

GUIDE TO DISASTER RESILIENCE

2ND
EDITION

A guidebook for **micro, small, and medium enterprises**



**Negosyong Matatag,
Kabuhayang Nagpapatuloy**

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Acknowledging the need to further promote awareness on disaster resilience among different micro, small, and medium enterprises (MSMEs) in the country, the National MSME Resilience Core Group developed the Guide to Disaster Resilience, designed to serve as a reference material for MSMEs in understanding business continuity practices and the basic concepts of disaster risk reduction and management.

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MESSAGES FROM MSME RESILIENCE CORE GROUP

Edwin M. Salonga

Country Program Manager, Philippines

Asian Disaster Preparedness Center (ADPC)



Micro, small, and medium enterprises (MSMEs) play a vital role in the economic development of the Philippines. They contribute to job creation, income generation, and poverty reduction, particularly in rural areas. However, MSMEs are particularly vulnerable to the impacts of disasters, which can cause significant disruptions to their operations, leading to lost income, damaged assets, and in some cases, even permanent closure.

Strengthening the disaster resilience of MSMEs is crucial to mitigating these impacts and ensuring their survival. MSMEs need to protect their employees, maintain business operations, ensure financial stability, and protect their assets during and after a disaster. To this end, the Asian Disaster Preparedness Center (ADPC) supports the MSME National Resilience Core Group (RCG) in providing technical assistance and capacity-building support to MSMEs in the Philippines.

As a product of collaborative work, this second edition of the MSME Guide to Disaster Resilience serves as a practical tool to assess their vulnerabilities and prepare for potential disasters or emergencies. It is an essential resource that can help MSMEs develop their resilience strategy, ensuring continuity of operations and quick recovery after a disaster. The checklists included are easy to understand and apply, making it accessible to MSMEs with limited resources.

Strengthening the disaster resilience of MSMEs is critical to ensuring their survival and promoting economic development in the Philippines. Let us continue working together to build a more resilient future for MSMEs in the Philippines.

Gilbert Albero

President

Asia Pacific Alliance for Disaster Management
Philippines (APAD PH)



Congratulations to the MSME Resilience Core Group, especially to Philippine Disaster Resilience Foundation (PDRF) for the publication of this Guidebook to Disaster Resilience for micro, small, and medium enterprises (MSMEs). On its second edition, it is expected to contain lessons from the experiences of entrepreneurs all over the country in implementing their disaster preparedness programs and initiatives.

This volume takes into consideration the impact of the COVID-19 pandemic, which includes not only hazards to public health but also to local economies. The statistics and stories compiled here will provide invaluable insights that will help MSMEs in doing business continuity planning and other preparedness measures even as the pandemic continues in its 3rd year.

In consonance, the Asia Pacific Alliance for Disaster Management- Philippines (APAD PH) is also committed to promote and support disaster resilience among MSMEs in the country by providing preparedness training and establishing partnership platforms for cooperation in disaster response, recovery and rehabilitation.

Padayon! Dios Mabalos.

Dr. Renato U. Solidum Jr.

Secretary

Department of Science and Technology



The impacts of climate change and disasters can destroy decades of progress in an instant. It undermines development, and most often, lives and livelihoods are lost. This is why it is crucial that in our resilience agenda, we put premium on prevention and mitigation.

Science, Technology, and Innovation (STI), and the Micro, Small, and Medium Enterprise (MSME) have a common denominator. They are both the backbone of the economic development and transformation in the Philippines. STI drives the MSME to be more competitive, sustainable, and efficient while the MSME spurs our economic growth. And in our thrust towards climate and disaster resilience, science guides our decision-making, planning, and action.

In this guidebook, the Department of Science and Technology (DOST) shared some of our latest technologies on risk assessment and programs on technology upgrading- that assist MSMEs in prevention, mitigation, and recovery. This book recognizes the value of business continuity planning and how it is instrumental in improving MSME resilience. It points to ways in which MSMEs can sustain economic resilience, particularly when supported by science, plans, policies, and strategies. We firmly believe that strengthening businesses helps fight poverty, create jobs, and safeguard livelihoods. We have a way to preserve our wealth through disaster risk reduction, and I encourage MSMEs to make use of this guidebook.

Finally, let me commend and appreciate the MSME Resilience Core Group led by the DTI and PDRF, and all the individuals involved in reviewing and updating this document. Let this guidebook serve as our renewed commitment to leverage the full potential of MSMEs and be able to build a more resilient and prosperous nation.

Usec. Blesila A. Lantayona

Undersecretary

Department of Trade and Industry
(DTI)



The MSME sector in the Philippines is crucial in creating employment and entrepreneurship opportunities for Filipinos. It is considered as the engine of job creation and the backbone of the Philippine economy, accounting for 99.58% of all registered businesses and 64.67% of employment.

In the recent times, the impacts of climate change and other related risks seriously affect the MSME sectors. It is therefore important to understand how these catastrophic events affect business operations. Also important is how the country strengthens its disaster preparedness, and disaster communication, and implements innovation-driven programs to help MSMEs operate more efficiently and become more resilient.

At the heart of our mission is the steadfast determination to implement existing programs and forge partnerships with private and international development organizations. Since 2016, the Department has been an integral part of the MSME Resilience Core Group (MSME RCG), a committed group of individuals and organizations dedicated to strengthening the resilience of the business sector in the country.

Today, we celebrate a significant milestone in our journey towards resilience. The MSME Guide to Disaster Resilience 2.0 is a breakthrough in providing the business sector with a comprehensive guide on “pre, during, and post-disaster response”, ensuring the sustainability of other initiatives. We are proud to say that with the invaluable support of our partners, we were able to craft this guidebook, and it now stands as a testament to the resilience of the Filipino spirit.

As we continue to co-chair the MSME RCG, we would like to take this opportunity to extend our heartfelt gratitude to everyone who has supported us in building the resilience of MSMEs in the country. Your contributions have made a tangible difference in the lives of countless Filipinos, and for that, we are forever grateful.

Together, we will continue to push the boundaries of what is possible, implement innovative programs, and forge meaningful partnerships that will enable us to build a more resilient and sustainable future for all Filipinos.

MESSAGES FROM MSME RESILIENCE CORE GROUP

Undersecretary Ariel F. Nepomuceno

Civil Defense Administrator

Office of Civil Defense (OCD)



The Office of Civil Defense (OCD), as the prime mover of disaster risk reduction and management in the country, congratulates the Philippine Preparedness Partnership in the creation of the Guide to Disaster Resilience: A Guidebook for Micro, Small and Medium Enterprises (MSMEs).

The OCD recognizes the crucial role of the MSMEs in creating jobs, generating income, and driving economic growth. They, however, are vulnerable to the impacts of disasters which have led to job losses, closures, and bankruptcy over the years.

This Guidebook shall assist MSMEs in assessing business risks, identifying preparedness measures, and determining quick recovery actions to ensure continuity of operations amidst the occurrence of disasters. This reference is another tangible proof of our commitment in building disaster resilient communities.

Kaisa Ninyo ang Office of Civil Defense sa Pagtataguyod ng Negosyong Matatag, Kabuhayang Nagpapatuloy!

MESSAGES FROM MSME RESILIENCE CORE GROUP

George T. Barcelon

President

Philippine Chamber of Commerce and Industry
(PCCI)



The Philippines is one of the countries most at risk from disasters. Extreme weather disturbances and natural disasters that visit the country results in a loss of livelihood, particularly the micro, small, and medium enterprises which are the most vulnerable sector in our society. Guiding them to mitigate and adapt to these vulnerabilities is key to sustaining their operations.

The MSMEs Guidebook to Disaster Resilience which the MSME Resilience Core Group has developed is an important resource material that will empower enterprises to face any risks that will come their way. The guidebook is also a critical tool for achieving the Sustainable Development Goals (SDGs), particularly in addressing SDG 11 which promotes resilience to disasters and holistic disaster risk management at all levels in line with the Sendai Framework for Disaster Risk Reduction.

We look forward to working with the MSME Disaster Core Group and other stakeholders in coming up with more products and tools that will make our enterprises grow and thrive.

Mabuhay tayong lahat!

Rene S. Meily

President

Philippine Disaster Resilience Foundation
(PDRF)



MSMEs are a vital segment of the Philippine economy. They enable families to put food on the table, have a decent place to live, and send their children to school with the hope for a better future. In 2016, the Asian Disaster Preparedness Center established the Philippine Preparedness Partnership (PhilPrep), comprised of the government via the Office of Civil Defense, civil society through the Center for Disaster Preparedness, and the private sector through the Philippine Disaster Resilience Foundation. In turn, PhilPrep formed the Resilience Core Group composed of the Department of Science and Technology, Office of Civil Defense, Philippine Disaster Resilience Foundation, Philippine Chamber of Commerce and Industry, Philippine Exporters Confederation, Employers Confederation of the Philippines, Asia Pacific Alliance for Disaster Management-Philippines, and the Asian Disaster Preparedness Center. The goal was to prepare small businesses around the country, many of which are led by female entrepreneurs, for a crisis—a storm, an earthquake, and, as it turned out, a pandemic. So far, we have trained thousands of businesses ranging from farmers to sari-sari store owners.

With this new guidebook, we continue that journey. The guidebook contains answers to frequently asked questions, assessment tools for firms, updated sources for loans, and my personal favorite, real-life stories of entrepreneurs battling against the odds to become resilient and successful. It stresses the importance of looking for alternate sources of revenue and backup suppliers so that a business is ready for any eventuality.

Entrepreneurs take enormous gambles when they start and run a business. We need to do all that we can do to support them so they can survive the inevitable challenges that will come their way. I believe that if we can prepare our small business sector for disasters, we will have done our job. Only then can we perhaps tell ourselves that, to paraphrase the Scriptures, we have fought the good fight, we have finished the race, we have kept the faith.

Sergio R. Ortiz-Luis Jr.

President

Philippine Exporters Confederation, Inc.
(PHILEXPORT)



My warmest greetings and congratulations to the MSME Disaster Resilience Core Group (RCG) led by the Department of Trade and Industry and the Philippine Disaster Resilience Foundation for this very relevant and timely MSME Guide to Disaster Resilience, 2nd Edition!

We believe that among a number of vulnerabilities of the Philippine economy at the moment, that of being the most disaster-prone country in the world is one that we should be most concerned about. By now we know that according to the World Risk Report 2022 by Germany-based Bündnis Entwicklung Hilft and the Institute for International Law of Peace and Armed Conflict at Ruhr University Bochum (IFHV), the Philippines has the highest disaster risk globally, with an index score of 46.82.

This puts the micro, small and medium enterprises at the spotlight once again, since they are among the hardest hit especially in times of natural disasters. It then becomes important to deliver a constantly evolving approach to address these disasters which also impact heavily on the economy. This makes this Guidebook a critical intervention, also considering the updates made terms of content and style.

As part of the RCG, PHILEXPORT has also worked to help ensure that this book is MSME friendly and a useful reference for the most common disasters possible. It also highlights the need to have a plan to help minimize financial damage and promote business or service continuity. After all, MSMEs play a crucial role and contribute significantly to the economy, accounting for more than 99% of business establishments, 63% of the workforce in the country, and 40% of the country's gross domestic product. With such performance, they remain to be the backbone of the Philippine economy.

But other than this, the Guidebook and RCG are strong proofs that public and private stakeholders can create game changing impacts if they work together for a common purpose. PHILEXPORT shall continuing to be a champion of disaster resilience through the RCG as one way to push our export development agenda.

Let's use and share the Guidebook and be more disaster resilient and future ready!

ABOUT THIS GUIDE



This guidebook contains checklists and guide questions that can help micro, small and medium enterprises (MSMEs) assess business risks and make necessary preparations to ensure continuity of operations when disasters or emergencies happen. It also provides guidance on how to quickly recover from different crises that businesses may face.

To serve as real life examples, stories of MSMEs that displayed resilience especially during the COVID-19 pandemic are also included in this guide.

The Philippine Preparedness Partnership

This publication was developed by the Philippine Preparedness Partnership (PHILPREP), the localized tripartite platform of the Asian Preparedness Partnership (APP) comprised of key stakeholders from the:

- ◆ Office of Civil Defense (OCD) - representing the government
- ◆ Philippine Disaster Resilience Foundation (PDRF) - representing the private sector
- ◆ Center for Disaster Preparedness (CDP) - representing the local non-government organizations and civil society

PHILPREP works collaboratively to promote, design, and implement locally-led initiatives aimed at strengthening the capacity of the country to prepare for and respond to emergencies.

APP is a program implemented by the Asian Disaster Preparedness Center (ADPC) and supported by the Bill and Melinda Gates Foundation and the United States Agency for International Development – Bureau of Humanitarian Assistance (USAID-BHA).

The MSME National Resilience Core Group

This guidebook was developed in consultation with the Philippine Disaster Resilience Foundation (PDRF) and its business continuity subject matter experts, as well as with the members of the MSME National Resilience Core Group or RCG.

RCG is a group of public and private organizations committed to strengthen the disaster resilience of MSMEs in the Philippines and provide them support on the challenges they commonly encounter. It was conceptualized in 2016 by the Philippine representatives who participated in the 2016 Asian Business Forum held in Bangkok, Thailand. These Philippine representatives were from the Department of Trade and Industry (DTI), Office of Civil Defense (OCD), Philippine Chamber of Commerce and Industry (PCCI), Philippine Exporters Confederation, Inc. (PHILEXPORT), and Philippine Disaster Resilience Foundation, Inc. (PDRF).

The Bangkok forum inspired the Philippine delegates to engage in a similar learning and experience sharing event by creating a localized version of the DTI - Asian Disaster Preparedness Center (ADPC) collaboration on strengthening disaster resilience of MSMEs in Asia.

In July 2016, the National Forum on Strengthening Disaster Resilience was held which was participated by about 250 MSMEs and partners all over the country. The event was capped with a signing of a Memorandum of Understanding among the government sector, private sector and development partners which formalized the private-public partnership of the MSME RCG.

HOW TO USE THIS GUIDE?

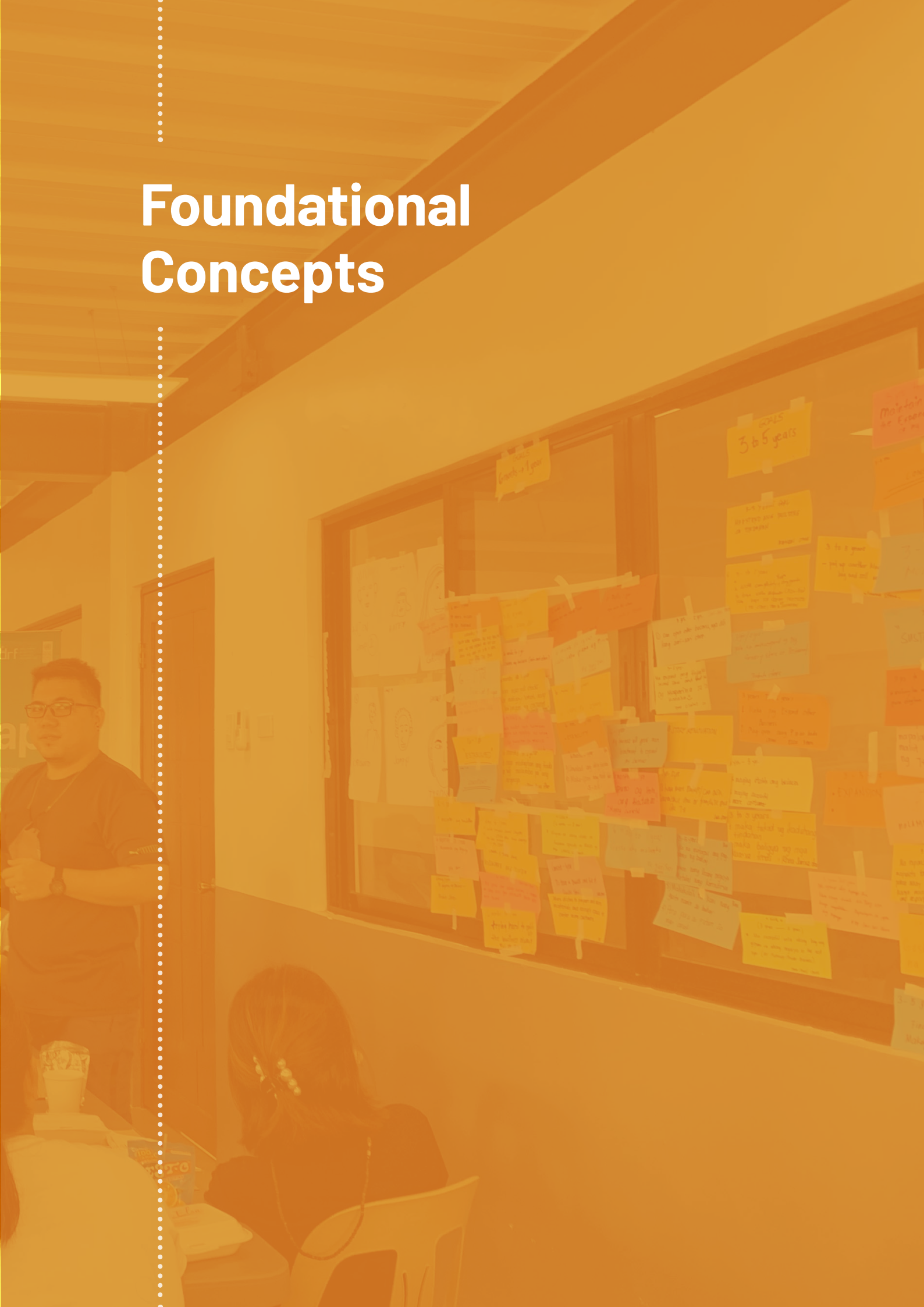
To be able progress smoothly with this guidebook, start with the foundational concepts which are defined and explained in the next section. Common acronyms, as well as the key players in disaster management in the country, are also indicated in the section.



WHAT'S NEW IN THIS EDITION?

- ◆ Definition of basic terms related to disaster risk management
- ◆ List of acronyms for easy reference
- ◆ Key players and their roles in disaster risk management in the Philippines
- ◆ Most recent statistics on disaster occurrences in the country and the world
- ◆ Data on the impact of COVID-19 pandemic to MSMEs
- ◆ MSME real life stories of resilience amidst the pandemic
- ◆ Overview of the National Disaster Risk Reduction and Management Plan 2020-2030
- ◆ Assessment tools such as the Disaster Preparedness Needs Assessment checklist, Business Continuity Capability and Readiness Assessment for MSMEs with and without BCP, and MSME Digital Transformation Readiness Test
- ◆ Updated Business Continuity Plan Roadmap
- ◆ Updated Emergency Contact Information
- ◆ Digitalization and resilience
- ◆ Updated loan programs and insurance products for MSMEs
- ◆ Links to other IEC materials and references helpful to MSME resilience

Foundational Concepts



What are micro, small and medium enterprises?

Micro, small, and medium enterprises or MSMEs are defined as any business activity or enterprise engaged in industry, agri-business and/or services that has:

- (1) an asset size (less land) of up to PhP100 million; and
- (2) an employment size with less than 200 employees

Regardless of the type of business ownership (i.e., single proprietorship, cooperative, partnership or corporation), MSMEs are classified according to these categories:

Enterprise	Category	
	By Asset size	By number of employees
Micro	Up to P3,000,000	1 - 9 employees
Medium	P3,000,001 - P15,000,000	10 - 99 employees
Small	P15,000,001 - P100,000,000	100 - 199 employees

Source: The MSME Sector At A Glance. <https://legacy.senate.gov.ph/publications/AG%202012-03%20-%20MSME.pdf>

MSME Development Plan 2017-2022

The micro, small, and medium enterprise Development Plan (2017-2022) aims to create more globally competitive, regionally integrated, resilient, sustainable, and innovative MSMEs by establishing five strategic goals, which include:

- ▶ Improved Business Climate
- ▶ Improved Access to Finance
- ▶ Enhanced Management and Labor Capacities
- ▶ Improved Access to Technology and Innovation
- ▶ Improved Access to Markets

The plan also addresses the different challenges affecting the sector's growth and development by including resilience and business recovery under its priority areas.

Disasters can strike without warning, which may cause lasting effects on people and property. Being ready and having a plan in place is crucial in mitigating adverse effects on your businesses, by safeguarding lives, and minimizing loss of assets, revenue, and customers.

DEFINITION OF TERMS

BUSINESS CONTINUITY (BC)

an organization's ability to continue delivering its products and/or services in an acceptable manner after any kind of disruptive incident

BUSINESS CONTINUITY PLAN (BCP)

a document that guides a business on what to do before, during and after disasters and emergencies to ensure continuity of business operations amidst the disruption

CAPACITY

the combination of all the strengths, attributes and resources available within an organization, community or society to manage and reduce disaster risks and strengthen resilience.

DISASTER

a serious disruption of the functioning of a community 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. It is characterized by situations that overwhelm the capacities of local responders and place demands on resources which are not available locally

DISASTER RISK REDUCTION (DRR)

efforts done to (1) prevent new risks, (2) reduce existing risks, and (3) manage residual risks to strengthen resilience and achieve continuing development

DISASTER RISK REDUCTION MANAGEMENT (DRRM)

the application or implementation of disaster risk reduction efforts and policies

EMERGENCY

a life-threatening event requiring immediate action using the resources available at hand, implying that there is no need to request external assistance

EMERGENCY PREPAREDNESS (EP)

state of readiness to remain safe during and after an emergency or disaster

EMERGENCY PREPAREDNESS PLAN (EPP)

a plan detailing the external preparation procedures for emergencies. It contains emergency communication protocols with external stakeholders. It involves a continuous cycle of planning, organizing, equipping, exercising, evaluating, and taking corrective actions to ensure effective coordination during emergencies.

EMERGENCY PREPAREDNESS AND RESPONSE PLAN (EPRP)

an integrated plan covering emergency preparedness and response actions

EMERGENCY RESPONSE PLAN (ERP)

a plan detailing the on-site response for emergencies. It includes key emergency roles and responsibilities of people on site

EXPOSURE

the situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas

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

IMPACT

the magnitude of harm that can be expected following a disaster

RESILIENCE

the ability of a business or community to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner. It is the ability to preserve and restore essential structures and functions through risk management

RISK

the probability or likelihood of an event or situation resulting in negative consequences (e.g. harm, loss, or damage) on people, systems, or assets

SUSTAINABLE DEVELOPMENT

a progress that meets current needs without compromising the ability of future generations to meet their own needs

VULNERABILITY

the conditions determined by physical, social, economic and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards

Sources:

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Checkpoint

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

- ◆ Hazard
- ◆ Vulnerability
- ◆ Capacity

LIST OF ACRONYMS

ADB	Asian Development Bank
BCCRA	Business Continuity Capability and Readiness Assessment
BCP	Business Continuity Plan
BFP	Bureau of Fire Protection
CSO	Civil Society Organization
CCA	Climate change adaptation
COVID-19	Coronavirus Disease 2019
DENR	Department of Environment and Natural Resources
DILG	Department of the Interior and Local Government
DOH	Department of Health
DOST	Department of Science and Technology
DSWD	Department of Social Welfare and Development
DBP	Development Bank of the Philippines
DRNA	Disaster Risk and Needs Assessment
DRM	Disaster Risk Management

DRR	Disaster Risk Reduction
DRRMC	Disaster Risk Reduction and Management Council
DTI	Department of Trade and Industry
EM-DAT	Emergency Event Database
LE	List of Establishments
LGU	Local Government Unit
MSME	Micro, Small, and Medium Enterprise
NDRRMC	National Disaster Risk Reduction and Management Council
NDRRMP	National Disaster Risk Reduction and Management Plan
NEDA	National Economic and Development Authority
NGO	Non-Governmental Organizations
OCD	Office of Civil Defense
PAGASA	Philippine Atmospheric, Geophysical and Astronomical Services Administration
PCG	Philippine Coast Guard
PDRF	Philippine Disaster Resilience Foundation
PHIVOLCS	Philippine Institute of Volcanology and Seismology
PNP	Philippine National Police
PSA	Philippine Statistics Authority
PSCP	Public Service Continuity Plan
UNDRR	United Nations Office for Disaster Risk Reduction
WRI	WorldRiskIndex

PHILIPPINE DISASTER RISK MANAGEMENT STAKEHOLDERS

Barangay Disaster Risk Reduction and Management Committee (BDRRMC)

- ◆ Facilitate and support risk assessments and contingency planning activities; consolidate local disaster risk information; and organize and conduct training, orientation, and knowledge management activities on disaster risk reduction and management at the local level
- ◆ Respond to and manage the adverse effects of emergencies and carry out recovery activities in the affected area
- ◆ Establish a Provincial/City/Municipal/Barangay Disaster Risk Reduction and Management Operations Center

Department of Agriculture (DA)

- ◆ ensures that farmers and fisherfolk are connected to production areas, markets, and inter-regional trade
- ◆ focuses on provision of agricultural inputs, cash assistance and other financial services to agricultural workers

Department of Environment and Natural Resources (DENR)

- ◆ promotes nature-based solutions, sustainable integrated area development, and participatory environmental governance

Department of Finance

- ◆ in-charge of enhancing financial resilience at all levels, and social protection of populations at risk

Department of Interior and Local Government (DILG)

- ◆ in-charge of promoting cooperation among diverse DRRM actors and the development of guidelines for partnership and complementation, which will help identify, clarify, and harmonize potential roles of stakeholders at various levels
- ◆ promotes the development of public service continuity
- ◆ focuses on the development of communication and advocacy plans for inclusive and integrated IEC programs and strategies, covering all hazards

Department of Trade and Industry (DTI)

- ◆ in-charge of minimizing economic losses and enhancing the resilience of livelihoods and businesses particularly the informal sector and MSMEs by promoting business continuity planning, provision of temporary employment and livelihood programs
- ◆ ensures that supply chain management, and monitoring of food and essential commodities are undertaken

Department of Science and Technology (DOST)

- ◆ overall lead for disaster prevention and mitigation activities
- ◆ plays a key role in providing oversight for the generation and dissemination of science-informed disaster and climate risk information to all sectors and levels, and the horizontal and vertical integration of DRRM-CCA in policy, planning and budgeting, among others
- ◆ ensures availability and access of end-to-end and multi-hazard early warning systems that are operational, context-specific and reaching the last mile especially in geographically isolated and disadvantaged areas.
- ◆ pushes for capacity building and equipping managers with resources for early warning

Department of Public Works and Highways (DPWH)

- ◆ in-charge in increasing the structural integrity of housing, building and critical infrastructure to reduce damage, disruption to essential services, and save lives
- ◆ pushes for construction of climate and disaster-resilient structures following established measures and standards in a timely manner

Department of Social Welfare and Development (DSWD)

- ◆ ensures that functional disaster response operation centers are equipped with knowledgeable, skilled, and competent personnel
- ◆ in-charge of the provision of accurate, reliable and timely situational reports and the conduct of rapid and/or comprehensive damage and needs assessment following a disaster event
- ◆ improves access of affected individuals, families and communities to social protection (e.g., cash transfers) and social services, including education and health (e.g., mental health, psychosocial support)

Disaster-Resilient Human Settlements (DHSUD)

- ◆ ensures that affected families and individuals are provided with shelter assistance in safe zones where social services (education, health, water, power, peace and order, and livelihoods, among others) and essential infrastructure and utilities are available

Local Disaster Risk Reduction and Management Council (LDRRMC)

- ◆ Approve, monitor, and assess the implementation of the Local Disaster risk Reduction and Management Plans and regularly review and test the plan consistent with other national and local planning programs
- ◆ Ensure the integration of disaster risk reduction and climate change adaptation into local development plans, programs and budgets

National Disaster Risk Reduction Management Council (NDRRMC)

- ◆ the focal body of disaster risk management in the country
- ◆ makes policies and performs coordination, integration, supervision, monitoring and evaluation functions concerning disaster risk reduction management in the country

National Economic and Development Authority (NEDA)

- ◆ focuses on setting up clear policy directions for rehabilitation and recovery

Office of Civil Defense (OCD)

- ◆ the implementing arm of the NDRRMC in-charge of administering a comprehensive national civil defense and disaster risk reduction and management program by providing leadership in the continuous development of strategic and systematic approaches as well as measures to reduce the vulnerabilities and risks to hazards and manage the consequences of disasters
- ◆ spearheads the conduct of the quarterly Nationwide Simultaneous Earthquake Drill (NSED)
- ◆ consolidates all the reports from the regional DRRM councils and the national DRRM Committees to come up with a consolidated monitoring, evaluation and progress report on the NDRRMP

Philippine Disaster Resilience Foundation, Inc. (PDRF)

- ◆ the country's major private sector vehicle and coordinator for disaster resilience
- ◆ an alliance of businesses dedicated to building the disaster risk management capabilities of the private sector in the country working on prevention and mitigation, preparedness, response, and rehabilitation and recovery.

Private Sector

- ◆ composed of the private corporations, households and nonprofit institutions serving households, the private sector is engaged in the government's disaster risk reduction programs to complement resources and help deliver services to citizens effectively

Resilience Core Group (RCG)

- ◆ a group of public and private organizations committed to strengthen the disaster resilience of MSMEs in the Philippines and provide them support on the challenges they commonly encounter
- ◆ composed of the DTI, DOST, OCD, PDRF, Philippine Chamber of Commerce and Industry (PCCI), Philippine Exporters Confederation (PHILEXPORT), Employers Confederation of the Philippines (ECOP), Asia Pacific Alliance for Disaster Management-Philippines (APAD-PH), and the Asian Disaster Preparedness Center (ADPC)

References:

- ◆ NDRRMP 2020-2030. <https://app.adpc.net/resources/national-disaster-risk-reduction-and-management-plan-ndrrmp-2020-to-2030%E2%82%AC/>
- ◆ National Resilience Core Group renews support for MSME recovery beyond pandemic. <https://reliefweb.int/report/philippines/national-resilience-core-group-renews-support-msme-recovery-beyond-pandemic>
- ◆ About PDRF. <https://www.pdrf.org/who-we-are/#:~:text=About%20PDRF&text=As%20an%20alliance%20of%20businesses,response%2C%20and%20rehabilitation%20and%20recovery.>
- ◆ About OCD. <https://ocd.gov.ph/about-ocd/mandate-mission-and-vision.html>
- ◆ Republic Act No. 10121 (27 May 2010). Official Gazette. <https://www.officialgazette.gov.ph/2010/05/27/republic-act-no-10121/>

Types of Hazards

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

A hazard is a process, event or activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. It can be natural or human-induced.

Natural Hazards are predominantly associated with natural processes or events that happen as a result of interactions between humans, animals, plants, and the environment.

Biological hazards	substances produced by organisms that pose a threat to human health	▶ bacteria, viruses (such as COVID-19) or parasites ▶ poisonous wildlife, insects, and plants ▶ mosquitoes carrying disease-causing agents
Geological or geophysical hazards	originate from internal earth processes	▶ Earthquakes ▶ volcanic activity ▶ landslides ▶ mud flows
Hydrometeorological hazards	triggered by atmospheric, hydrological or oceanographic events	▶ tropical cyclones/ typhoons ▶ floods ▶ drought ▶ storm surges ▶ tsunami

Human-induced hazards are induced entirely or predominantly by human activities and choices. These include process-based hazards which occur when dangerous and poisonous substances are not contained.

Examples of hazards caused by human activities are:

- ▶ Fire
- ▶ Accident
- ▶ Aircraft crash
- ▶ Pollution
- ▶ Civic disturbance
- ▶ Terrorist attacks
- ▶ Explosions
- ▶ Armed conflict
- ▶ Pollution
- ▶ Chemical spills
- ▶ food-poisoning
- ▶ cyber security breaches
- ▶ labor disputes
- ▶ product recall

Source: United Nations Office for Disaster Risk Reduction (UNDRR)

A person is pushing a blue cart through a heavy rain. They are holding a large yellow and white striped umbrella. The background is a blurred street scene with other people and trees. The entire image has a green tint.

CHAPTER 1

Impact of Disasters on Businesses

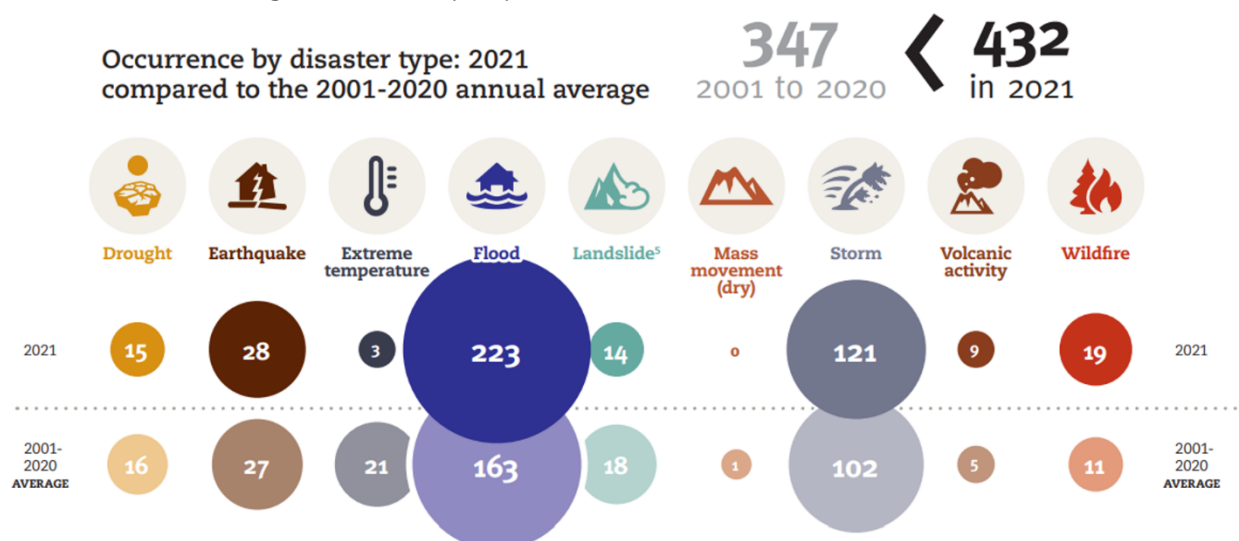
In this chapter, we will discuss:

- ▶ the increasing number of disastrous events in the country and the world
- ▶ the impact of the COVID-19 pandemic on MSMEs

Disasters in numbers

In 2021, the Emergency Event Database (EM-DAT) recorded 432 disastrous events related to natural hazards worldwide which accounted for more than 10,000 deaths, affecting 101.8 million people, and caused approximately 252.1 billion US\$ of economic losses. This is considerably higher than the average of 357 annual catastrophic events for 2001-2020.

Floods dominated the disastrous events, with 223 occurrences, followed by storms with 121 events recorded. The Super Typhoon Odette (known internationally as Typhoon Rai), which struck the Philippines in December 2021 resulted in at least 457 deaths affecting 10.6 million people.



	Haiti	Earthquake	2,575		Afghanistan	Flood	260
	India	Flood	1,282		USA	Winter Storm	235
	Canada	Heat Wave	815		India	Landslide	234
	Philippines	Typhoon Rai	457		USA	Heat Wave	229
	China	Flood	352		Indonesia	Cyclone Seroja	226

Figure from EMDAT Report 2021

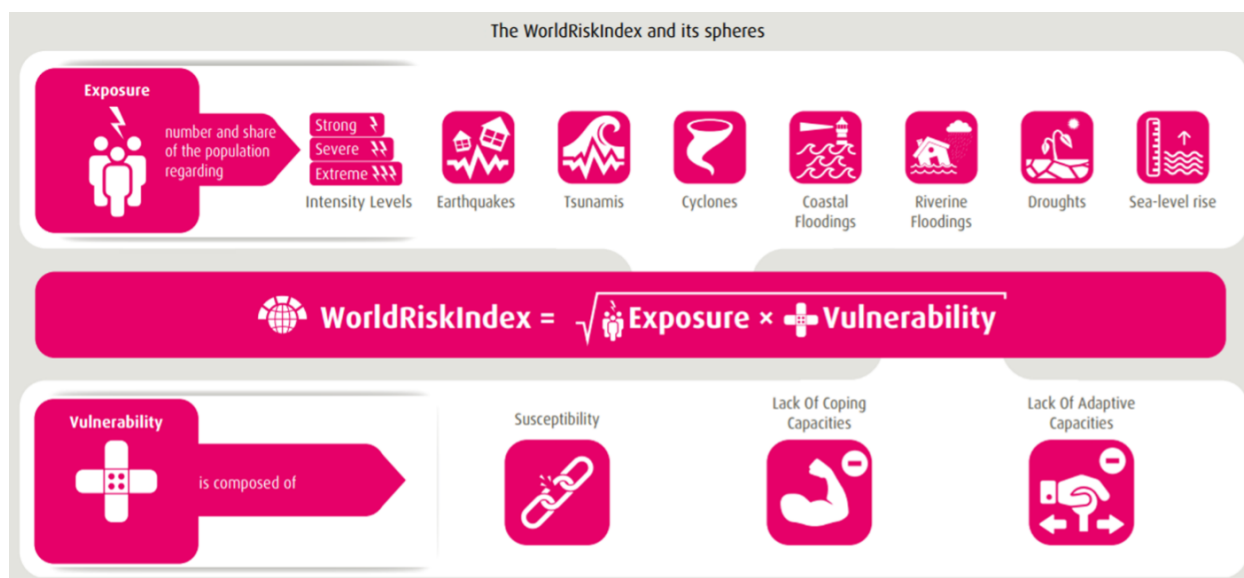
Among the continents, Asia was the most severely impacted, being hit by 40% of all disaster events. Almost half of the total number of deaths were recorded from Asia.

Source: CRED. 2021 Disasters in numbers. Brussels: CRED; 2022. https://cred.be/sites/default/files/2021_EMDAT_report.pdf

In 2022, the Philippines has the highest disaster risk worldwide with WorldRiskIndex (WRI) 46.82, followed by India (WRI 42.31), and Indonesia (WRI 41.46).¹

The WorldRiskIndex assesses the disaster risk for 193 countries. This covers all UN-recognized countries and over 99 percent of the world's population. The calculation of disaster risk is based on the interaction between the spheres of exposure and vulnerability:

- ▶ Exposure to earthquakes, tsunamis, cyclones, coastal floods, riverine floods, drought and sea-level rise
- ▶ Susceptibility depending on socio-economic development, social disparities and deprivations, and the weakening of the population through violence, disasters, and diseases
- ▶ Lack of coping capacities related to social shocks, political stability, health care, infrastructure, and material security
- ▶ Lack of adaptive capacities related to developments in education and research, reduction of disparities, investments, and disaster preparedness.



Did You Know?

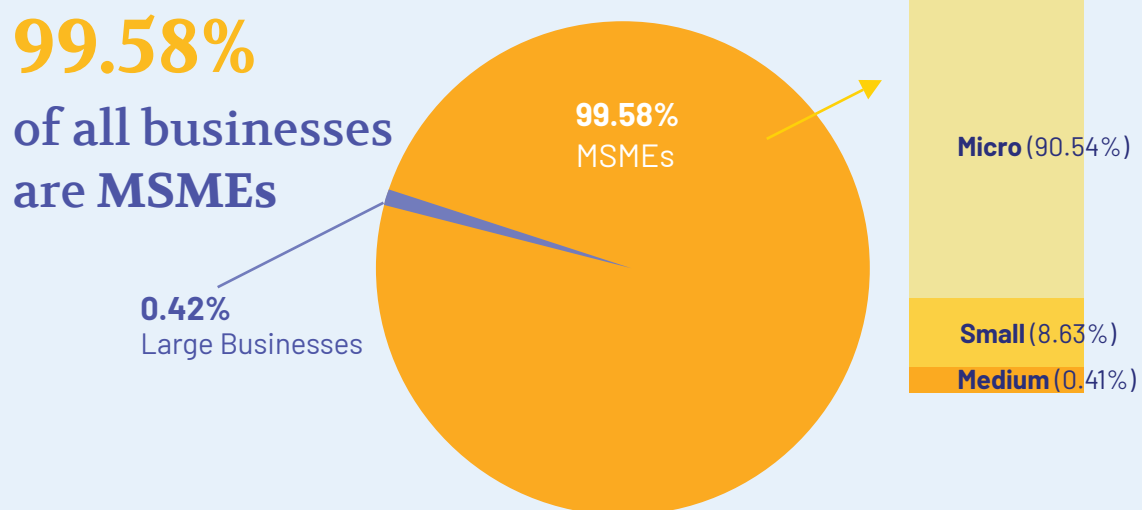
The Philippines' longest disaster-free period came about in 2002, where no tropical cyclone entered the Philippine Area of Responsibility for 8 months. This lasted from August 15, 2002 to April 15, 2003. [Workshop of Market Access for MSMEs, Department of Trade and Industry]

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). This is why MSMEs need to prepare.

¹WorldRiskReport 2022 - Focus: Digitalization (2022, September 8). ReliefWeb. <https://reliefweb.int/report/world/worldriskreport-2022-focus-digitalization>

According to the 2021 List of Establishments (LE) of the Philippine Statistics Authority (PSA)¹, a total of 1,080,810 business enterprises were recorded and 1,076,279 of these businesses are MSMEs. This means that 99.58% of all business enterprises operating in the country are MSMEs. Micro enterprises constitute 90.54% (978,612) of total establishments, followed by small enterprises at 8.63% (93,230) and medium enterprises at 0.41% (4,437).

Considering the given figures, the MSME sector is certainly one of the country's major drivers of growth. However, these enterprises also suffer the most when disasters happen as they are regarded to be relatively limited in resources and less resilient in comparison with large enterprises.



Number of Establishments, PSA 2021 List of Establishments

According to the UNDRR², in their report on the consultative workshop on the business resilience of MSMEs conducted in December 2019, “MSMEs are more likely to lack risk awareness and struggle to find the capacity to manage disaster risks, due to financial, human resource and technical limitations.” These limitations affect the risk management strategies of MSMEs. The report says that due to the unaffordable and inflexible insurance options, risk transfer and financing options remain a challenge to MSMEs. Many MSMEs rely on savings and informal financing to recover from disasters. Furthermore, the majority of MSMEs still have limited awareness of the benefits of long-term resilience building.

¹2021 MSME STATISTICS. DTI. <https://www.dti.gov.ph/resources/msme-statistics/>

²UNDRR (2019, December 11). Business Resilience of MSMEs. Retrieved 20 February 2023, from PreventionWeb website: https://www.preventionweb.net/files/69379_reporttechnicalconsultationonbusine.pdf

Impact of the COVID-19 pandemic on businesses

The most recent crisis that shook not just the country but the world, is the COVID-19 virus outbreak. The necessary safety precautions and protocols that were put in place forced individuals, communities, businesses and the government to shift to a new normal to be able to adapt.

A survey¹ done by the International Labour Organization during the onset of the pandemic in 2020 revealed that MSMEs matter more than ever as they represent 70% of global employment and 50% Gross Domestic Product (GDP). Unfortunately, the MSMEs were hit the hardest by the pandemic.

Of the 1,000 businesses surveyed from eight countries in four continents, 70% had to shut down operations. Half (50%) have temporarily closed as compliance to safety protocols of the government, while the other half have closed temporarily due to decrease in orders and COVID-19 infection among the staff.

The figures are similar in the Philippines. According to a rapid nationwide survey conducted from the end of March to mid-April 2020 by the Asian Development Bank (ADB), 73.1% of MSMEs were forced to close their business a few weeks after the lockdown measures were implemented. MSMEs immediately faced delays in the delivery of products and services, disrupted supply chains, and a sharp drop in the domestic demand.

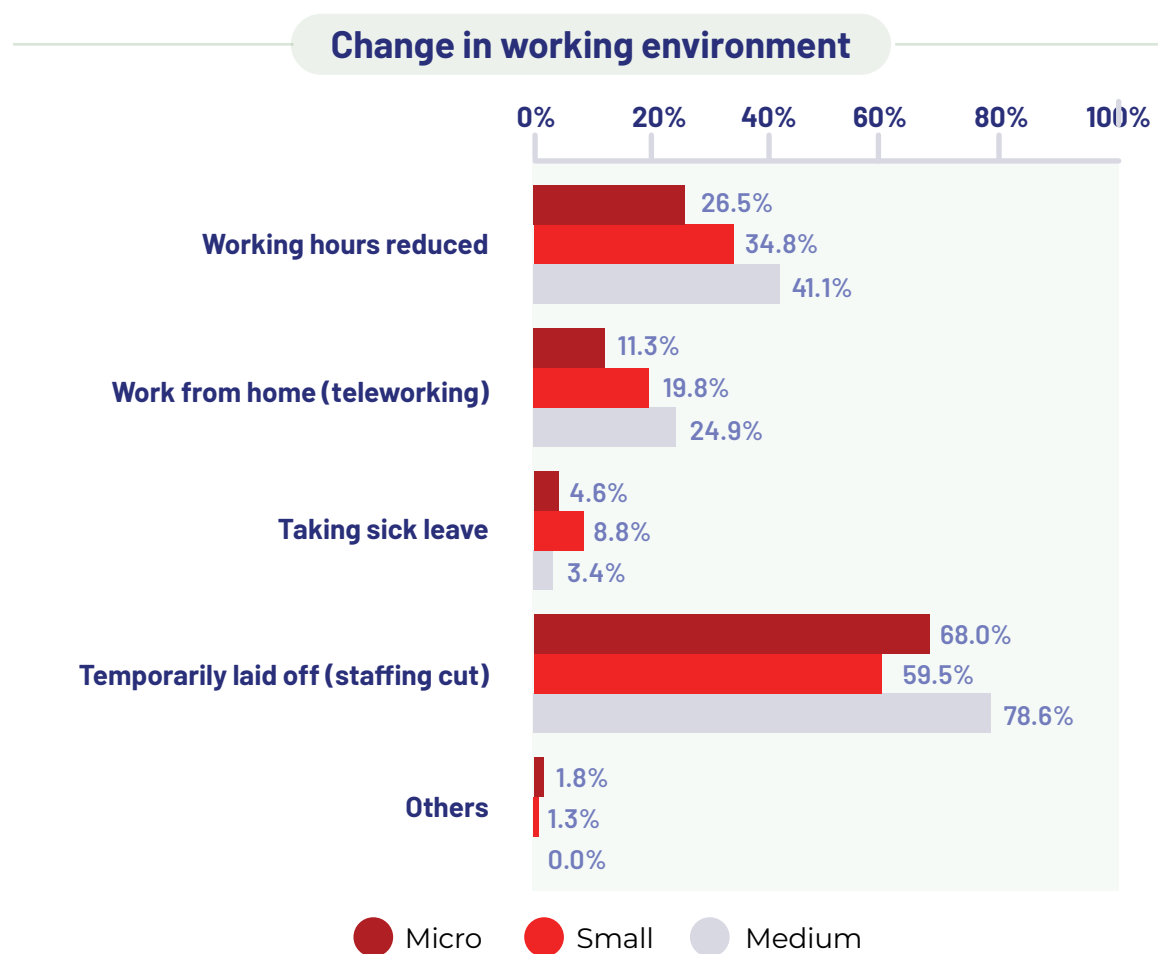
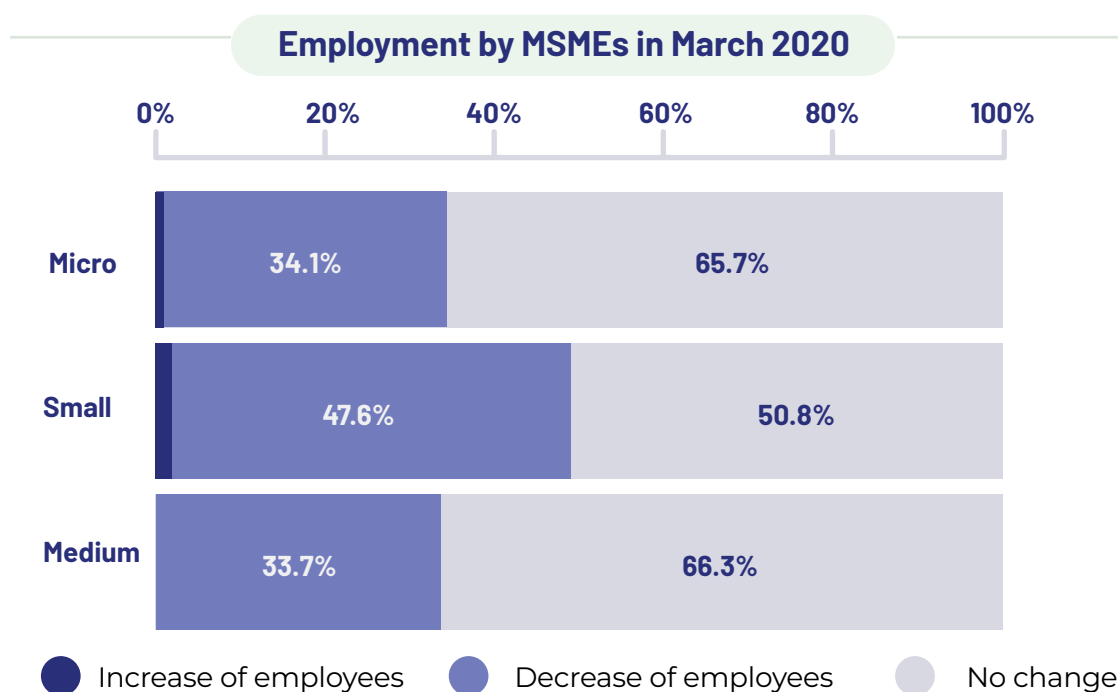
Around 60% of MSMEs had no sales and revenue in March 2020 due to business closure. Those that operated continuously during the lockdown faced over a 30% drop in sales and revenue.

	Micro		Small		Medium	
	sales	revenue	sales	revenue	sales	revenue
MSMES with no sales and revenue in March 2020 due to business closure	59.9%	61.7%	44.8%	49.1%	35.8%	35.8%
MSMEs that experienced a 30% drop in sales and revenue	27.7%	26.5%	43.6%	40.8%	41.0%	41.0%

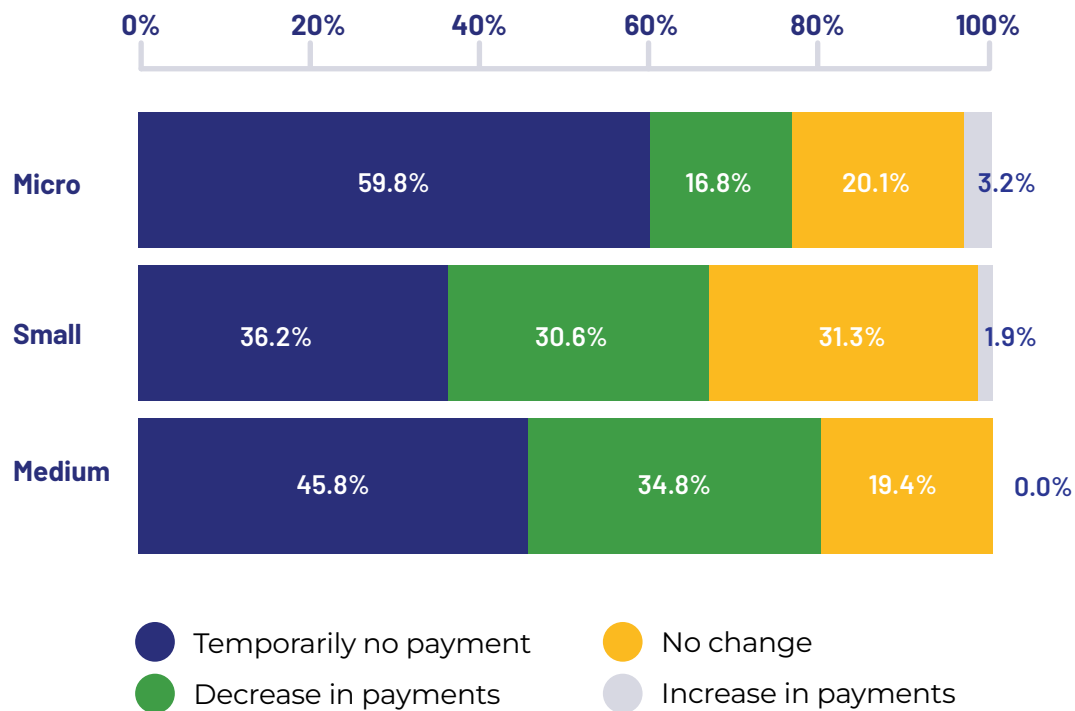
The ADB survey also showed the impact of the pandemic on the (a) employment, (b) working environment, (c) wage payments, (d) financial condition, (e) funding, and (f) access to loans of MSMEs. The survey also asked the MSMEs about (g) their concerns and challenges, (h) the actions they've considered to cope, and (i) the policies they want for support.

¹MSME Day 2020: the COVID -19 pandemic and its impact on small business. www.ilo.org/empent/whatsnew/WCMS_749275/lang--en/index.htm

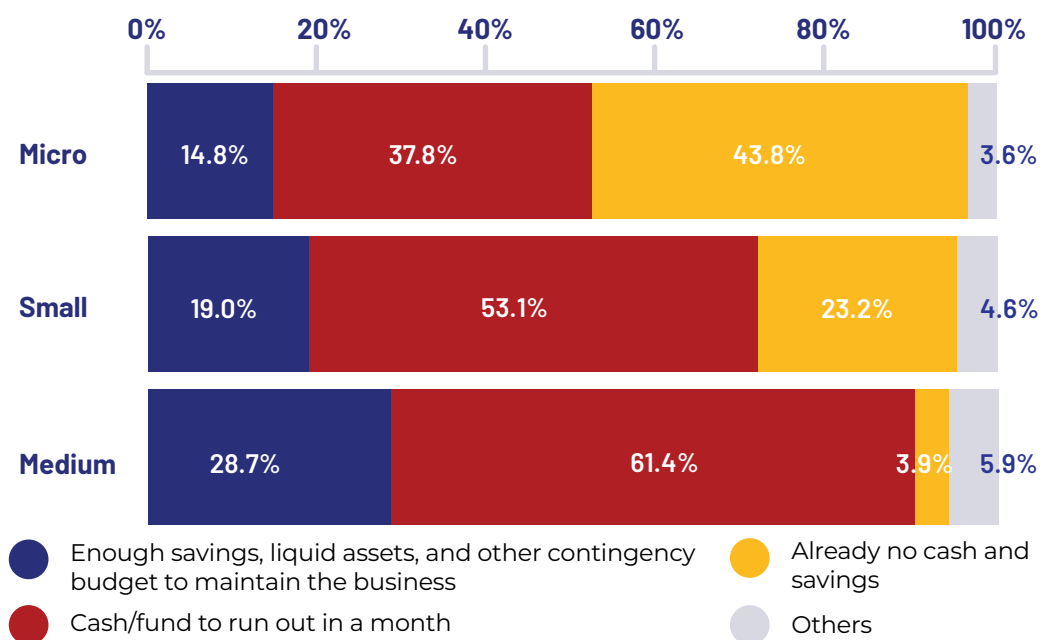
The following graphs from the ADB survey report show the summary of the findings.



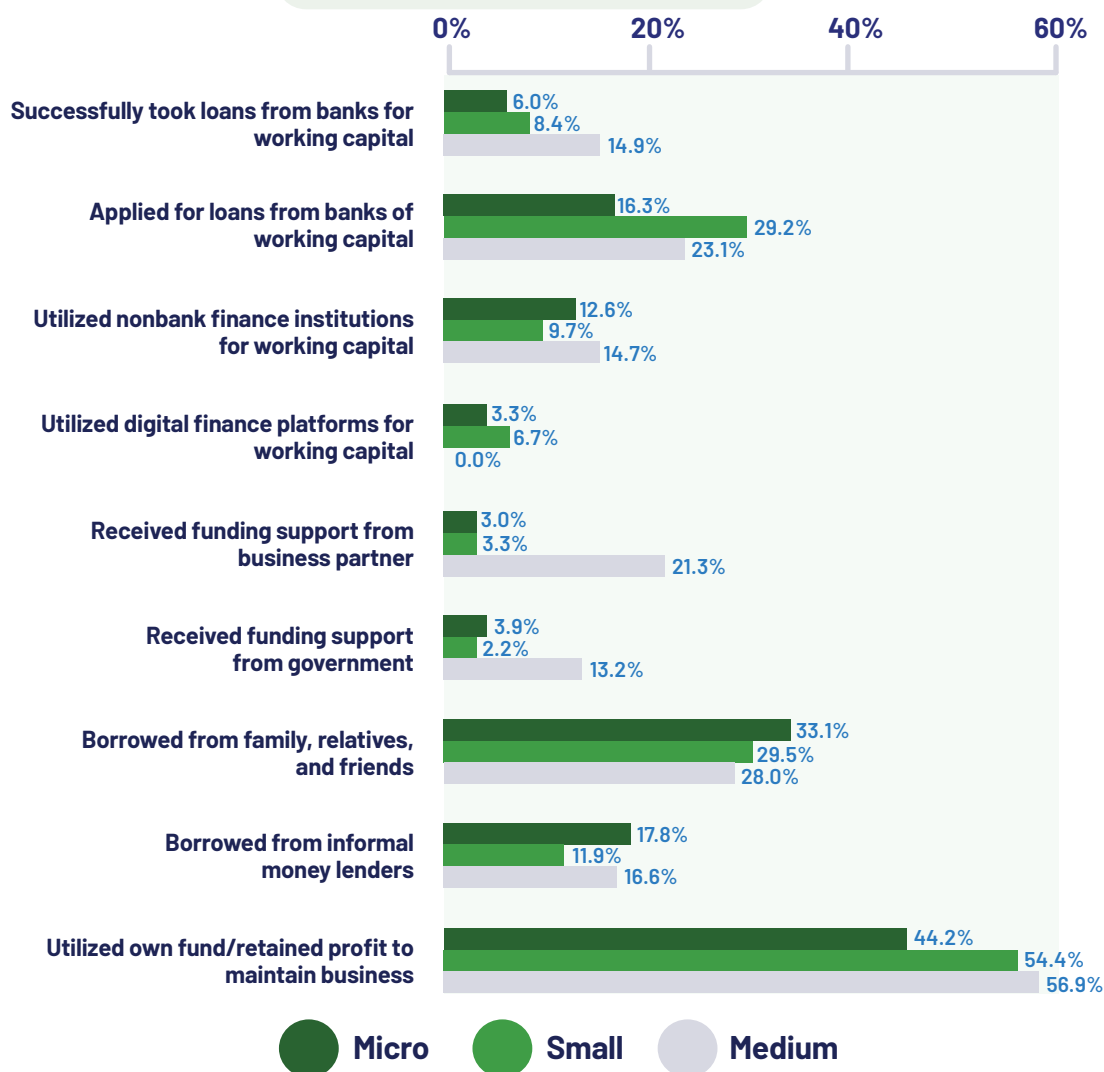
Total wage payments after the outbreak



Financial condition after the outbreak

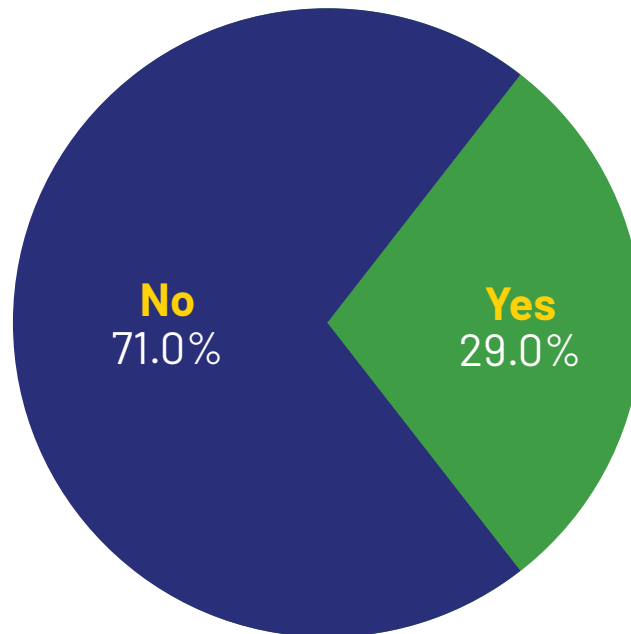


Funding after the outbreak

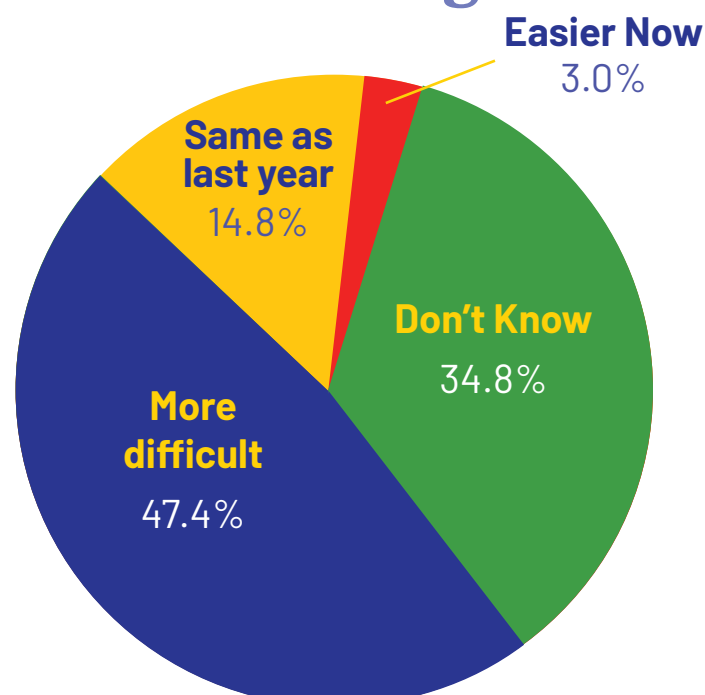


Access to loans

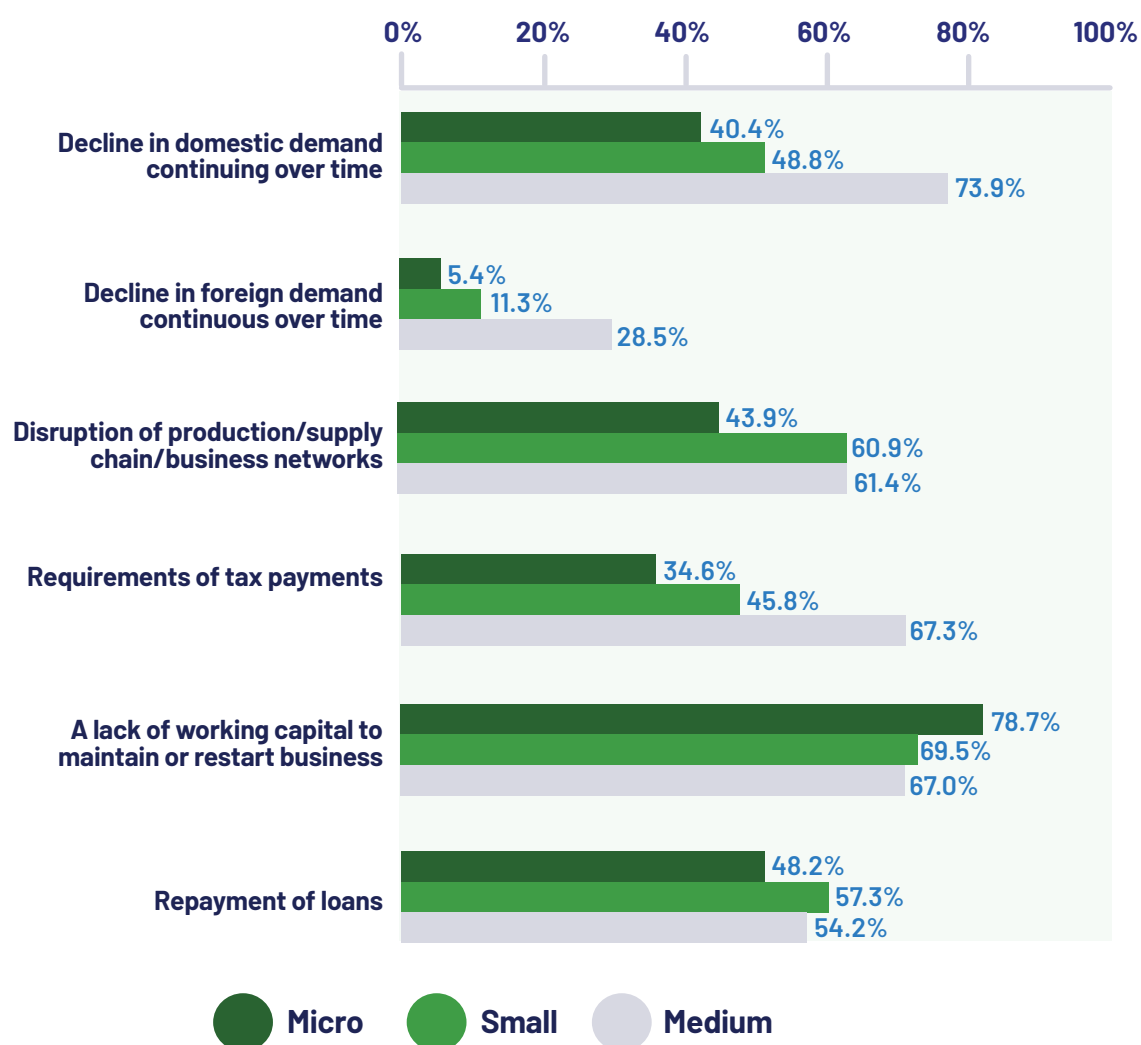
Can you borrow P50,000?

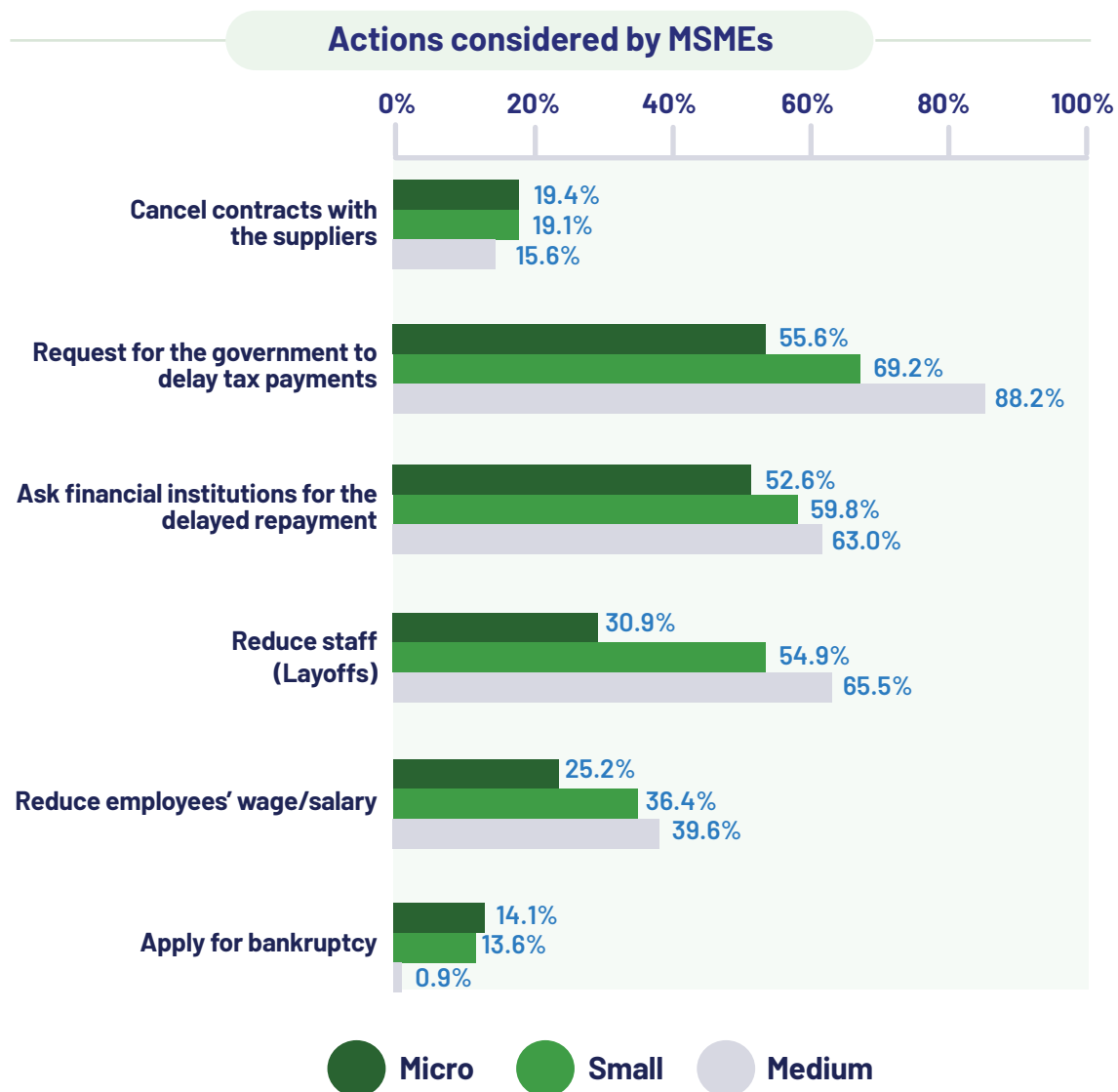


Difficulty of Borrowing



Concerns and challenges faced by MSMEs during the outbreak





Source: Shinozaki, S. and L. N. Rao. 2021. COVID-19 Impact on Micro, Small, and Medium-Sized Enterprises under the Lockdown: Evidence from a Rapid Survey in the Philippines. ADBI Working Paper 1216. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/covid-19-impact-msme-under-lockdown-evidence-rapidsurvey-philippines>

Checkpoint

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

- ◆ Home?
- ◆ Community?
- ◆ Livelihood?

MSME Stories of Disaster Resilience

Creativity and Continuity Saved a Winery

NATURE'S WINERY

The sweet taste of success could have soured for Nature's Winery when the COVID-19 pandemic hit. Lockdowns coupled with on-and-off liquor bans could have halted the production of Nature's Winery's best-selling 'Selosa' mangosteen wine and other products. But business owner Ferdinand Nipaz faced the crisis and declared: challenge accepted.

The origin behind the 'Selosa' brand name comes from the early days of Nature's Winery. Mr. Nipaz came up with the catchy name when a client purchased the last 3 bottles of his then-unnamed wine which – he was told – were supposed to be a gift for the client's wife who "easily gets jealous."

"After naming it 'Selosa,' the sales went up. I consider the name as the lucky charm that is why my products were always sold out," Mr. Nipaz shared.

The mangosteen wine of Nature's Winery became a popular item in local hotels and resorts in the province of Pangasinan prior to the pandemic. The flavored drink made from fermented mangosteen is considered as a staple token during special events and a souvenir item for tourists.

The onset of the pandemic brought rough times with plummeting sales and heavy restrictions. But the path to survive the crisis became clear for Nature's Winery because of their

existing Business Continuity Plan, which they created before the pandemic and in collaboration with the Department of Trade and Industry. The plan helped him analyze the situation and strategize how to keep his business running

“There were no problems in terms of the raw materials. Our main stumbling block was the liquor ban since we were not allowed to sell our major product,” Mr. Nipaz recounted.

Closing down was not an option. Instead, guided by his Business Continuity Plan, Mr. Nipaz decided to introduce a new product: concentrated calamansi juice. Consistent with his creative branding, Mr. Nipaz named his new product ‘Maarte,’ a colloquial term for “finicky or choosy.”

“We purchased calamansi from nearby farms and backyard gardeners. It was also one way of helping the community by providing them livelihood opportunities during a difficult time,” Mr. Nipaz explained.

“We are also considering backup suppliers in case other forms of calamities happen.”

With a growing trend towards living a healthier lifestyle and with people becoming “choosier” about what they consumed, the ‘Maarte’ Calamansi Concentrate became a huge hit for Nature’s Winery. And that is how this business managed to thrive during the pandemic.

And as the quarantine restrictions became less stringent, Nature’s Winery bounced back effectively. ‘Selosa’ is back to selling like crazy while ‘Maarte’ has carved its own place in the market.

The Fruits of Their Labor

“We learned a lot from the experience. In fact, we are now looking into partnering with more suppliers (such as those in malls) outside Mindoro and Davao where most of the mangosteen are sourced. We are also considering backup suppliers in case other forms of calamities happen,” Mr. Nipaz shared his takeaways from the crisis.

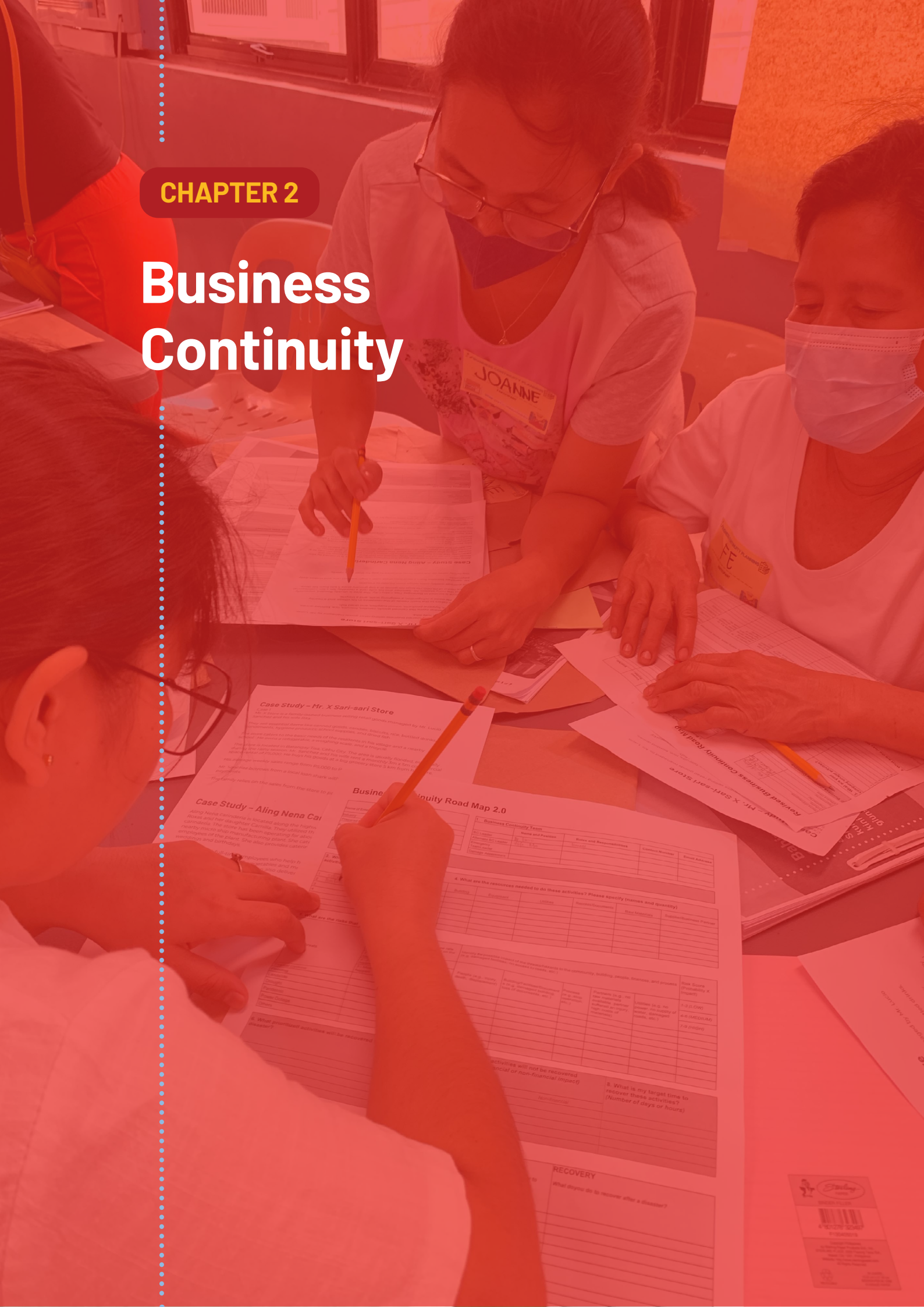
Nature’s Winery is currently exploring tea as a secondary business product. Mr. Nipaz is studying how to best use the by-product or waste from producing the mangosteen wine. Apparently, this can be dried into a powder that can be brewed as tea. The company is also considering the use of powdered or preserved fruits as alternative raw materials in case the supply chain is cut-off.

Mr. Nipaz is updating his Business Continuity Plan to reflect his experiences during the pandemic and to craft new strategies to improve his business in case of future disruptions. The plan came in handy during a tricky time and he now knows that preparation and creativity can bear fruit in a crisis.

To read other MSME resilience stories, download TATAG (Stories of MSME Disaster Resilience) at <https://iadapt.pdrf.org/msme-stories-of-resilience/>

CHAPTER 2

Business Continuity



In this chapter, we will:

- ▶ Learn business continuity
- ▶ Design a business continuity plan

What is Business Continuity?

The COVID-19 pandemic highlighted the value of business continuity (BC) which is the ability of an organization to continue delivering its products and/or services in an acceptable manner after any kind of disruption.

To be able to continue with business operations in the middle of and after a crisis, a business continuity plan (BCP) must be designed beforehand. A BCP is a document that guides a business on what to do before, during and after disasters and emergencies to ensure continuity of business operations. It includes the following information:

1. Business continuity team members and their roles
2. Major business activities
3. Resources needed to carry out the major business activities
4. Risks involved in the identified resources
5. Priority activities to be recovered
6. Target time for recovering activities
7. Preparedness, response, and recovery strategies
8. Emergency contact numbers

Why is having a business continuity plan important?

According to Mr. Ramil Cabodil, the Founder and President of Business Continuity Managers Association of the Philippines (BCMAP), the first step for MSMEs to be disaster-resilient is to prepare their business continuity plans.¹ With a BCP in place, MSMEs can help their employees stay safe whenever any kind of disruption happens. It trains MSMEs to be resilient as they take preplanned actions to adapt to adverse conditions and continue with operations. Being ready and properly trained in BCP puts MSMEs in a position where they can remain calm during a crisis and make effective and timely decisions, minimizing confusion within the organization and consequently, minimizing losses and risks.

With the COVID-19 virus still being a threat, on top of the Philippines being a disaster-prone country, preparing a BCP is very crucial and necessary.

¹Towards disaster-resilient MSMEs (03 June 2019). University of the Philippines Diliman. <https://upd.edu.ph/towards-disaster-resilient-msmes/>

Designing a Business Continuity Plan

In developing a BCP for your business, below are the steps that you can follow:

1. Evaluate your business continuity capability and readiness
2. Scope and determine prioritized activities
3. Evaluate business risks
4. Analyze business impact

In the next sections, processes and activities needed to be done for each step are discussed further.

STEP 1

Evaluating Business Continuity Capability and Readiness

When assessing the capability and readiness of your business to develop a BCP, you need to look at the 10 C's in Business Continuity Management:

1. **Conventions** - refers to documented models, frameworks, norms, protocols, policies, and processes that are in place to ensure that the BCP is meeting quality standards
2. **Conditions** - measures the business risks and hazards and identifies the critical areas of operations
3. **Customers** - measures the ability of MSMEs to ensure safety of customers when disaster events happen during business hours
4. **Crews** - measures the ability of MSMEs to identify BCP champions to implement the BCP and ensure the safety of employees in the workplace especially during disasters
5. **Costs** - measures the ability of MSMEs to insure business, and identify persons/ individuals/lending institutions as well as the available government support they could reach out to
6. **Chains** - measures the ability of MSMEs to figure out demand chain transportation requirements and possession of transportation assets during disasters
7. **Controls** - measures the ability of MSMEs to shift to work-from-home arrangement, prepare back-up copies of important documents, and procure medicines, vaccines, and healthcare services for its employees, among others
8. **Collaborations** - measures the ability of MSMEs to network with other businesses and communicate the need for BCP among neighboring business

establishments

9. **Capacity** - measures the ability of MSMEs to use data on financial performance before, during, and after a disaster for evidence-based decision making
10. **Coping** - measures the ability of MSMEs to recover and continue business by identifying alternative sites and putting in place different modalities in the supply and demand chain such as online selling and door-to-door delivery

To help you assess these C's of your business, you may accomplish the Business Continuity Capability and Readiness Assessment (BCCRA), an online checklist developed by the Social Development Research Center of De La Salle University-Manila (DLSU-Manila), together with select MSMEs, DTI representatives, PDRF and its partners.

BCCRA measures the level of readiness of a company/organization to be able to develop an adequate business continuity plan. The assessment tool will ascertain whether procedures, protocols, and resources are present or absent.

MSMEs that do not yet have existing BCP may accomplish this checklist: <https://iadapt.pdrf.org/msme-tools/business-continuity-capability-checklist-for-msmes-without-bcp>



MSMEs with BCP may quality check their plan and see how it can further be improved by answering this checklist: <https://iadapt.pdrf.org/msme-tools/business-continuity-capability-checklist-for-msmes-with-existing-bcp>



STEP 2 Scoping and Determining Prioritized Activities

When your company is ready and able to develop your own business continuity plan, you can move on to identifying the activities you need to restore first should disasters or emergencies happen.

Here are some guide questions you can ask yourself to help you determine activities that you need to prioritize:

1. What is the lifeline product or service of your enterprise?
2. Which products and services generate the most revenue?
3. Which business activity makes a top selling products

Identifying Resources Needed by the Business

Apart from determining the prioritized activities, a business must also identify the necessary resources to be able to operate after a disruption which include, but not limited to, the following:

Internal Resources

- ◆ Building
- ◆ Equipment
- ◆ Personnel
- ◆ Raw materials
- ◆ Inventory

Essential Utilities

- ◆ Fuel
- ◆ Power
- ◆ Telecommunications
- ◆ Water

Business Partners

- ◆ Vital suppliers
- ◆ Major clients
- ◆ Telecommunications
- ◆ Government institutions

STEP 3 Evaluating Business Risks

After identifying the prioritized activities and resources, the next step is to evaluate business risks.

Risk is determined by hazard, exposure (impact and likelihood), vulnerability and capacity. To minimize disaster risks, the hazard, exposure, and vulnerability must be reduced while the capacity must be increased. Their interdependence can be illustrated through this equation (not an actual formula):

What is the concept of risk?

RISK

=

Hazard x Vulnerability x Exposure
Capacity

To have a good understanding of your disaster risks, you need to identify the following factors:

1. **hazards** - processes, events or human activities that may cause loss of life, injury or other health impacts, property damage, or social and economic disruption
2. **vulnerabilities** - physical, social, economic and environmental factors or processes that can increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards
3. **impact** - the magnitude of harm that can be expected following a disaster
4. **likelihood** or probability of hazards to happen
5. **capacity** of your business to manage the hazards

These are the guide questions that can help you identify the factors mentioned and evaluate your business risk:

QUESTION 1

HAZARDS What are the possible threats to your business? Think of possible threats that can affect your business.

QUESTION 2

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

QUESTION 3

LIKELIHOOD What is the likelihood that this will happen to your business? You may evaluate the likelihood using the following parameters:

Impact Level	Description
Most likely	81% - 100% chance of the event occurring
likely	41% - 80% chance of the event occurring
unlikely	21% - 40% chance of the event occurring
remote	1% - 20% chance of the event occurring

Remember: You are analyzing the occurrence of the risk (e.g., potential damage to products and store equipment, impact to employees) and not the occurrence of the hazard.

Did You Know?

IN JULY 2019, the Department of Science and Technology created the "Hazard Hunter," a mobile application that can detect natural hazards at any location. This is a useful tool in identifying the disaster risks in your area of business.

Visit <https://hazardhunter.georisk.gov.ph/>

QUESTION 4

IMPACT If the scenario happens, how will this affect your business? What will be the impact?

You may determine the impact by asking yourself the following questions:

1. On people: Will my employees or customers be harmed or injured? Will this affect their safety?
2. On profit: Will my business profit be affected? Will I suffer financial loss?
3. On brand reputation/image: Will this lead to negative customer feedback which can affect my business/brand image?

QUESTION 5

CAPACITY What is the business currently doing to protect itself from these potential scenarios?

Did You Know?

PDRF, in partnership with UPS foundation, launched the “Katatagan in a Box” mobile application, which helps enterprise owners accomplish their own business continuity planning toolkits and helps them assess the disaster preparedness of their enterprises.

To help you evaluate your business risks as well as identify the gaps in knowledge, skills and resources necessary to avoid or mitigate the impacts of disasters, you may accomplish the Disaster Risk and Needs Assessment (DRNA) checklist via <https://iadapt.pdrf.org/msme-tools/disaster-risks-and-needs-assessment-tool>.



This checklist was scientifically formulated by the Social Development Research Center of DLSU-Manila, in consultation with select MSMEs nationwide that have experienced disasters and emergency situations in the past. Key informant interviews were also done with local disaster risk reduction management officers as well as with representatives from the Department of Trade and Industry (DTI).

This tool has four (4) components:

1. Vulnerability assessment based on location
2. Perceived likelihood of disaster risks
3. Pre-disaster needs assessment inventory
4. Perceived likelihood of impacts

Based on your answers, this tool generates a score per component along with the interpretation of the results.

YOUR RESULTS		
Part I: Potential Exposure to Risks Based on Location		
Score: 4 - Low Risk		
* A score between 4 and 12 signifies moderate to high risk exposure. A score of more than 12 means that you are situated in a very high risk location, which would require relocation.		
Part II: Perceived Likelihood of Disaster Risks		
Score: 18 - Moderate Risk		
* If your score falls between 1 and 30, your company needs to undergo training in order to be able to come up with a comprehensive business continuity plan and disaster preparedness plan.		
Part III: Pre-Disaster Need Assessment Inventory		
Score: 19 - Not prepared at all		
DOMAINS	NO OF ITEMS	SCORE
Physical Features of the Business Infrastructure	8	2
Disaster Management Planning	15	1
Disaster Management-Related Capacity	9	3
Access to Information	3	1
Goods/Products	4	2
Equipment and Tools	7	3
Health, Safety, and Welfare of Employees	6	4
Health, Safety, and Welfare of Clients	4	1
Service Utilities (Water, Electricity, Communication, and Transportation)	8	0
Insurance Coverage and Claims and Financial Capacity	6	2
TOTAL	15	
* If your score falls between 1 and 30, you need to seriously consider implementing protocols, arrangements, and procedures that are not yet in place. You may attend trainings or consult appropriate authorities in order to know some strategies on how best to comply with the standards.		
Part IV: Perceived Level of Likelihood of Impacts		

Sample result generated using the DRNA tool

Checkpoint

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

- ◆ Seismic Hazards
- ◆ Volcanic Hazards
- ◆ Hydrometeorological Hazards

STEP 4 Analyzing Business Impact

After assessing the business risks, you would need to go back to the prioritized activities you have determined and identify which will be recovered first after a disaster. In this part, you also need to analyze the financial and non-financial impact to your business if the prioritized activities you've identified are not recovered. You have to set your target time to recover each prioritized activity.

Steps in crafting a business continuity plan:

Step 1: Evaluate business continuity capability and readiness

Assess the 10 C's in Business Continuity Management:

- | | |
|----------------|-------------------|
| 1. Conventions | 6. Chains |
| 2. Conditions | 7. Controls |
| 3. Customers | 8. Collaborations |
| 4. Crews | 9. Capacity |
| 5. Costs | 10. Coping |

Tools available:

MSMEs without existing BCP:

<https://iadapt.pdrf.org/msme-tools/business-continuity-capability-checklist-for-msmes-without-bcp>



MSMEs with BCP: <https://iadapt.pdrf.org/msme-tools/business-continuity-capability-checklist-for-msmes-with-existing-bcp>



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**Step 2: Determine prioritized activities and resources**

1. What is the lifeline product or service of your enterprise?
2. Which products and services generate the most revenue?
3. Which business activity makes a top selling product?
4. What are the necessary resources to be able to continue to operate?

**Step 3: Evaluate business risks**

1. What are the possible threats to your business? (Hazards)
2. How can these hazards affect your facilities and equipment, products/services, employees, customers and partners? (Vulnerabilities)
3. What is the probability for these hazards to happen? (Likelihood)
4. If a crisis happens, how will it affect your business? (Impact)
5. What is your business currently doing to protect itself from these potential disruptions? (Capacity)

Tools available:

Disaster Risk and Needs Assessment (DRNA)
<https://iadapt.pdrf.org/msme-tools/disaster-risks-and-needs-assessment-tool>

**Step 4: Analyze business impact**

1. Which prioritized activities will be recovered first?
2. What are the financial and non-financial impact to your business if the prioritized activities are not recovered?
3. What is the target time to recover each prioritized activity?

Business Continuity Plan Roadmap

To help you get started and apply the steps previously mentioned, you may refer to this Business Continuity Plan Roadmap developed by PDRF. You may add here your own contact list consisting of your enterprise's supply chain.

Name of Enterprise	
Industry	
Prepared by:	
Approved by:	
Effective Date:	

1. Business Continuity Team				
	Name and Position	Roles and Responsibilities	Contact Number	Email Address
BC Leader				
Alternate BC Leader				
Emergency Team Leader				
Damage Assessment				

2. Business Continuity Objective:

--

3. What are you company's major activities?	4. What are the resources needed to do these activities? Please specify (names and quantity)						
	People	Building	Equipment	Utilities	Records/ Documents	Raw Materials	Supplier/ Business Partner
1.							
2.							
3.							

5. What are the risks that your business is exposed to?								
Hazard/ Threats	(P) Probability (Please rate the probability based on the scoring below)	(I) Impact (Please rate the impact based on the scoring below)	Identify possible impact of the threats/hazards to the community, building, people, finances and process (Refer to Figure 1 below for examples)					Risk Score (Probability X Impact)
	1 - Unlikely to happen	1 - Minor impact	People	Building/ Facilities/ Documents	Process	Partners	Utilities	1-3 (Low)
	2 - Possible to happen	2 - Moderate impact						4-6 (Medium)
	3 - Most Certain to happen	3 - Major impact						7-9 (High)
Tropical Cyclone								
Flooding								
Landslide								
Drought								
Pandemic								
Power Outage								
Others								

Figure 1. Examples	
People	(e.g. injury, death, displacement)
Building/Facilities/Documents	(e.g. damage building, loss of documents etc)
Process	(e.g. stop operation, etc)
Partners	(e.g. no raw materials available, partner suffered an injury, high costs of materials)
Utilities	(e.g. no power, no supply of water, damaged roads etc.)

6. What prioritized activities will be recovered first after a disaster?	7. What is the impact if activities will not be recovered following a disruption? (Financial or non-financial impact)		8. What is my target time to recover these activities? (Number of days or hours)
	Financial	Non-financial	
1			
2			
3			

9. What are the strategies to prepare, respond during and recover after a disaster?

Resources	PREPAREDNESS & MITIGATION How do you protect your resources and assets before the disaster?	RESPONSE What do you do during an emergency to protect your assets and your people?	RECOVERY What do you do to recover after a disaster?
People			
Building/Facilities			
Equipment			
Raw Materials			
Records/Documents			
Utilities (Power, Water, Communications)			
Supplier/Business Partner			
Finances			

EMERGENCY CONTACT LIST

Agency	Contact Number	Address	Agency	Contact Number	Address
Bureau of Fire			Hospital/Clinic		
Electric Cooperative			Local Disaster Risk Reduction and Mangement Office		
Local Water District			Police Station		
Rescue			Supplier		
Barangay					
DTI					
Supplier					
Bank					

MSME Stories of Disaster Resilience



“Hapi-ness” and Readiness for a Successful Business

HAPI JESS

Staying motivated, being innovative, and getting prepared are what enabled seasoned agripreneur Jesselle Hyacinth Suarez-Hablo to keep her business afloat during the toughest moments of the COVID-19 pandemic.

Even as the business was threatened with imminent closure, Hapi Jess Food Products Manufacturing developed a new brand and produced several innovative products while also supporting local communities and exploring alternative sources of raw materials. Hapi Jess also learned the value of developing a business continuity plan to document all the lessons learned from difficult experiences.

Tasty and Healthy Innovations

Hapi Jess is an offshoot of the Sir Jess brand which is known for their Piaya in Basil Pesto, Turmeric, Oregano and Pure Muscovado flavors. Hapi Jess products proved to be “pandemic-proof” because they are considered healthy food. Hapi Jess went even further by developing the “No MSG” and “saltfree” condiment named Orega Farmer’s Seasoning.

Even more flavorful but healthy products include juice concentrates of calamansi, lemon, cucumber, and nata de coco. They also sell the popular drink rice brew with lemongrass.

Hapi Jess also made sure to maximize

social media in promoting their products, emphasizing their health benefits. The marketing strategy also included mentioning that the products were made by local ingredients to encourage consumers to support Filipino products.

“During the pandemic, my focus was to distribute Hapi Jess products to every home to promote good health,” Suarez-Hablo said.

Empowering the Community

But the business does more than produce healthy products made from local ingredients. Hapi Jess also makes sure to empower communities.

Aside from using herbs harvested from the family farm, Hapi Jess also brought produce from small farmers and vendors in the community to help them survive during the pandemic. This win-win strategy was a supplement to the Women’s Economic Empowerment (WEE) Project under which Suarez-Hablo had the opportunity to provide free assistance and develop new recipes for its women-beneficiaries.

“When we heard that [local] farmers are struggling, we continued to give [assistance] so that our community can grow,” Suarez-Hablo said as she explained how the support of the resellers were instrumental in the success of the newly-introduced Hapi Jess products in the market.

A Recipe for Readiness

Learning from experience, Suarez-Hablo has become better prepared to face the worst case scenario for a business.

Taking business continuity planning seriously, Hapi Jess has a team devoted

to constantly testing and updating their business continuity plan (BCP). The company has also partnered with local farmers and suppliers to serve as backup during times of need.

“Any kind of disruptions that could occur in our production plant were considered,” Suarez-Hablo said, discussing the process of creating their BCP.

A chef by profession, Suarez-Hablo is still able to innovate and produce unique food products that are now available in grocery shelves. With positivity as an extra ingredient, Hapi Jess became successful in teaming up with small market vendors and farmers.

Effectively preparing for recognized threats and risks has enabled Hapi Jess to become Bacolod’s pride despite all the ups and downs. This multi-awarded business has both “happiness” and “readiness” enshrined in its sustainable brand.

“When we heard that [local] farmers are struggling, we continued to give [assistance] so that our community can grow.”

To read other MSME resilience stories, download TATAG (Stories of MSME Disaster Resilience) at <https://iadapt.pdrf.org/msme-stories-of-resilience/>

CHAPTER 3

MSME Resilience



In this chapter, we will talk about:

- ▶ Guidelines to instill MSME resilience
- ▶ Digital transformation as next step towards resilience

After preparing BCP, what's next? How can MSMEs enhance resilience?

According to a report done by the ASEAN Coordinating Committee on micro, small, and medium enterprises, resilient MSMEs are “firms that are able to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management.”

Increasing the capacity of an MSME to cope with changing environments, means moving further beyond planning and implementation. Resilience is achieved by building a culture of agility in a business through continuous assessments, training, and innovation, among others.

Guidelines to instill MSME Resilience

To instill MSME resilience to crises and disasters, the report provided guidelines that are structured in four pillars, patterned after the four phases of disaster risk management:

Prevention	Preparedness	Response	Recovery
▶ Reduce the exposure to hazards ▶ Enhance occupational safety and health ▶ Reduce the vulnerabilities ▶ Strengthen financial resilience	▶ Improve the understanding of the risks ▶ Develop disaster planning capabilities	▶ Understand the emerging impacts ▶ Ensure the availability of critical supplies ▶ Support continuity of operations ▶ Ensure the upkeep of employees	▶ Expand access to markets ▶ Increase the adoption of digital technologies ▶ Upskill and reskill employees ▶ Innovate ▶ Improve financial sustainability

Source: Enhancing the Resilience of MSMEs to Crises and Disasters: Regional Guidelines for ASEAN Governments (13 June 2022). ASEAN. https://asean.org/wp-content/uploads/2022/07/Enhancing-the-resilience-of-MSMEs_final_13June2022.pdf

Digitalization and resilience

The ASEAN report also identified the use of information and communications technology innovations to enhance the collection, analysis and dissemination of

data. The recent COVID-19 outbreak has proven that going digital gives flexibility and agility to businesses. According to APEC, However, according to the 2021 survey done by MicroSave Consulting in India, Indonesia, Kenya, and the Philippines, MSMEs still have significantly low adoption of technology. Many MSMEs still haven't taken advantage of social media and other online channels for business communication. The survey found that only one-fifth of MSMEs have started using e-commerce platforms or social media channels.

Digitalization is the integration of digital technologies (such as computers and the internet) into business processes and operations. The use of digital tools like digital payments, messagings apps, social media, and cloud storage can bring about many benefits to your business such as:

1. managing transactions at a distance - contactless transactions via e-commerce tools, mobile money and digital payment services lower costs and offer convenience to customers.
2. delivering goods efficiently - using digital shipping platforms can save costs and facilitate on-time product delivery
3. engaging with new and existing customers - using social media such as Facebook and Instagram improves the reach of the business. Messaging apps like Messenger and Viber allow customers to conveniently contact businesses.

However, while going digital has significant advantages, it also poses challenges such as cybersecurity and data privacy concerns, exposure to digital fraud and online misinformation, among others. Before jumping into digitalization, MSMEs must first build their digital capacities. There must first be an understanding and appreciation of the use of digital technologies.¹

To help MSMEs assess their readiness to embark on digital transformation, DTI launched an online self-assessment tool.² After taking the test, the tool will recommend specific training topics to help MSMEs move forward with digitalization. Learning resources are available at DTI³ or the Negosyo Center⁴ websites. MSMEs may also inquire at Negosyo Centers.

Checkpoint

How can you build the digital capacity of your business to:

- ◆ manage transactions at a distance?
- ◆ deliver goods efficiently?
- ◆ engage with new and existing customers?

¹Supporting MSMEs' Digitalization Amid COVID-19 (July 2020). APEC. <https://www.apec.org/publications/2020/07/supporting-msmes-digitalization-amid-covid-19>

²DTI Digital Maturity Diagnostic Tool. <http://msmetoolkit.dti.gov.ph/>

³DTI. <https://www.dti.gov.ph/>

⁴Negosyo Center. <https://www.dti.gov.ph/negosyo/negosyo-center/>

MSME Stories of Disaster Resilience



Resourcefulness: A Key to Lorenzo Farm's Sweet Success

LORENZO FARM

Chocolate-lovers who also appreciate locally-sourced cacao can indulge in Lorenzo Farm's wide selection of cacao-based products which are also popular Iloilo pasalubong or souvenir items and always available in trade fairs. Since 2017, the owners have been expanding their product line to include truffles, sugar-free Tsokolate/tablea, instant tablea, dark and milk chocolate bars, and so much more.

Lorenzo Farm is owned by Engr. Rogelio Daduya and his wife, Yurie, a teacher, who helped him grow the business as it catered to the increasing demand for healthy food products by discerning customers. They make a

good team: Mr. Daduya takes care of the technical side, particularly on the process and the equipment, while Mrs. Daduya is in charge of the business and marketing. Lorenzo Farm products have been regularly featured in local TV shows and have become staples in Iloilo pasalubong centers.

Humble Beginnings

"It all started with a manual grinder which my husband mechanized using a motor of an old washing machine," Mrs. Daduya shared the peculiar origins of their business venture.

This very manual grinder, which is still being used to this day, gave birth

to Lorenzo Farm's variety of products, like the Tsokosaba, Dark Diamond, and Milk Chocolate. This simple innovation helped them embark on an important culinary journey.

The couple's original business idea had been to sell and plant seeds. But fate had other plans for them and Lorenzo Farm ventured into mass production of various cacao products.

A lucrative opportunity presented itself when the farm was selected as a partner of the Department of Trade and Industry. This prompted the owners to further develop their products and to enhance the business. Packaging was improved, becoming more standardized in terms of colors and shapes with standard content as well.

The couple also learned to create a Business Continuity Plan to help them prepare for any potential disruption. As they laid down the strategies for continuing cacao production in the event of a crisis, little did they know how helpful this would be for them in the near future.

Pandemic Bitterness

When the COVID-19 pandemic struck, Lorenzo Farm was forced to close down its production house for two months. While they were no longer selling their products, they continued to buy and produce cacao. Sales dropped because of logistical challenges and cacao production slowed down.

Prior to the pandemic, the couple had been planning to create more cacao products and launch new flavors. All these came to a halt as they had to deal with the pandemic restrictions.

Introducing new products was out of the question when they could not even sell their available product line to a dwindling clientele.

A New Sweet Spot

But the enterprising couple did not let the pandemic discourage them. They consulted their Business Continuity Plan to help them maintain their cacao production. And they also learned to adapt their strategies to the evolving changes in the market.

As they surveyed the market, they noticed an important shift in consumer behavior. People were becoming more and more health conscious because they understood the urgency of protecting themselves against infection. Customers were becoming very interested in healthy alternatives to their usual diet.

And as it turns out, cacao has a lot of health benefits! It contains a fiber that can help your digestive system and drinks with cacao can increase the good bacteria in your gut. Studies have also shown that eating dark chocolate helps reduce stress and improve your overall mental and physical wellbeing.

"Our products being considered as antioxidants and health boosters became the narrative that turned threats into opportunities," Mrs. Daduya said.

This new trend allowed Lorenzo Farm to reopen and regain the market easily.

Business Continuity to the Rescue

A full-blown business continuity plan is now in place for Lorenzo Farm. The plan includes a strategy on how to continuously produce cacao even

in the midst of a natural or human-induced disaster.

“Our products being considered as antioxidants and health boosters became the narrative that turned threats into opportunities.”

“On a positive note, our cacao-producing farms are strategically located in the outskirts of the city. Because of this, the area was not largely affected by the pandemic. So, our cacao production continued,” Mrs. Daduya said. Lorenzo Farm’s supply chain will not be easily broken and they are able to support the livelihood of farmers living in the areas aforementioned.

She also added that plans are already laid out for the revival of their in-house farm to increase cacao production yield. Originally, cacao production took place in their own farm, which they inherited. Now they plan to do this again to create more stock of their products.

In terms of equipment, the company is expecting the delivery of several chocolate making equipment coming from DOST Small Enterprise Technology Upgrading (SET-UP) fund.



A small patch of land such as the Lorenzo Farm can be cultivated to become a thriving business. With the help of their Business Continuity Plan, the Daduya couple have an invaluable guide to help them navigate difficult times and to keep their business booming.

To read other MSME resilience stories, download TATAG (Stories of MSME Disaster Resilience) at <https://iadapt.pdrf.org/msme-stories-of-resilience/>

CHAPTER 4

Disaster Risk Management in the Philippines



In this chapter, we will discuss:

- ▶ The shift of disaster risk management approach from response to mitigation
- ▶ The updated National Disaster Risk Reduction and Management Plan (NDRRMP) 2020-2030

With our country being prone to natural disasters, located along the ring of fire and at the center of a typhoon belt, the Philippine government has developed a strong coping system over the years. Although there are still many gaps that need to be addressed, the country has substantial experience with, and has heavily invested in disaster preparedness and response.¹

In 2010, the Republic Act (RA) No. 10121 (also known as the Philippine Disaster Risk Reduction and Management Act of 2010 or DRRM Act) was enacted as the focus of disaster risk management in the country shifted from response to mitigation. The strategy is to use directives, skills, and capacities to eventually lessen the impacts and possibilities of disasters.

RA 10121 revoked the Presidential Decree (PD) 1566 of 1978. The table below shows the summary of the shift of focus and direction of disaster risk management in the country.

Legal Basis	Presidential Decree 1566 of 1978	Republic Act 10121 of 2010
Focus	Disaster Response	Disaster Risk Reduction and Management (All Thematic Areas)
Decision-making Approach	Top-down and centralized Disaster Management	Bottom-up and Participatory DRR
Concept	Disasters are brought about by physical hazards	Disaster are brought about by the confluence of hazard, exposure, and high level of vulnerability
Activities	Focused on disaster response	Comprehensive planning to reduce disaster risk

¹Vincenzo Bollettino, Tilly Alcayna, Krish Enriquez, and Patrick Vinck. 6/2018. Perceptions of Disaster Resilience and Preparedness in the Philippines. <https://hhi.harvard.edu/publications/perceptions-disaster-resilience-and-preparedness-philippines>

Through the DRRM Act, MSMEs and communities gain financial assistance through the creation of a calamity fund dedicated to disaster risk reduction or mitigation, prevention, and preparedness activities for the potential occurrence of disasters and not only for response, relief, and rehabilitation efforts.¹

This provision allows LGUs to utilize 70% of the total calamity fund on risk-reduction activities and 30% on quick response measures.² In return, MSMEs reduce their vulnerabilities, strengthen their resilience to ensure the health and safety of the employees, build client confidence, and minimize economic losses.³

With the enactment of RA 10121, the National Disaster Coordinating Council (NDCC) headed by the Secretary of National Defense was replaced by the National Disaster Risk Reduction and Management Council (NDRRMC) as the focal body for disaster risk management.

As the highest organization and authorized body in disaster risk reduction and management in the country, NDRRMC is mandated to respond to natural calamities and monitor human-induced emergencies. And to help government units to continue performing their essential functions in times of crises, NDRRMC developed a DRRM mechanism called the Public Service Continuity Plan (PSCP) in partnership with the Philippine Disaster Resilience Foundation (PDRF), a network of private sector actors working on disaster risk reduction and management initiatives. The private sector, which includes private corporations, households and nonprofit institutions serving households, is engaged in the government's disaster risk reduction programs to complement resources and help deliver services to citizens effectively.

The Office of Civil Defense, the implementing arm of NDRRMC, formulates and implements the National Disaster Risk Reduction and Management Plan (NDRRMP), a national guide to achieve a safer, adaptive and disaster-resilient Filipino communities. NDRRMP provides the legal basis for policies, plans and programs to deal with disasters, in accordance with the requirements of RA 10121.

National Disaster Risk Reduction and Management Plan

The focus of the updated National Disaster Risk Reduction and Management Plan (NDRRMP) 2020-2030 is on climate and disaster risks. It establishes the partnership between disaster risk reduction and management (DRRM), climate change adaptation (CCA), and human security to achieve risk reduction, resilience building, human security, and sustainable development.

¹Climate-laws.org. (2020). Philippine Disaster Reduction and Management Act (RA 10121). [online] available at: <https://climate-laws.org/cclow/geographies/141/laws/1549>.

²Mendoza, V. (2011). Philippines: New disaster reduction law strengthens self-reliance - Philippines. [online] ReliefWeb. Available at: <https://reliefweb.int/report/philippines/philippines-new-disaster-reduction-law-strengthens-self-reliance>

³Upd.edu.ph. (2019). University of the Philippines Diliman. [online] Available at: <https://upd.edu.ph/towards-disaster-resilient-msmes/>

The purpose of the NDRRMP 2020-2030 is to:

- ▶ provide direction and guidance to national, local, civil society organizations, private sector, and development partners on disaster and climate-resilience actions in the Philippines;
- ▶ strengthen disaster and climate risk governance by clarifying the roles, accountabilities, strategies, and activities of DRRM stakeholders at all levels;
- ▶ strengthen linkages and interoperability of the DRRM thematic pillars; and
- ▶ ensure the convergence of and synergy between DRRM and CCA.

NDRRMP provides a multi-sectoral, inter-agency approach to disaster risk management, encouraging participation from the private sector, local government units (LGUs), non-governmental organizations (NGOs), civil society organizations (CSOs), community members, and volunteers in disaster risk management. It aims to strengthen the community's ability to maintain basic functions and recover from disasters by planning response and recovery strategies ahead of time.

The long-term goals of the NDRRMP are divided into the four (4) priority thematic areas, namely, a) Disaster Prevention and Mitigation; b) Disaster Preparedness; c) Disaster Response and Early Recovery; and d) Disaster Rehabilitation and Recovery. These priority areas support and strengthen each other, focusing on assessing needs and harnessing strengths in order to reduce people's vulnerabilities and increase their capacities.

Thematic Pillars



Disaster Prevention and Mitigation

LEAD AGENCY

Department of Science and Technology (DOST)



Goal: Address current and reduce future risks of communities and government through mainstreaming integrated risk management into science, policy and practice

Objectives:

1. Improve access, understanding, and use of updated risk information, DRR-related statistics, and research
2. Apply integrated risk management assessment tools
3. Implement risk-centered national, sub-national and sectoral policies, plans and budgets

4. Institutionalize timely, responsive, context- and culture-specific early warning systems
5. Access to effective, responsive and inclusive risk financing and insurance mechanisms
6. Improve and protect ecosystem integrity
7. Build resilience of livelihoods and businesses; and
8. Disaster-resilient human settlements

2 Disaster Preparedness

LEAD AGENCY

Department of the Interior and Local Government (DILG)



Goal: Establish and strengthen capacities of governments, communities, CSOs, and private sector to anticipate, cope, and recover from the adverse impacts of hazards and potential cascading disasters, and minimize losses and disruption of daily life

Objectives:

1. Increase the level of awareness and understanding of governments and communities of hazards, exposure, and vulnerabilities
2. Equip governments, institutions, communities, families, and individuals with the necessary skills to respond and cope with the adverse impacts of disasters
3. Increase the capacity of institutions for risk governance to avert loss of lives and assets
4. Strengthen partnership among all key actors and stakeholders
5. Develop and implement comprehensive and mutually-reinforcing national and local disaster preparedness and response plans and systems

3 Disaster Response and Early Recovery

LEAD AGENCY

Department of Social Welfare and Development (DSWD)



Goal: Provide risk-based, timely and anticipatory response actions to address basic, life-preservation and immediate needs of communities and government

Objectives:

1. To activate emergency operations center equipped with response workforce and volunteers
2. To activate risk and forecast-based financing to forecasted affected communities
3. To evacuate safely, preemptively and immediately, affected communities and ensure their safety
4. To ensure the timely, effective and well-coordinated response action and humanitarian logistics among cluster members and other actors
5. To ensure adequate, prompt and well-coordinated assessment of needs and damages
6. To immediately and temporarily restore basic needs
7. To establish and implement an integrated system for early recovery

4

Disaster Rehabilitation and Recovery**LEAD AGENCY****National Economic and Development Authority (NEDA)**

Goal: Speed up recovery from disaster losses through rehabilitation and recovery programs that are aligned to sustainable development and “build back better” principle

Objectives:

1. Assess damage, losses, and damage needs during disasters as basis for the formulation of rehabilitation and recovery program
2. Develop short- and medium-term rehabilitation and recovery plans, aligned with or contributing to the national medium- and long-term national, regional, or local development plan

Checkpoint

Below are the scope of activities designated to the implementing agencies per thematic area of the NDRRMP 2020-2030:

Disaster Prevention and Mitigation

- ◆ risk assessment
- ◆ early warning systems
- ◆ DRRM-CCA strategies and plans
- ◆ resilient infrastructure
- ◆ ecosystem integrity

Disaster Preparedness

- ◆ IEC campaign
- ◆ capacity building
- ◆ partnership building
- ◆ planning, preparedness for response
- ◆ continuity of essential services

Disaster Response and Early Recovery

- ◆ prevention of casualties
- ◆ life-saving and life-sustaining actions

Disaster Rehabilitation and Recovery

- ◆ post-disaster needs assessment
- ◆ financial assistance to jumpstart economic activities
- ◆ shelter assistance
- ◆ social services and social protection

MSME Stories of Disaster Resilience



Stitching for Success

MARIYA'S CUT & SEW CO.

Mariya's Cut and Sew Co. was doing very well as the supplier of uniforms for all private schools in the Rizal province. Sales were steady and production was stable. The sewing company was founded by Ms. Ana Marie Mabini, a Nutritionist-Dietician by profession, who turned her passion into a thriving business.

Mariya's Cut and Sew Co. boasted of a colorful fabric collection with a wide range of products including pouches, wallets and purses. The company also shared its blessings by employing underprivileged women from nearby communities who were considered business partners.

Everything changed when the pandemic struck and the lockdown forced schools to close. With no uniforms needed, the sewing company had to be shut down for four months.

New Products for New Needs

But nothing can stop a creative and resourceful person for long. Mariya's owner identified a valuable opportunity to develop a new product. With more and more customers ordering food to be delivered to their homes, logistics companies prospered and motorbike riders filled the once-empty streets. These riders needed certain items to do their jobs effectively. And that's where Mariya's came in.

“We introduced collapsible insulated bags which became a hit among riders,” the owner of Mariya’s proudly said.

They also produced other pocketable items such as jackets, shirts and sleeping bags which increased the sales during the pandemic. Things were looking bright for the company.

But Mariya’s recovery was abruptly cut short when Super Typhoon Ulysses hit the Philippines.

“At the height of our production, the typhoon washed out all our materials and left our equipment wet and muddy. Electricity was down and the floodwaters submerged all our sewing machines,” Ms. Mabini recalled.

Mariya’s was already busy trying to increase production to prepare for a national business showcase when the typhoon arrived, piling on the pressure. The company would have to find another way to weather this crisis.

Rays of Hope after the Rain

But once more, Mariya’s Cut and Sew Co. refused to be defeated. They made strategic partnerships to help them bounce back. The company’s revival materialized with the help of the Rizal Exporters’ and Manufacturers’ Association, Inc. (REMAI).

“Our partners from REMAI allowed us to use their factories [which were not affected by the typhoon] as temporary back-up production sites for Mariya’s,” Ms. Mabini said.

Since the seeds of partnerships were sown previously, colleagues from REMAI allowed Ms. Mabini’s team to use their factories. The Department of Trade and

Industry (DTI) was also able to provide sewing machines so that they can meet production deadlines in time for a business event. Ms. Mabini also learned how to craft a business continuity plan to help prepare for future challenges.

Sew On and Sew Forth

Today, Mariya’s is thriving in the new normal. With its tagline “Quality Beyond Compare,” Mariya’s shirts, uniforms, bags, and jackets are available in pop-up stores in various malls in Metro Manila. Ms. Mabini’s strategies proved effective in enabling the company to overcome different kinds of disruptions.

“Part of our business continuity plan is to transfer to a flood-free area. Aside from that, we are also looking for various training courses for our employees so that they will become more resilient,” Ms. Mabini said.

Through creativity and resourcefulness, Mariya’s successfully navigated a pandemic and a typhoon. Since it has demonstrated an ability to stitch itself back together after every storm, the future looks promising for Mariya’s Cut and Sew Co.

To read other MSME resilience stories, download TATAG (Stories of MSME Disaster Resilience) at <https://iadapt.pdrf.org/msme-stories-of-resilience/>



Annexes

Annex 1**Emergency Contact Information
List Financing Options****LOCAL**

Bureau of Fire Protection

Local Water District:

Electric Cooperative:

Hospital/Clinic:

Local DRRMO:

Municipal Police Station:

Barangay:

Red Cross Chapter:

NATIONAL

**National Disaster Risk Reduction And Management Council
(NDRRMC)**

 (02) 8 911-5061 to 64 locals 112 and 110 or (02) 8 912-3044

 drmmfmd@ocd.gov.ph

Office Of Civil Defense (OCD)

 (02) 8911-5061-64; (02) 8911-1406; (02) 8912-5668; (02) 8912-2665

 operationservice@ocd.gov.ph; publicaffairs@ocd.gov.ph

 www.facebook.com/civildefensePH

Philippine Coast Guard

 (02) 8527-3877; 0966-217-9610; 0969-217-4123

 www.facebook.com/coastguardph

Bureau of Fire Protection (BFP)

 (02) 8426-0219; (02) 8426-0246

 www.facebook.com/DILGBFP

 ofc@bfp.gov.ph (Office of the Chief BFP);
pis@bfp.gov.ph (Public Information Service)

Department of Science and Technology (DOST)

 (02) 8837-3941

 ousec.ro@dost.gov.ph

 www.facebook.com/DOSTph

National Blood Service (Red Cross)

 Hotline 143; (02) 8790-2300 local 931/932/935

 nbs@redcross.org.ph

Disaster Management Office (Red Cross)

 (02) 8790-2367 local 612-614

 dms1@redcross.org.ph

Emergency Response Unit (Red Cross)

 (02) 8790-2300 local 604

 eru@redcross.org.ph

PAGASA

 (02) 8284-0800 local 102 and 103

 information@pagasa.dost.gov.ph

 www.facebook.com/DOSTph/

Philippine National Police

 (02) 8723-0401 local 7491; 0961-8298083

 www.facebook.com/anticybercrimegroup

DILG

 (02) 8876-3454

 www.facebook.com/dilg.philippines

National Center for Mental Health (NCMH)

 (02) 531-9001; 0917-899-8727; 0966-351-4518; 0908-6392672

 mcc@ncmh.gov.ph

 www.facebook.com/ncmh.ph

Annex 2**Business Continuity
Plan Roadmap**

Name of Enterprise	
Industry	
Prepared by:	
Approved by:	
Effective Date:	

1. Business Continuity Team				
	Name and Position	Roles and Responsibilities	Contact Number	Email Address
BC Leader				
Alternate BC Leader				
Emergency Team Leader				
Damage Assessment				

2. Business Continuity Objective:

--

3. What are you company's major activities?	4. What are the resources needed to do these activities? Please specify (names and quantity)						
	People	Building	Equipment	Utilities	Records/ Documents	Raw Materials	Supplier/ Business Partner
1.							
2.							
3.							

5. What are the risks that your business is exposed to?

Hazard/ Threats	(P) Probability (Please rate the probability based on the scoring below)	(I) Impact (Please rate the impact based on the scoring below)	Identify possible impact of the threats/hazards to the community, building, people, finances and process (Refer to Figure 1 below for examples)					Risk Score (Probability X Impact)
	1 - Unlikely to happen	1 - Minor impact	People	Building/ Facilities/ Documents	Process	Partners	Utilities	1-3 (Low)
	2 - Possible to happen	2 - Moderate impact						4-6 (Medium)
	3 - Most Certain to happen	3 - Major impact						7-9 (High)
Tropical Cyclone								
Flooding								
Landslide								
Drought								
Pandemic								
Power Outage								
Others								

Figure 1. Examples

People	(e.g. injury, death, displacement)
Building/Facilities/Documents	(e.g. damage building, loss of documents etc)
Process	(e.g. stop operation, etc)
Partners	(e.g. no raw materials available, partner suffered an injury, high costs of materials)
Utilities	(e.g. no power, no supply of water, damaged roads etc.)

6. What prioritized activities will be recovered first after a disaster?	7. What is the impact if activities will not be recovered following a disruption? (Financial or non-financial impact)		8. What is my target time to recover these activities? (Number of days or hours)
	Financial	Non-financial	
1			
2			
3			

9. What are the strategies to prepare, respond during and recover after a disaster?

Resources	PREPAREDNESS & MITIGATION How do you protect your resources and assets before the disaster?	RESPONSE What do you do during an emergency to protect your assets and your people?	RECOVERY What do you do to recover after a disaster?
People			
Building/Facilities			
Equipment			
Raw Materials			
Records/Documents			
Utilities (Power, Water, Communications)			
Supplier/Business Partner			
Finances			

EMERGENCY CONTACT LIST

Agency	Contact Number	Address	Agency	Contact Number	Address
Bureau of Fire			Hospital/Clinic		
Electric Cooperative			Local Disaster Risk Reduction and Mangement Office		
Local Water District			Police Station		
Rescue			Supplier		
Barangay					
DTI					
Supplier					
Bank					

Disaster Risk Financing & Insurance Programs for MSMEs

Department of Science and Technology

PROGRAM

DOST Small Enterprise Technology Upgrading (SET-UP)

PURPOSE

to assist MSMEs to adopt technological innovations to improve their products, services, operations and increase their productivity and competitiveness

It supports MSMEs by (1) provision of funds for technology acquisition and equipment upgrading; (2) infusion of new/ advanced technologies to improve operations; (3) human resource training, technical assistance and consultancy services; (4) design of functional packages and labels; (5) assistance in the establishment of product standards including testing; and (6) database management and information system.

REQUIREMENTS

1. Comprehensive project proposal. (Technical Aspects, Marketing Aspect, Management /Administrative Aspect, Financial Aspect, Waste Disposal);
2. Proponent's letter of interest to avail of financial assistance, stating commitment to repay;
3. Copy of business permits and licenses from relevant LGUs and other government offices;
4. Financial statements of the past three (3) years for the company/ beneficiary duly signed by a Registered Accountant/Auditor;
5. Projected financial statements for the next five (5) years;
6. Certificate of Registration of Business Name with DTI, SEC or CDA.
7. Board resolution authorizing the borrowing and designating the authorized signatories for the financial assistance (if applicable);
8. Three (3) quotations from suppliers/ fabricators of the equipment to be purchased /fabricated;
9. Complete technical design/drawing of the equipment to be purchased / fabricated.

CONTACT DETAILS

Office of the Undersecretary for Regional Operations or any DOST Regional Offices



(02) 8837-3941



ousec.ro@dost.gov.ph
www.dost.gov.ph/

More details at https://ncr.dost.gov.ph/program_setup.php

Development Bank of the Philippines

LOAN PROGRAM	DBP RESPONSE
LOAN PURPOSE	For businesses/Projects located in areas affected by calamities and/or force majeure events as determined by the appropriate authorities (i.e. President of the Philippines, NDRRMC, concerned LGUs)
LOAN AMOUNT	Up to 95% based on the project requirement or minimum cash requirement
REQUIREMENTS	1. DBP Application Form 2. Customer Information File Form with Loan Record Form 3. Financial Statements (Audited/Unaudited) for the latest three (3) years (if applicable)/Relevant Financial Document 4. Authority for the Bank to conduct inquiry and provide credit information to/from credit bureaus and other banks/creditors (DBP form) 5. Board/Sanggunian resolution and/or Secretary's Certificate authorizing the loan, indicating the authorized signatories and authorized person to transact the loan 6. Project details (including detailed cost estimates) 7. For public institutions a. Copy of LGU's Disaster Risk Reduction and Management Plan and budget allocation (for LGUs) b. BLGF Certification on Net Debt Service Cover and Borrowing Capacity (for LGUs) c. MB Opinion (if already available, otherwise Pre-release condition) 8. For private institutions a. Business Registration (from DTI/SEC/CDA) b. Business Permit (from LGU) c. Business/Company profile (including details of subsidiaries and/or affiliates, Board of Directors and management, and Stockholders) d. Latest General Information Sheet e. By-Laws and Articles of Incorporation/cooperation 9. Additional Requirements (if applicable): a. Real Estate Collateral/Security ◆ Two copies of Location Plan with Vicinity Map ◆ Two copies of TCT/OCT ◆ Latest Real Estate Tax Declaration and Tax Receipt

CONTACT DETAILS

- b. Chattel Collateral
 - ◆ Affidavit of Ownership and Certification of Non-Encumbrance with specifications
 - ◆ Suppliers Quotation complete with technical specifications, for machinery and equipment
 - ◆ Contract to Sell, for machinery and equipment to be acquired
 - ◆ Copy of OR/CR for transportation equipment
- c. Building rehabilitation
 - ◆ Bills of Materials and Cost Estimates
 - ◆ Building Plan and Specification
 - ◆ Building Permit, to be submitted before construction

 (02) 8818-9511 local 2379
 pdm1@dbp.ph
 Website: www.dbp.ph

More details at www.dbp.ph/developmental-banking/social-services-community-development/dbp-rehabilitation-support-program-on-severe-events/

Small Business Corp

LOAN PROGRAM

RISE UP Micro Multi-Purpose Loan

LOAN PURPOSE

to sustain the gains of multi sectoral microenterprises that have survived the past two years of crisis

LOAN AMOUNT

Up to Php300,000 (payable monthly up to 3 years)

REQUIREMENTS

1. Government-Issued ID
2. Barangay Permit or Barangay Certification that the business has been operating at least one (1) year or BMBE Certificate of Authority or Mayor's Permit for loans not more than 100T
3. BMBE Certificate of Authority or Mayor's Permit for loans more than 100T
4. Photos of business operations and assets
5. Corporate documents, if applicable

CONTACT DETAILS

 (02) 8 651-3333
 communicationsteam@sbcorp.gov.ph
 www.facebook.com/BayanihanCARES
www.sbgfc.org.ph

More details at <https://sbcorp.gov.ph/riseupmultipurpose/>

Small Business Corp

LOAN PROGRAM	RISE UP SME Multi-Purpose Loan First Timers
LOAN PURPOSE	to sustain the gains of multi sectoral SMEs that have survived the past two years of crisis
LOAN AMOUNT	Up to 2 million (payable monthly up to 3 years)
REQUIREMENTS	1. Government-Issued ID; 2. Valid/unexpired BMBE Certificate of Authority or Mayor's Permit 3. Pictures of business operations and asset; 4. Corporate Documents, if applicable. 5. PLUS BIR-filed Financial Statement (FS) for prior year reflecting positive net income and BIR-filed FS for earlier two years; other proof of sales and/or asset
CONTACT DETAILS	 (02) 8 651-3333  communicationsteam@sbcorp.gov.ph  www.facebook.com/BayanihanCARES www.sbgfc.org.ph More details at https://sbcorp.gov.ph/riseupmultipurpose/

Small Business Corp

LOAN PROGRAM	RISE UP Micro Tindahan loan
LOAN PURPOSE	to help sari-sari stores with fast-moving consumer goods (FMCG) accreditation
LOAN AMOUNT	Up to Php300,000 (payable monthly up to 3 years)
REQUIREMENTS	1. Government-Issued ID; 2. Barangay Business permit for loans up to ₱100,000 3. BMBE Certificate or Mayor's Permit for loans more than ₱100,000 4. Pictures and video on business operations and asset 5. Corporate documents, if applicable 6. FMCG Reference Number *Must be in business with an SB Corp-accredited FMCG company for at least 1 year * Must be 100% Filipino-owned for sole proprietorship or partnership; at least 60% Filipino-owned for corporation
CONTACT DETAILS	 (02) 8 651-3333  communicationsteam@sbcorp.gov.ph  www.facebook.com/BayanihanCARES www.sbgfc.org.ph More details at https://www.firstcircle.ph/blog/7-dti-loans-for-small-businesses

Small Business Corp

LOAN PROGRAM	RISE UP SME Tindahan loan
LOAN PURPOSE	to help sari-sari stores with fast-moving consumer goods (FMCG) accreditation
LOAN AMOUNT	Up to Php 5 million (payable monthly up to 3 years)
REQUIREMENTS	1. Government-Issued ID; 2. Mayor's permit 3. Pictures and video on business operations and asset 4. Corporate documents 5. FMCG Accreditation Number 6. Proof of Asset Size not exceeding ₱100 million * Must be in business with an SB Corp-accredited FMCG company for at least 1 year; 3 years for loan amounts above ₱1 million * Must be 100% Filipino-owned for sole proprietorship or partnership; at least 60% Filipino-owned for corporation
CONTACT DETAILS	☎ (02) 8 651-3333 ✉ communicationsteam@sbcorg.gov.ph 📘 www.facebook.com/BayanihanCARES www.sbgfc.org.ph More details at https://www.firstcircle.ph/blog/7-dti-loans-for-small-businesses

Small Business Corp

LOAN PROGRAM	Pondo sa Pagbabago at Pag-asenso (P3)
LOAN PURPOSE	To assist micro entrepreneurs throughout the country by providing affordable and cost efficient micro loans with 2.5% monthly interest
LOAN AMOUNT	Up to 100,000 to end-borrower (payable monthly up to 30 months)
REQUIREMENTS	1. Accomplished Loan Application Form 2. One (1) Government-issued ID 3. Business registration 4. DTI Business Name registration 5. Barangay Clearance
CONTACT DETAILS	☎ (02) 651-3333; (02) 7751-1888; 0999-9937247 ✉ sbcorporation@sbgfc.org.ph 📘 www.facebook.com/BayanihanCARES www.sbgfc.org.ph More details at https://www.firstcircle.ph/blog/7-dti-loans-for-small-businesses

Cebuana Lhuillier

PRODUCT	CL MicroEnterpriseProtek
DESCRIPTION	CL Microbiz Protek Jr. is Property Microinsurance specifically designed for Cebuana Lhuillier's clients. It is a cash assistance benefit which pays for property damage caused by Typhoon, Fire and/or Lightning, Flood and Earthquake. It also offers Personal accident coverage, Burglary & Robbery and offers Emergency Assistance via AXA's EMMA App. CL Microbiz Protek Jr. is underwritten by AXA Philippines.
QUALIFIED BORROWERS	Cebuana Lhuillier clients
BENEFITS	1. Cash Assistance for Property damage (10,000-50,000) ◆ Fire and/or Lightning ◆ Typhoon ◆ Flood ◆ Earthquake 2. Personal accident (10% of Total Sum Insured for Owner + 1 employee) 3. Robbery and burglary (10% of Sum Assured) 4. Emergency Assistance
CONTACT DETAILS	 (02) 8895-1093  insurance_support@pjluhuillier.com  www.facebook.com/cebuanalhuillierpawnshop www.cebuanalhuillier.com More details at www.cebuanalhuillier.com/microinsurance/

PRODUCT	NegosyoCARE
DESCRIPTION	A personal and property insurance underwritten by Bankers Assurance Corporation (BAC) valid for 1 year
QUALIFIED BORROWERS	clients with MSMEs or businesses
BENEFITS	◆ Property insurance (PHP 100,000.00) ◆ Burglary and robbery (PHP 50,000.00) ◆ Accidental death (PHP 50,000.00) ◆ Permanent disablement and dismemberment (PHP 25,000.00) ◆ Accident medical reimbursement (inside the business premises only) and Money, Securities, and Payroll (PHP 25,000.00)
CONTACT DETAILS	 (02) 8895-1093  insurance_support@pjluhuillier.com  www.facebook.com/cebuanalhuillierpawnshop www.cebuanalhuillier.com More details at www.cebuanalhuillier.com/microinsurance/

Annex 4

Other IEC materials and references

PhilPREP Digital Tools

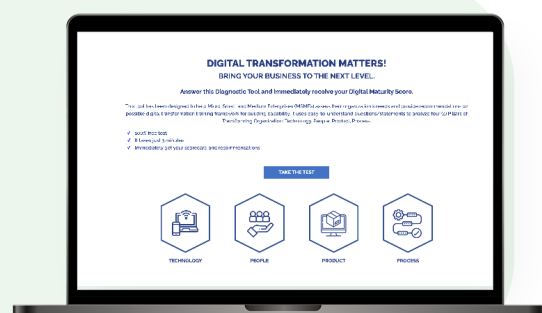
PhilPREP Digital Tools

Access the tools via <https://iadapt.pdrf.org/PHILPREPTools/>



MSME Digital Transformation Readiness Test

Access the tools via <https://iadapt.pdrf.org/PHILPREPTools/>



MSME Stories of Resilience Comics

Access the tools via <https://iadapt.pdrf.org/PHILPREPTools/>



Applications

Katatagan In A Box App



Payong App



DOST INNOVATIONS: Web and Mobile Applications for Disaster Risk Reduction and Management

Can be accessed through:
www.dost.gov.ph



Online Learning Platforms

PDRF iADAPT Championing Business Continuity

Can be accessed through:

<https://iadapt.pdrf.org/open-courses/>



Online Learning Course on Scenario-based Business Continuity Planning

Can be accessed through:

<https://courses.adpc.net/courses/>



