

DZUP EskweKalikasan Module 8

# Environment and Disasters





# DZUP ESKWEKALIKASAN PROJECT

***DZUP EskweKalikasan: Para sa kabataan, kapaligiran, at bayan*** is a publicly-funded initiative of the academe, with support from advocates and the government. It aims to raise awareness on emerging and evolving discussions about climate change, disaster risks, sustainable living and development and mindful consumption. Especially designed for senior high school teachers and students, the project has produced several teaching and learning resources such as modules, video guides, podcasts, and radio episodes that are available for free online at [dzup.org/eskwekalikasan](http://dzup.org/eskwekalikasan).

The project (whose title is a portmanteau of the Filipino words for school and nature) is spearheaded by the Department of Broadcast Communication of the University of the Philippines (UP) College of Mass Communication and DZUP 1602, in partnership with the UP National Institute for Science and Mathematics Education Development (UP NISMED) and the UP Diliman of the Office of the Chancellor. It is principally funded by the Philippine Government under the General Appropriations Act for Fiscal Year 2019 through the initiative of the Office of Senator Loren Legarda.



## KAYANG-KAYA! PODCAST

***Kayang-Kaya!*** is a 10-episode podcast in Filipino that follows the adventures of three senior high school students, Kali, Naya, and Alab, as they seek to understand and uncover issues confronting the environment. As an educational tool, the podcast serves to supplement classroom discussion using aural storytelling.

In ***Episode 8***, titled ***"Paano maghahanda ang buong barangay laban sa disaster?"***, Kali wants to find-out if Barangay Luntian will be joining a town-wide earthquake drill next week which the Mayor announced in a Facebook post. She also wants to know why the Philippines is prone to disasters and how to prepare for them. Together with her friend Naya, they find out how their community can prepare for a disaster.



# Impacts of natural calamities on the Philippines

## DISASTER PREPAREDNESS

The **knowledge and capacities developed by governments, professional response and recovery organizations, communities, and individuals** to effectively anticipate, respond to, and recover from the impacts of likely, imminent, or current hazard events or conditions.

Source: Republic Act No. 101211. (n.d.). [PDF File].

[http://www.ndrrmc.gov.ph/attachments/article/45/Republic\\_Act\\_10121.pdf](http://www.ndrrmc.gov.ph/attachments/article/45/Republic_Act_10121.pdf)

# Importance of disaster preparedness

Disasters can happen anytime and anywhere. So being prepared is knowing what to do and having the resources needed in times of disaster. Readiness is important because:

1. It raises the possibility of safety and limits the damage to life, property, livelihood, etc.;
2. It decreases the level of stress that may be felt;
3. It can help and contribute to faster recovery after a disaster;
4. It increases the capacity of the community in dealing with disasters; and
5. It helps the responders give priority in helping those who really need help (old, children, PWDs) instead of those who are perfectly capable of helping themselves.



# Group Activity

## Instructions and guide questions for discussions

**INSTRUCTIONS:** Read your assigned case studies and discuss among your group the questions below.

**Question 4.** Why did the event become disastrous?

- location of affected areas
- conditions that make a community prone to the damaging effects of a hazard, such as poor construction of buildings, lack of public awareness, and limited preparedness
- strengths and resources within a community that can reduce the effects of a disaster, such as infrastructure, institutions, human knowledge and skills, and leadership and management

**Question 5.** What could have been done in or by the community to avoid or limit the impacts of disasters?

Sources:  
Case Study — Typhoon Haiyan 2013 [Online image]. (n.d.). Geography.  
<https://garsidej.wordpress.com/igcse/hazardous-environmnets/typhoon-haiyan/>  
Yolanda's path: Then and now [Online image]. (2018, November 7). ABS-CBN News.  
<https://news.abs-cbn.com/focus/multimedia/slideshow/11/07/18/yolandas-path-then-and-now>



## Case Study

Super Typhoon Yolanda in Eastern Visayas (November 2013)

Sources:

Earthquake stronger than 'The Big One' possible in N. Cotabato—PHIVOLCS [Online image]. (2019, October 31). Yahoo! News. <https://ph.news.yahoo.com/earthquake-stronger-big-one-possible-104124855.html>

Cotabato quake death toll climbs to eight, 394 injured [Online image]. (2019, October 31). CNN Philippines.

<https://www.cnnphilippines.com/news/2019/10/30/magsaysay-davao-del-sur-missing-quake.html>



## Case Study

Three (3) succeeding earthquakes in Cotabato with magnitudes 6.3, 6.6, and 6.5 (October 2019)



## Case Study

Mayon Volcano Eruption (1st quarter of year 2018)

Source: Warning in Philippines to 'evacuate or face death penalty' as Mayon volcano threatens deadly eruption [Online image]. (2018, January 23). Sky News. <https://news.sky.com/story/warning-in-philippines-to-evacuate-or-face-death-penalty-as-mayon-volcano-threatens-deadly-eruption-11219540>



Sources: Philippines: Landslide at Payatas Garbage Dump Latest [Online video]. (2015, July 21). AP Archive. [https://www.youtube.com/watch?v=n\\_NBmlChce0](https://www.youtube.com/watch?v=n_NBmlChce0)  
Koelsch, F. (n.d.). Stability problems of landfills—The Payatas landslide. [PDF File]. [http://www.dr-koelsch.de/Phillie\\_01\\_Payatas.pdf](http://www.dr-koelsch.de/Phillie_01_Payatas.pdf)



## Case Study

### Payatas Landfill Disaster (July 2000)

## Concluding statement for justification

**The Philippines is a disaster-prone country because of the following factors:**

1. exposure to hazards which are mainly due to its location
2. conditions of vulnerability which make a community susceptible to the damaging effects of hazards; and
3. the capacity of community.

## Exposure to hazard

The **degree to which the elements at risk are likely to experience hazardous events of different magnitudes** mainly due to its location

The Philippines is situated in the Typhoon Belt and Pacific Ring of Fire.

*Examples:* living near a volcano, a dumpsite, or steep-slope areas

Source: Republic Act No. 101211. (n.d.). [PDF File]. [http://www.ndrrmc.gov.ph/attachments/article/45/Republic\\_Act\\_10121.pdf](http://www.ndrrmc.gov.ph/attachments/article/45/Republic_Act_10121.pdf)

# Vulnerability

The **characteristics and conditions of a community, system, or asset that make it susceptible** to the damaging effects of a hazard.

It may arise from various physical, social, economic, and environmental factors such as poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management.

*Examples:* poor design and construction of buildings, environmental factors, and people not familiar with the term “storm surge”

Source: Republic Act No. 101211. (n.d.). [PDF File]. [http://www.ndrrmc.gov.ph/attachments/article/45/Republic\\_Act\\_10121.pdf](http://www.ndrrmc.gov.ph/attachments/article/45/Republic_Act_10121.pdf)

# Capacity

It is **the combination of all strengths and resources available** within a community, society, or organization that can reduce the level of risk or effects of a disaster.

It may include infrastructure and physical means, institutions, societal coping abilities, as well as human knowledge, skills, and collective attributes such as social relationships, leadership, and management.

*Examples:* leadership and management by local authorities during evacuation

Source: Republic Act No. 101211. (n.d.). [PDF File]. [http://www.ndrrmc.gov.ph/attachments/article/45/Republic\\_Act\\_10121.pdf](http://www.ndrrmc.gov.ph/attachments/article/45/Republic_Act_10121.pdf)

## Community-based disaster risk reduction management or “CBDRRM”

It is the **process of disaster risk reduction and management in which at-risk communities are actively engaged in the identification, analysis, treatment, monitoring and evaluation of disaster risks** to reduce their vulnerabilities and enhance their capacities, and where the people are at the heart of decision-making and implementation of disaster risk reduction and management activities (Republic Act No. 10121, Section 3 (e), 2009).

## Importance of community-based disaster risk reduction management

1. It increases the capacity of the community against any disaster. That is, limiting the probability of life loss, injury, and destruction of property, livelihood, etc., decreases. So, the community becomes more resilient.
2. Local knowledge and traditions are used in more effective and more realistic disaster management planning.
3. It helps communities increase hope and courage, which is necessary in times of disaster.
4. It values the voice and participation of every person in the community and makes them more responsible citizens.



# Kali's Call to Action

1. Makipag-coordinate sa inyong barangay para alamin ang evacuation centers, safe areas, and emergency hotlines sa inyong lugar.
2. Makipag-usap din sa inyong mga pamilya para maghanda ng Go Bags at makabuo ng emergency communication plan.
3. Sumali sa at seryosohin ang mga emergency drill.
4. #BidaAngHanda



# Assessment

**INSTRUCTION:** Get one piece of paper, and answer in not more than five sentences the following questions:

1. What can the youth contribute to building the capacity of the community for disaster risk reduction?
2. One of the challenges in the implementation of the DRRM policy is how they would invite and have the youth interested or participate in their initiatives. For you, what are the activities or initiatives that local officials can do to pique your interest and have you participate in the activities related to disaster risk reduction and management?



## The youth has a role to building the capacity of the community in disaster preparedness.

1. Recognize and acknowledge that you have a role in disaster risk reduction management.
2. Coordinate and participate in the activities organized by their community officials (own barangay, schools, etc.).
3. Educate yourself about the hazards in your community, what to do, community projects, signs of hazards, etc.
4. Spread awareness.
5. Inform and educate immediate social circles (friends and families) about DRRM. Make them understand the importance of preparedness.
6. Exercise preparedness (activities listed above).
7. Initiate a preparedness plan with your family unit (communication plan, evacuation plans, etc.).



You may listen to this podcast episode at [dzup.org/eskwekalikasan](https://dzup.org/eskwekalikasan). Catch all ten episodes of *Kayang-kaya!* Podcast at [dzup.org](https://dzup.org).

**Episode 1:** Ano ang carbon footprint?

**Episode 2:** Kakaunti na lang ba talaga ang mga isda natin sa Pilipinas?

**Episode 3:** Ano ang kahalagahan ng pagtanim ng punò sa tao at sa kapaligiran?

**Episode 4:** Ano ang epekto ng “fast fashion” sa ating kalikasan?

**Episode 5:** Bakit kayâ summer na pero bumabagyo pa rin sa barangay namin?

**Episode 6:** Mapupunô ba ng basura ang barangay namin?

**Episode 7:** Bakit walang lumalabas na tubig sa gripo?

**Episode 8:** Paano maghahanda ang buong barangay laban sa disaster?

**Episode 9:** Paano napapagana ang cellphone ng hangin at tubig?

**Episode 10:** Bakit kailangang lumahok ang kabataan sa environmental movement?

If you'd like to know more about the environment and disasters, you may listen to the radio episodes of DZUP EskweKalikasan's Module 8. Environment and Disasters:

**Radio Episode 1. Disasters in the Philippines**

Guest: Dr. Jake Cadag

**Radio Episode 2. Communities, Environment, and Disasters**

Guest: Noli Abinales

**Radio Episode 3. National Framework on Disaster Risk Reduction and Management (DRRM)**

Guest: Rachel Ann Miranda

**Radio Episode 4. Issues During Disasters**

Guests: Cora Jazmines and Kevin Lee

**Radio Episode 5. Types of Disasters**

Guest: Dr. Jake Cadag