

United Nations • Educational, Scientific and • Cultural Organization •

UNESCOAssociatedSchools

# A Student's Guide to Disaster Risk Reduction

# STAY SAFE AND BE PREPARED

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This Guide is part of a three-book Compendium on Disaster Risk Reduction (DRR). The other guides are: Stay safe and be prepared: a teacher's guide to disaster risk reduction (ISBN 978-92-3-100044-7) Stay safe and be prepared: a parent's guide to disaster risk reduction (ISBN 978-92-3-100045-4)

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# STAY SAFE AND BE PREPARED

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#### Dear student,

The information in this Guide will explain how to keep you and your friends safe from disasters. Take the time to read it once, twice, three times — this information could save your life!

Through this Guide, you will get to know a handful of smart young people just like you. A lot has happened to many of them and they want to share with you what they've learned and experienced.

For instance, you'll meet a young girl who lost one of her legs due to a tsunami. Her experiences encouraged her to learn as much as possible about disaster risk, preparedness and resilience. In her new school, she gave a presentation on 'Be risk-smart, be prepared, be resilient.' Her classmates got really interested in disaster preparedness and resilience, and wanted to learn more.

On your journey to becoming disaster smart, make sure to get everybody on board: Discuss the Guide with your friends, ask your teacher to teach you about disaster preparedness, share your ideas at home, motivate your classmates, initiate different activities... You can become a disaster risk reduction champion!

At the end of this guide, you will find a scoreboard that will allow you to measure your progress. You will also find key words explained in an easily accessible glossary.

Have a wonderful learning journey and stay safe!

# **Quick Facts about Disaster Risk Reduction (DRR)**



#### Am I at Risk?



#### HAVE YOU TRIED TO SUMP OVER A PUDDLE OR A BUSH?

DID YOU MAKE IT?



DID YOU FALL AND HURT YOUR KNEE?







#### SOMETIMES WE FORGET THAT NATURE IS ALL AROUND US.

We are part of nature. And like human beings, nature is always changing. This can happen in different ways, in things we witness every day, like wind, rain, and the movement of clouds. Or it can be in things that are less common, like earthquakes, tsunamis, erupting volcanoes, cyclones or floods. And while in some areas of the world, these events happen regularly, in others they are extremely rare leading to the name 'extreme events' or 'natural hazards.'



**Thanks to modern science,** as well as centuries of experience and observation, we have learned a lot about natural hazards. We know that earthquakes — and most volcanoes — are most likely near or at places where two or more tectonic plates meet. In some regions, elders have left stories or markers to show where and how high tsunamis were in the past. Many regions have more than a century of records on rainfall, temperatures and extreme events, which allow scientists to make predictions about how often a certain hazard strikes a certain area.



ROLL YOUR DICE SIX TIMES AND WRITE DOWN THE RESULTS. COMPARE THEM WITH WHAT YOUR CLASSMATES ROLLED.





When you roll a die, you know that your chance of rolling a 6 is one in six. But you also know that even if you roll the die six times, you may not get a single 6 — or you may roll 6 every time, or roll 6 a few times. The thing is, if you only roll the die a few times, the results look very random, but if you roll it many, many times — for example 10,000 times — you will see that you roll each number pretty much evenly. You will also see that, on average, you roll a 6 about once every six rolls.

I know this is a lot of math. If you want to learn more about probability, I know your math teacher will be happy to help.

So, when you hear that the probability of your area being flooded is '1 in 20', what does it mean? It means that if you look at the numbers over hundreds of years, floods happen about once every 20 years. But, if you only look at a few years — for example, 80 years — the chances of a flood happening seem more random. You may be lucky enough to not experience a single flood in those 80 years, or you may experience four floods over the same number of years — or you may even experience ten floods.

You might say there is a lot of uncertainty in what we know about the probability and risk of disasters, and you are right. But understanding how likely it is for a certain hazard to occur is important if you want to know what kinds of hazards you need to prepare for, which are more important to prepare for, and how you can reduce the risk of a disaster happening.

Think of the people you love, the things you love to do, and what you want to do in the future. However low the probability is, would you be willing to risk losing all that in a disaster? If your answer is no, then you are going to want to do things to reduce such risk. We will only become more vulnerable to disaster if we continue on without making any changes to our environment or our skill sets.

HAZARDS ARE NOT ALWAYS CAUSED BY NATURE. IN MANY CASES, HUMANS CAUSE THEM. ENVIRONMENTAL POLLUTION, FIRES, NUCLEAR DISASTERS AND OIL SPILLS ARE MAN-MADE HAZARDS. SO ARE VIOLENT CONFLICTS AND WARS.

## HAZARDS ARE NOT DISASTERS.

Only if humans are affected does a hazard become a disaster. When we say 'disaster risk,' we are talking about how likely it is that a hazard will become a disaster. That risk not only depends on how strong the hazard is, but on a population's or a community's **vulnerabilities** and **capacities**.

### What Is Vulnerability?



WHEN PEOPLE, COMMUNITIES, AND THINGS LIKE BUILDINGS ARE IN DANGER OF BEING AFFECTED BY A HAZARD, THAT IS YULNERABILITY.

## VULNERABILITY DEPENDS ON DIFFERENT FACTORS:

- where people live: do they live in a hazardous area or not?
- how well built houses are: are they strong enough to withstand hazards?
- health, age and gender: can children, seniors, and people with disabilities evacuate easily? Are women and men affected differently by disasters?
- social and economic status.

WHERE PEOPLE LIVE Do they live in a hazardous area or not?

#### HOW WELL BUILT HOUSES ARE Are they strong enough to withstand hazards?

# GIVE IT SOME THOUGHT!

Have you thought about why we build our houses where we do, and why some people are more vulnerable than others when a hazard strikes? There are many people in our community that are not given the help they need to make sure that they're safe from hazards.

Poor people: Often they can only afford to live in unsafe houses in areas that are at risk from hazards.

- Old and sick people: Many of them need special assistance, and they may be particularly vulnerable if they do not have anyone to take care of them.
- People with disabilities: They may require special warnings and assistance. They may be more vulnerable if our houses, schools and roads are not built in ways that allow them to quickly evacuate.

Migrants, immigrants and tourists: They don't know many people and might have difficulty understanding the language. They may be particularly vulnerable if there is nobody to tell them about local hazards and where they can be safe.

SO VULNERABILITY DEPENDS ON HOW WE ORGANIZE OUR COMMUNITIES, AND WHAT KIND OF VULNERABLE POPULATIONS WE HAVE IN THOSE COMMUNITIES. SOME PEOPLE BELIEVE THAT IF WE MAKE SURE EVERYBODY'S HUMAN RIGHTS ARE RESPECTED, WE CAN REDUCE VULNERABILITIES.

#### We All Have the Same Rights to Be Safe



"The United Nations Universal Declaration of Human Rights starts by declaring that all human beings are born free and equal in dignity and that every human being is entitled to those rights, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status."

#### Have you already learned about the United Nations Universal Declaration of Human Rights at school? Which rights do you think are relevant when it comes to safety from disasters?

To build a fair and safe community, everybody's rights are important. It doesn't matter if they are tall or small; dark-skinned or light-skinned; male or female; young or old; local or from a different country. To create a safe community that takes into account everyone's needs, everyone needs to be involved. Unfortunately, some groups are either not asked or not allowed to participate. For example, far too often, the voices of children and youths are not taken into account when planning for security in schools or safety in a disaster situation — even though they can be a leading force in learning and teaching about risk, preparedness and resilience!

In many societies, there is still a difference in how boys and girls are treated. Smart girls might be ridiculed and laughed at, rather than listened to. They may not even be allowed to go to school or learn about risks and preparedness. In Sri Lanka, during the 2004 tsunami, way more girls than boys died, because girls were not usually taught how to swim. Probably nobody asked those girls if they would like to learn how to swim, or maybe it was not seen as something that girls are supposed to do.

And what about those who are sick or have other health issues — the girl in the wheelchair or the boy with Down syndrome? They might be particularly vulnerable in a disaster, because it might be more difficult for them to get to safety on their own. They, too, should be taught about what risks they face, and how they can be prepared and resilient. They, too, should be consulted on the easiest way for them to deal with hazards and disasters. They, too, can contribute to a more resilient community. Unfortunately, those who we urgently need to consult with are not being asked, not told, taught, and they are not being saved. What can we do to change that?

## GIVE IT SOME THOUGHT!

- Are there things in your family and community that boys are allowed to do and girls are not (or the other way around)? Are there tasks in your family and community that girls are required to do and not boys (or the other way around)? Are there things that you would like to do but are not allowed to do because you are a girl or a boy?
- Think about how these differences might be helpful to you or your family during a disaster. Then think about how they might be dangerous during a disaster.
- Have you ever felt that you were not consulted, either at home or at school, when an important decision was taken? How did it make you feel?
- Who in your class, in your family, in your neighbourhood is not usually consulted, asked their opinion, or provided with information? Think about ways they can be included in learning about risk, preparedness and resilience, as well as ways they can be included when planning and preparing for disasters.

One way we can reduce vulnerability is by organizing our communities, thereby increasing our **capacity**. We can, for example, learn about our community's hazards and create appropriate warning systems that everyone can understand. We can share the responsibilities related to helping seniors, sick people, pregnant women, and people with disabilities evacuate when a hazard is approaching. We can build shelters for everyone to be safe from hazards and help everybody, including poor people, to build safe houses.





MANY PEOPLE ARGUE THAT THERE ARE NO NATURAL DISASTERS AT ALL, BECAUSE A HAZARD IS ONLY A DISASTER WHEN IT AFFECTS HUMANS. WHEN HUMAN VULNERABILITY IS HIGH AND CAPACITY IS LOW, THE RISK OF DISASTERS IS GREATEST.

GLOBALLY, THE NUMBER OF DISASTERS HAS BEEN RISING !!

Haiti 2010 earthquake: more than 220,000 people killed

Horn of Africa 2011 drought: 13 million people needed humanitarian assistance (food, water, shelter, etc.)

> Pakistan 2010 floods: more than 6 million people displaced



Japan 2011:

earthquake and tsunami: almost 20,000 people killed, more than USD 210 billion in damage

#### Philippines 1991 Mt. Pinatubo eruption: global average temperatures decline by 0.4–0.5 degrees Celsius that year due to the eruption

Myanmar 2008 cyclone: more than 130,000 people killed

![](_page_11_Picture_13.jpeg)

#### SCIENTISTS HAVE FOUND THAT:

- The global rise of disaster occurrence is related to population growth and to the fact that more people live in hazardous areas, especially in densely populated cities.
- More than 32 million people had to flee their homes from disasters in 2012.
- Unsustainable development leads to environmental degradation, which in turn exposes communities to higher risks of disaster.
- Communities which protect their forest cover are less prone to soil erosion and landslides (for example, mangrove forests protect communities when tsunamis strike).

#### The Role of Climate Change

![](_page_12_Picture_1.jpeg)

#### MORE THAN A HUNDRED YEARS AGO,

people around the world started burning large amounts of coal, oil, and natural gas — or fossil fuels — to power their homes, factories, and vehicles. Today, most of the world relies on these fossil fuels for energy. Burning fossil fuels releases carbon dioxide, a heattrapping gas, into the atmosphere. Higher temperatures lead to more evaporation of water. Combined, these two phenomena increase the probability of extreme weather such as heavy rainfalls, drought and stronger storms and cyclones.

![](_page_12_Picture_4.jpeg)

#### THINK BACK TO OUR DICE:

In a normal world, the number 1 would represent cold weather, number 6 would be hot weather and the numbers 2 through 5 would be temperate weather. In a world of warming climate, numbers 5 is hot weather, while 6 is now representative of extremely hot weather.

Since temperature records have been in existence, six of the ten hottest years worldwide have occurred within the last decade.

THE PROBLEM OF CLIMATE CHANGE IS NOT ONLY THAT IT INCREASES THE RISK OF CERTAIN EXTREME EVENTS. IN MANY REGIONS, IT MAKES IT DIFFICULT TO CALCULATE DISASTER RISK BASED ON THE PAST, AS WHAT WAS A 1-IN-20 YEARS FLOOD, MIGHT, WITH CLIMATE CHANGE, BECOME A 1-IN-10 YEAR FLOOD.

![](_page_12_Picture_9.jpeg)

![](_page_12_Picture_10.jpeg)

![](_page_12_Picture_11.jpeg)

![](_page_13_Picture_0.jpeg)

# WHILE SOME OF THE THINGS WE HAVE DISCUSSED MAY SEEM SCARY, THERE ARE A LOT OF THINGS WE CAN DO TO PROTECT OURSELVES FROM THEM.

Humanity has lived with and survived natural hazards and disaster risk for hundreds of thousands of years. Many human communities have proven to be very resilient, meaning they bounce back after they being struck by a disaster. So what does it take for a community to be resilient?

We now know that disaster risk depends on the hazards we face, on the vulnerabilities we have and on our capacities to minimize hazards and vulnerabilities. Often this is expressed by this simple formula:

# DISASTER RISK =

## HAZARD X VULNERABILITY

#### CAPACITY

To be resilient, the first thing we need to be is **Risk-Smart**. To be Risk-Smart we have to find out as much as possible about the risks we are facing and learn how to reduce those risks. This also means we need to be climate smart — know about climate change and work to adapt to it, and slow it down.

While we might not be able to influence all hazards — it is impossible to stop an earthquake from happening,— we can influence some hazards by building dams or plant trees to reduce flood risks, for instance.

We can reduce our vulnerabilities, too. We can build safer houses in safer areas, or help those who are more vulnerable to become less so. As we mentioned before, we can also put a stop to practices that endanger our environment and work to slow down global warming.

Another thing that helps us become resilient is being **prepared**, which means improving our response to disasters by having good warning systems, safe houses, safe evacuation shelters, and knowing first aid, for just a few examples. Preparedness is something that everyone can do and it's easy! The better prepared a family, a school, a community, or even a country, the less tragic the effects of a disaster will be. A risk-smart and prepared community will be more **resilient** when disaster strikes.

![](_page_13_Picture_11.jpeg)

![](_page_14_Figure_0.jpeg)

#### **DRR Crossword**

#### AcRoSS

- 3. Preparing for disasters can be
- 4. A natural or man-made event that threatens humans
- 6. Helps to minimize the impact of disasters
- 8. The chance that a certain event happens at a certain time
- Earthquakes, storms, volcano eruptions, floods, landslides are ...
   (2 words)
- 14. Bouncing back well from a disaster
- 16. What we should be (2 words)
- 17. Global atmospheric system that determines our weather
- 19. When a hazard impacts human beings their life, health or possessions

#### DOWN

- 1. Helps humans to understand natural hazards better
- 2. Help to protect communities from tsunamis
- 5. The number of disaster has been ... In recent decades
- 7. There are no such things as ... (2 words)
- Sum of factors that makes a human, a community or an asset endangered by a hazard
- 10. Burning fossil fuels leads to this (2 words)
- 11. Main greenhouse gas responsible for global warming (2 words)
- 13. The probability that a hazard will turn into a disaster, based on vulnerability and adaptive capacity (2 words)
- 15. Period in which six of the ten hottest years happened
- 18. A natural hazard caused by wind

# It Happened to Me

![](_page_16_Picture_1.jpeg)

![](_page_16_Picture_2.jpeg)

![](_page_17_Picture_0.jpeg)

![](_page_18_Picture_0.jpeg)

![](_page_19_Picture_0.jpeg)

![](_page_19_Picture_1.jpeg)

WELL, I WAS BOTH SAD AND ANGRY FOR QUITE SOME TIME. I CRIED A LOT AND DIDN'T WANT TO TALK TO PEOPLE IN THE HOSPITAL, ESPECIALLY WHEN I DIDN'T KNOW WHETHER MY FAMILY HAD SURVIVED OR NOT. I WAS SCARED THAT I MIGHT BE ALL ALONE FROM THEN ON.

WHEN MY FAMILY CAME TO THE HOSPITAL I WAS VERY RELIEVED. OF COURSE THEY WERE SHOCKED ABOUT MY LEG, ALTHOUGH THEY TRIED NOT TO SHOW IT. BUT IT WAS REALLY GOOD TO TALK TO THEM ABOUT WHAT HAPPENED AND ABOUT HOW I FELT.

![](_page_19_Picture_4.jpeg)

THE THERAPISTS IN THE HOSPITAL, WHO HELPED ME LEARN TO WALK AGAIN, WERE SO HELPFUL AND POSITIVE. THEY KEPT ENCOURAGING ME THAT I WOULD WALK AGAIN AND DO ALL THE FUN THINGS THAT I DID BEFORE.

![](_page_19_Picture_6.jpeg)

AND LEARNING ABOUT DISASTERS AND PREPAREDNESS, THINKING THAT IT MIGHT BE USEFUL TO ME AND OTHERS, REALLY HELPED ME TO STOP FEELING SORRY FOR MYSELF...

![](_page_19_Picture_8.jpeg)

![](_page_19_Picture_9.jpeg)

![](_page_19_Picture_10.jpeg)

![](_page_19_Picture_11.jpeg)

![](_page_19_Picture_12.jpeg)

![](_page_20_Picture_0.jpeg)

THROUGH THE BLOG, I GOT IN TOUCH WITH OTHER CHILDREN WHO HAD EXPERIENCED DISASTERS. ONE GIRL TOLD ME THAT YEARS AGO, A HUGE FLOOD PUT HER VILLAGE UNDERWATER FOR SEVERAL WEEKS. SHE AND HER SISTERS GOT SO BORED. ELECTRICITY WAS DOWN, ALL HER TOYS AND BOOKS WERE SWEPT AWAY, AND HER FAMILY COULDN'T LEAVE THE SECOND FLOOR OF THE HOUSE...

![](_page_21_Picture_1.jpeg)

AFTER A WHILE, THEY CAME UP WITH SOME SIMPLE GAMES THAT DIDN'T REQUIRE ELECTRICITY AND TOOLS, WHICH HELPED THEM PASS THE TIME. THEY WERE REALLY HAPPY TO GO BACK TO SCHOOL AFTER THE FLOODS HAD PASSED.

A BOY TOLD ME THAT HE AND HIS FAMILY HAD TO LIVE IN AN EVACUATION CENTRE FAR FROM HIS HOME FOR TWO WEEKS BECAUSE THE VOLCANO NEAR HIS VILLAGE ERUPTED. HE SAID THAT LIVING IN THE CENTRE WASN'T BAD. HE EASILY MADE FRIENDS WITH OTHER CHILDREN AND THEY DID FUN THINGS TOGETHER.

![](_page_21_Picture_4.jpeg)

![](_page_21_Picture_5.jpeg)

WHAT WAS DIFFICULT FOR HIM WAS GOING BACK HOME, BECAUSE HE WAS AFRAID THAT THE VOLCANO WOULD ERUPT AGAIN. HE HAD BAD DREAMS ABOUT THE WHOLE VILLAGE BEING SWALLOWED UP BY BURNING LAVA.

HE ONLY MANAGED TO OVERCOME HIS FEAR AFTER HIS TEACHER EXPLAINED HOW VOLCANOES WORK AND THAT THE CHANCE OF ANOTHER ERUPTION IN HIS LIFETIME IS VERY SMALL.

![](_page_21_Picture_8.jpeg)

![](_page_21_Picture_9.jpeg)

#### GIVE IT SOME THOUGHT!

Take a couple of minutes to think about the children's stories and to answer the following questions. Share and discuss your answers with the classmate sitting next to you.

How did you feel when you read the children's stories?

What feelings did the children experience after the disaster? Can you relate to their feelings?

How did the children cope with their feelings? Do you think they did a good job?

If you were in their position, what are the things that you would have done similarly, and what are the things that you would have done differently?

Have you ever been affected by a disaster? Do you know someone who has been affected by a disaster?

![](_page_22_Picture_7.jpeg)

# HELP IS HERE: PSYCHOSOCIAL SUPPORT

#### HERE ARE A FEW THOUGHTS THAT MAY HELP YOU FEEL BETTER IF YOU ARE AFFECTED BY A DISASTER:

- Things *will* get back to normal. Even if things are hard now, they are likely to get better soon enough.
- It is not your fault. Disasters are not God's or anybody else's punishment.
- Ask grown-ups for help if you are feeling confused or afraid. They will help you understand what is going on. Don't be afraid to ask any questions such as "How long are we going to be in this shelter?" or "When will I go back to school?"
- It is okay to be sad or angry after a disaster happens. If you feel sad or angry, try to find out why you are feeling this way. Try to share your feelings with your parents, siblings, friends or teachers.
- You might have lost things that are valuable to you or even have to be away from home for a while. See this as an opportunity to make new friends and be creative on using things for playing and studying.
- Understand that parents and family members might also be sad, confused and angry after a disaster. This does not mean that they don't love you. They might also be very busy rebuilding what got destroyed during the disaster.
- Sometimes it helps to write, draw or sing about what happened. You can describe what happened and how you feel about it, so that you can remember it all better when it's all over and you want to tell others how brave you were.
- You too, can help. Girls and boys of all ages can help in shelters by taking care of other children, playing with them. You can also help at home after a hurricane or an earthquake, for example by picking things up or cleaning up.
- Try to go back to school as soon as possible, as it is good to share what you experienced with your friends and teachers.
- Learn about hazard, risk, preparedness and resilience so you have a head-start if another disaster happens.

Adapted from UNISDR and UNICEF. 2007. Let's Learn How to Prevent Disasters. UNISDR and UNICEF.

![](_page_24_Figure_0.jpeg)

![](_page_25_Picture_0.jpeg)

#### WHAT YOU NEED

![](_page_26_Picture_1.jpeg)

A large piece of **paper** or an empty blackboard, white board, or wall

![](_page_26_Picture_3.jpeg)

Pens — you might want to use different colors

![](_page_26_Picture_5.jpeg)

Some **tape or glue** to hang your risk map if it's on paper

#### WHAT TO DO:

- Draw a map of your neighborhood, village or town. Include the places where you spend the most time: your home and your school.
- Include natural landmarks, such as rivers and canals, mountains and steep hills, or coastlines, as well as major infrastructure (roads, bridges, tunnels), and important public buildings (fire stations, train stations, hospitals, police stations, electrical plants.) You should also include potentially hazardous buildings like chemical plants.
- 3. Once you have drawn your map, it's time to become a disaster risk detective! Find out which **hazards** your community is facing. Split up into teams and interview people in your community — everyone from local journalists and disaster management officials to your family and friends. The Internet and your library are great sources of information, too. Find out the answers to the following questions:
  - Which hazards is your neighborhood/village/town exposed to? Which areas will be most affected if a certain hazard occurs?
  - Which disasters have happened in the past in your area? Which sections were most affected and why?
  - Does your community already have risk maps for various hazards? If so, were people in your community consulted? Does the map include changes in risk due to climate change?
- 4. Next, mark areas and buildings that are at risk from a certain hazard. Different groups of students can work on different hazard scenarios (like a small flood versus a large flood).

- Are you frequently in those areas that are at risk?
- Is your school in an area that is at risk?
- 5. Next, discuss vulnerabilities.
  - What makes certain people in your neighborhood more vulnerable than others?
  - What makes certain areas, buildings, or infrastructure in your area more vulnerable than others?
  - What activities happen in your neighborhood that increase vulnerabilities?
- 6. Mark buildings and areas where a large number of people might need help when a disaster strikes, such as schools, community centres, homes for the elderly, and hospitals.
- 7. Next, think of **capacities**. Mark buildings and infrastructures that are important for disaster response, such as evacuation routes, safe zones, hospitals, fire houses, and others. Discuss how much at risk those facilities are from disasters and how accessible they would be when a disaster strikes.
- 8. Your risk map is ready! There are so many things you can do with it: present it to your teachers, your family, emergency workers like fire fighters. Find out if you can display it in the community somewhere. From here, you'll want to start talking about how your community can start to reduce its disaster risk, and how you can be more prepared. Think of ways to identify people who would be vulnerable in a disaster and how they can be helped to safety. What can children/youths do to help?

#### SOME TIPS

- If your community is too big to fit into one risk map, you can form groups, each responsible for mapping a specific area within the community. You could even work with other schools in your community.
- Hazards might be different in different seasons. If so, different groups can make risk maps for different seasons. You can also do a separate risk map for each hazard, instead of combining all hazards in one map.
- Risk maps are always based on probability and sometimes very improbable things can happen (these are called black swan events — try to figure out why!). This means that even if your house and school are located in areas that are relatively safe, it makes sense to be prepared from disasters.

![](_page_27_Picture_4.jpeg)

### THEY DID IT, SO CAN YOU!

Students from Baan Talae Nok and Kuan Sai Ngam schools in Thailand took part in a Disaster Risk Reduction Learning Camp. They performed several fun risk-smart activities, including:

- A community survey, where children asked villagers about their knowledge and experiences with disasters and risk reduction.
- Drawing risk and resources maps to show areas considered hazardous and safe for children during a tsunami.
- Presenting their maps to younger children as well as telling these children where to run/evacuate if a tsunami comes.

Source: Baan Talae Nok Schoolchildren and Rabatbai Group (2008). *The Alert Rabbit*. Save the Children Sweden – Southeast Asia and The Pacific Regional Office.

![](_page_28_Picture_0.jpeg)

#### # 2. MAKING MURALS AND EXHIBITIONS

IT'S COOL. WHILE PREPARING THE MURAL OR EXHIBITION, YOU LEARN ABOUT A DISASTER-RELATED TOPIC IN A FUN WAY. YOU GET TO BE ALL CREATIVE, WHILE OFFERING SOMETHING USEFUL TO OTHER STUDENTS, YOUR FAMILIES AND THE WHOLE COMMUNITY.

#### WHAT YOU NEED:

It all depends on what you want to present and what is available to you, because exhibition pieces can be any shape and size you want. You could use:

- Medium- or large-size papers to make collages
- Different coloured pens, crayons, water or oil colours, paints (for murals)
- Scissors, rulers, glue
- Newspapers and magazines (to cut out articles of interest, characters or photos)
- Printouts from the internet
- Old pieces of fabric and cloth, threads or wool
- An exhibition space or a wall to draw your mural onto

#### WHAT TO DO:

- 1. Brainstorm with your teacher and classmates what topic mural or exhibition will address and who you want to present it to. For example, you could paint a mural by the riverside to remind people to reduce the risk of flooding by not throwing garbage into the river, or you could put together an exhibition on the hazards faced by your community.
- 2. Do some research on your topic so that you can illustrate it in a way that will help people understand what you are trying to show.
- 3. Once you have enough information, think about how your mural or piece will look and what materials you'll need to make it and what information you are going to focus on.
- 4. Discuss where to put on the mural or exhibition with your teacher. It should be somewhere clearly visible and accessible to your intended audiences. Make sure you get permission to paint your mural or hold your exhibition there.
- 5. Get creative in painting your mural or making your exhibition piece and don't forget to ask for help!

- 6. Get people involved! Send out invitations and put up posters to get people to go see your mural or exhibition. Organize an opening ceremony for your mural or exhibition and get as many people as possible to attend this event everyone from your family to community leaders. Try to get local radio stations to spread the word about your work.
- 7. Prepare the exhibition space so you can present your pieces. Display or hang them so they are clearly visible. Having some text explaining your piece (what it is about, by whom it is made) will make it easier for people to appreciate your work. You and your friends could also become exhibition guides, so there is always someone to answer visitors' questions. Think about a good day/time to open your exhibition. A special occasion such as the International Day of Disaster Risk Reduction (October 13) might be it.

# THEY DID IT, SO CAN YOU!

Young people in Petapa, El Salvador, formed an emergency committee in the aftermath of the 2001 earthquake. They organized an environmental education program to raise awareness on issues such as tree felling and the extraction of sand and rocks from the river. They painted a mural on tree felling on school buildings and put up signs to forbid the extraction of rocks and sand from the river.

Source: Mitchell, T., Tanner, T. and Haynes, K. (2009). Children as Agents of Change for Disaster Risk Reduction: Lessons from El Salvador and the Philippines. Children in a Changing Climate Research.

![](_page_30_Picture_0.jpeg)

## # 3. INITIATING AND SUPPORTING RISK REDUCTION ACTIVITIES

YOU CAN INITIATE AND SUPPORT RISK REDUCTION ACTIVITIES IN YOUR COMMUNITY. YOU CAN EASILY ORGANIZE A COMMUNITY CLEAN-UP, PLANT TREES OR MANGROVES, COLLECT RAIN WATER AND MORE.

#### WHAT YOU NEED:

- Well, this depends very much on the activity.
- For a clean-up, you need bags or baskets to move the garbage to the designated waste disposal sites. Working or household gloves might come handy. Having a small cart, wheelbarrow or truck will allow you to remove larger items more easily.
- To plant trees or mangroves, you need seedlings, shovels to dig holes and buckets to water the new plants.

#### WHAT TO DO:

- 1. Start by looking at your risk map. Discuss with your teacher, classmates or family what human activities make certain areas more risky. These may include clogging of rivers and canals with garbage, cutting down of vegetation around landslide-prone hills as well as harvesting of stones and gravel from rivers
- 2. Make a list of what could and should be done to minimize risks in your community. Here are some examples:

HAZARD	WHAT MAKES IT MORE LIKELY	WHAT COULD BE DONE
River flooding	<ul><li>Cutting down trees near the river</li><li>Throwing garbage in and near the river</li></ul>	<ul><li>Plant trees near the river</li><li>Organize a garbage clean-up</li></ul>
Tsunami	<ul> <li>Cutting down barrier forests and mangroves</li> </ul>	Revitalize mangrove forest     on coastline
Landslide	<ul> <li>Soil erosion because of cutting down of vegetation</li> </ul>	Plant bushes and trees

- 3. Again, visit the people you consulted with when you made your risk map, like neighbourhood associations, women's groups, local government and NGOs. Ask whether there are activities in your neighbourhood/village/town that aim to mitigate disaster risk. If such activities exist, go and help! With everything you've learned, you will make the activities even more effective.
- 4. If there are no such activities, organize some!

#### SOME TIPS

- You can use these activities to raise awareness about behaviours that harm your environment and increase disaster risk in your community.
- These activities can go well together with creating posters, murals and signs to inform community members of dangerous and hazardous practices and on how they could do things more risk-smart.
- Some of these activities might need you to raise some money or ask for donations. You can talk to local business owners and ask if they are willing to support such projects.

![](_page_31_Picture_6.jpeg)

## THEY DID IT, SO CAN YOU!

Children in Sumbawa Island, Indonesia, an area that is at high risk of volcanic eruptions and floods, founded Sanggar Sinar Pajo (which means 'children's workshop'). Next to raising the community's awareness about flooding risk due to littering, the children play an important role in 'Sunday Cleaning' activities. With their peers and adults, they cleaned the drainage ditch along the main road, the drainage inside the village as well as places of worship in the community.

Source: UNISDR and Plan International (2012). Children's Action for Disaster Risk Reduction: Views from Children in Asia. UNISDR and Plan International.

#### **Become Prepared**

![](_page_32_Picture_1.jpeg)

![](_page_32_Picture_2.jpeg)

WHEN? How?

> THIS ACTIVITY WILL HELP YOU PREPARE A DISASTER PREPAREDNESS AGENDA SO THAT YOU ARE PREPARED WHEREVER AND WHENEVER A HAZARD STRIKES

#### WHAT YOU NEED:

- Your risk map, if you have already made one
- A large piece of paper or several smaller pieces of paper, if you haven't made a risk map
- Pens or pencils, ideally of different colours ٠

#### WHAT TO DO:

- 1. List all the places you go to throughout the week. Indicate what time of day you are in each place.
- 2. Locate and mark those places in your risk map. If you don't have a risk map yet, draw a map of your community, which includes all the places in your list.
- 3. Discuss the hazards in your community and where you would be most at risk from those hazards. You might have done this when you made your risk map. If not, go back to the section on risk maps to see the kinds of information you will want to look into.
- 4. Write down the hazards you've identified and associate them with the locations you mapped out in step 1.

- 5. Add a column where you can write down the kinds of warning you would get for each hazard at each place. Discuss your list with your teachers and parents.
- 6. Write down what you would do and where you would go if you get a warning for a certain hazard at a certain location (see example below).
- 7. Put in your evacuation/safety routes for each location and each hazard into your risk map.

#### HERE'S AN EXAMPLE OF HOW YOUR PLAN COULD LOOK LIKE

MONDAY				
Place	Time	Hazard	Warning	Action
School	8 am – 2 pm	Earthquake	Most likely no warning	<ul> <li>Duck, cover and hold</li> <li>When shaking is over, calmly and cautiously leave the school building</li> <li>Meet up with my classmates at designated evacuation point</li> </ul>
Home	2 pm – 4 pm	Tsunami	Tsunami warning sirens, radio, TV, text message	Evacuate to hill closest to my house
Sports ground	4 pm – 6 pm	Floods	Sirens, word of mouth, text message	Evacuate to higher ground on the northwest side of sports ground
Grandma's house	6 pm – 8 pm	Landslide	Neighbours, fire fighters; monitor hill next to grandma's house in case of very heavy rain	<ul> <li>Evacuate through back door of grandma's house as soon as I spot warning signs for landslide</li> <li>Warn neighbours and call fire Department</li> <li>Grab my and grandma's preparedness bag</li> <li>Help grandma to evacuate</li> </ul>

#### SOME TIPS

- Discuss your list with your family members they might want to make such a list too. Discuss where you would meet and how you would communicate with each other if any of these disasters happened.
- Discuss in class and with authorities on how warnings could be improved at different places in your neighbourhood/village/town.

![](_page_34_Picture_0.jpeg)

#### WHAT YOU NEED:

![](_page_34_Picture_2.jpeg)

Pens and paper

![](_page_34_Picture_4.jpeg)

#### # z. MAKING A FAMILY DISASTER PREPAREDNESS PLAN

YOU'VE LEARNED A LOT ABOUT HAZARDS AND HOW TO BE PREPARED FOR THEM, WHICH MEANS THAT YOU CAN HELP YOUR PARENTS AND SIBLINGS TO MAKE A PREPAREDNESS PLAN.

#### WHAT TO DO:

- 1. Take your time and make sure that all family members join in the discussion.
- 2. Discuss which natural and man-made hazards are present around your home, workplace, school, and play sites. Make a 'Where? When? How?' plan for each family member.
- 3. Discuss how safe your house is and if it can withstand different disaster scenarios. Talk about whether it is safer to stay inside the house or to evacuate in case a certain disaster happens.
- 4. Check all rooms in the house for things that could be hazardous in case a disaster occurs (for example, things that could cause a fire or could fall down and block exits). Make sure that any dangerous materials are stored safely.
- 5. Draw a map of your house. Include detailed information, such as where the main electrical box is and where the gas and water lines can be turned on and shut off.
- 6. Discuss and agree on the safest evacuation routes from each room in the house. Ideally, you should have two separate routes planned from each spot in the house. Discuss who is responsible for helping family members who need assistance and how to help them evacuate.
- 7. Discuss ways to make your house more resistant against hazards and what you can do to prepare your house before a hazard strikes.
- 8. Prepare emergency supplies, an emergency (or preparedness) bag or, at least, a list of important things you need to bring in case a disaster strikes and you need to evacuate.

- 9. Map your surroundings. Think from where a hazard may come from, the secondary hazards that might harm you when evacuating or prevent you from evacuating (large trees and/or electrical lines that could fall, drenches and rivers that could flood, bridges that could be impassable, buildings that could collapse and more).
- 10. Decide on the best evacuation routes and where to evacuate for each hazard. Have more than one option for evacuations.
- 11. Decide where to meet or how to contact each other in case you get separated.
- 12. Discuss what to do with your pets and/or livestock in case of disaster.
- 13. Make a list of people and institutions that can help in the event of a disaster. Write down important phone numbers (fire fighters, police, ambulance, relatives, neighbours, doctors, utilities, etc.) and make a copy for each family member. Save the numbers in your cellphones but have them on paper as well.
- 14. Write down your plan. Make sure each family member is clear on their responsibilities, and that there is always someone to back up in case the person is away.
- 15. Review and, if needed, revise your plan after some time.

#### SOME TIPS

- Agree on two meeting points:
  - One right outside your house in case of a sudden emergency, such as a fire.
  - One outside your neighbourhood, in case you cannot return home or are asked to evacuate.
- Practice evacuating from your home and neighbourhood twice a year (both on foot and in a vehicle).
- Include your neighbours in your emergency planning. Maybe you can help each other in case of an emergency.
- Agree on a relative or friend in a different village or town that you all can contact in case you lose each other.

![](_page_35_Picture_14.jpeg)

#### # 3. PACKING AN EMERGENCY BAG

YOU'LL NEED AN EMERGENCY BAG IF YOU HAVE TO EVACUATE. WHICH OF THE FOLLOWING ITEMS WOULD YOU PUT INTO SUCH A BAG, AND ARE THERE OTHER ITEMS YOU WOULD INCLUDE?

![](_page_36_Picture_2.jpeg)

WELL, YOU'VE PROBABLY REALIZED THAT YOU CAN'T BRING EVERYTHING AS THE BAG MAY BECOME TOO HEAVY AND TOO BULKY TO CARRY...

#### WHATEVER ELSE YOU DECIDE, THERE ARE CERTAIN THINGS THAT SHOULD BE INCLUDED IN YOUR EMERGENCY BAG:

- Important medicines and first aid items;
- A source of light: flashlight, candles and matches;
- Some water and food;
- Important documents or copies of those documents;
- A bit of money;
- A change of clothes and a towel;

- Some soap, a toothbrush and other hygiene items;
- If not too big and heavy, you can always pack one of your favourite toys, books or trinkets; and
- A small battery-powered or windup radio to access information in case electricity blacks out after the disaster.

REMEMBER: IF YOUR HOUSE IS IN THE HAZARD ZONE AND YOU ARE ALREADY IN A SAFE PLACE, YOU SHOULD NOT HEAD HOME FOR THE EMERGENCY BAG!

ALSO, A DISASTER MIGHT HAPPEN WHILE YOU ARE AT SCHOOL. TALK WITH YOUR TEACHER ABOUT PREPARING AN EMERGENCY BAG FOR SCHOOL.

![](_page_37_Picture_0.jpeg)

BY MAKING SIGNS, YOU CAN HELP INFORM PEOPLE ABOUT HAZARDS, HAZARDOUS SPOTS AND EVACUATION ROUTES IN YOUR AREA.

#### WHAT TO DO:

- 1. Think about which warnings you want to convey. This is best done by discussing which hazards your community is facing and by identifying high risk areas in your community. Again, a risk map comes handy.
- 2. Think about the purpose of the warning signs:

hazard area.1

- Historical markers: Do some research and learn about past disasters in your community. Was there ever a tsunami or a flood in your neighbourhood/ village/town? If yes, how high did the water go? Did a volcano ever erupt in your town? If so, how far did the lava and ashes go? By marking those, you can remind your community of which areas were affected in the past.
- Warning signs: Look around for hazardous spots and behaviours. You can mark hills and slopes that are prone to landslides when the rainy season comes or make a sign for people to not cross the bridge once the river has risen above a certain mark.
- Marking evacuation routes: If the authorities have not done so, you can mark the main evacuation routes from your neighbourhood/village/town. This can be combined with marking safe zones or meeting points where people can gather after an evacuation.
- 3. Warning signs can take different forms and shapes. You can paint them on walls or trees (you need permission to do so as well as the right kinds of paints and brushes or multi-coloured spray cans). You can make signs out of cardboards, using coloured pencils or markers and cover them with plastic to make them more weather resistant. You can even discuss with your teacher about making signs out of metal.

REMEMBER THAT IN A DISASTER SITUATION PEOPLE ARE UNDER STRESS. MAKE SURE THAT THE SIGNS ARE VERY CLEARLY VISIBLE, SO THAT PEOPLE WOULD NOT MISS THEM, EVEN IN A HECTIC SITUATION. THEY SHOULD ALSO BE ABLE TO WITHSTAND THE FORCES OF NATURE.

![](_page_37_Figure_10.jpeg)

#### **Become Resilient**

![](_page_38_Picture_1.jpeg)

#### # I. PURIFYING WATER

IT IS EXTREMELY IMPORTANT TO MAKE SURE THAT THE WATER YOU DRINK IS NOT CONTAMINATED BY CERTAIN BACTERIA AND CONTAMINANTS, ESPECIALLY IN A DISASTER WHEN ACCESS TO CARE MAY NOT BE EASY. YOU SHOULD THEREFORE LEARN HOW TO PURIFY WATER.

- Remember that you should always have some clean water stored in your emergency bag and at home for use in a disaster.
- 2. If you don't have any clean water or have very little left, you can purify some. Carefully select your water source. Don't use water that has floating material in it, water that has any odour or water that has a dark colour. These are all indications that the water is significantly contaminated and may be dangerous no matter what you do to filter it or to kill the bacteria. On the other hand, a little dirt in the water can be easily cleaned out and won't hurt anyone.
- 3. Clear the water from dirt. You can do this by giving it time (12–24 hours) to settle until the dirt sets at the bottom of the container. Then, move the water above the dirt into another clean container. If letting it settle takes too long, you can filter the water through a clean cloth, tissue or a coffee filter.
- 4. The safest way to purify your water is by **boiling** it. Bring the water to boil until you see large bubbles forming. Boil it for another 5–10 minutes. If you're afraid to lose too much water to evaporation, use a lid. Remember that boiled water might not taste as good, because it has lost oxygen. Move the water from one container to another to add oxygen and make it taste better.

- Another way to disinfect filtered and settled water is to use chlorine tablets, which can be purchased in many places. This is something you might want to try with your teacher at school first, before doing it at home with your parents.
- 6. You can also purify water with **household bleach** that is based on a chlorine compound. It does not kill bacteria as effectively as boiling does, but it will get rid of most of them. Ask your science or chemistry teacher on how to purify water with bleach.
- If none of the above methods are available to you, one method that only requires a few clear plastic bottles and sunlight. This method utilizes the ultraviolet rays of the sun. Be aware that it will not kill all bacteria, although it will

give you water that is safer to drink than the one you had before. Here is how it works:

- After you have filtered the water, you just need one clear plastic bottle with cap.
- Fill the bottle up until it is 75 per cent full, close it and then shake it for 30 seconds to move oxygen into the water.
- Next, place the bottle horizontally on a flat surface like a rock or a rooftop, in a spot where it can get direct sunlight. Ideally, the surface should be dark or reflective.
- Leave it there for a minimum of six hours. If the sunlight is indirect or it is cloudy, leave the bottle for up to 24 hours.

![](_page_39_Picture_8.jpeg)

#### SOME TIPS:

- Try these methods at school with your science or chemistry teacher, so you already know how to do them and know what's safe, particularly when it comes to using bleach or chlorine.
- Discuss the issue of clean water with your family when you make your family preparedness plan. Discuss how much water you want to have in your storage and who is responsible for checking on the stock. Think about how large an issue clean water might be in your community and which of the methods offers a solution that works for your family, both practically and economically.

#### # 2. PUTTING ON A PUPPET OR THEATRE SHOW

![](_page_40_Picture_1.jpeg)

THIS IS A GREAT WAY TO TEACH OTHER CHILDREN, PARENTS OR OTHER COMMUNITY MEMBERS ABOUT DISASTER RESILIENCE AND PREPAREDNESS!

#### MAKING YOUR OWN FINGER OR PAPER BAG PUPPETS

### WHAT YOU NEED:

- Papers or a paper bag
- Scraps of fabric, wool thread
- Scissors and glue
- Coloured pens

![](_page_40_Picture_9.jpeg)

draw!

![](_page_40_Picture_10.jpeg)

cut!

#### WHAT TO DO:

- 1. Decide on how your puppet should look like. Will it be a person, an animal, a superhero?
- 2. Draw its shape and outline on a piece of paper. If you are making a finger puppet, make the body as long as about half your finger and draw the head on top of it.
- 3. Cut out the shape of the puppet.
- 4. Colour and decorate your puppet. You can use scraps of fabric to make clothes for your puppet and use wool threads for its hair.
- 5. Glue parts of your puppet together.
- 6. For finger puppets, it's fun to have more than one character on hand, so go ahead and be creative in making different characters.

![](_page_40_Picture_20.jpeg)

# PLANNING A THEATRE SHOW

## WHAT YOU NEED:

• Puppets, or costumes, which you can design using different things you find at home or in school.

# WHAT TO DO:

1. Discuss what topics you want to present at the show and think of who your audience will be.

- If you want to talk about preparedness for example, your play could show how people should or should not behave when a disaster happens.
- After a disaster, if you have to live in an evacuation shelter for a while, you can make shows that teach people how to stay clean and healthy.
- You can also make shows to talk about your feelings after a disaster happens.
- 2. Like in movies, puppet and theatre shows need a script. Come up with an interesting story to capture people's attention. Since preparedness and resilience are serious topics, put in some jokes that will lighten your audience's heart and make them remember your messages better. Involving your audience in the play is often a good way to make them enjoy your performance.
- 3. Distribute roles: who will be the director, who will be responsible for costumes or making puppets, who will be the actors and puppet players?
- 4. Rehearse, rehearse, rehearse!
- 5. Find a stage where you will perform your theatre play or puppet show. Invite people to attend.

![](_page_41_Picture_12.jpeg)

![](_page_42_Picture_0.jpeg)

#### # 3. SHARING EXPERIENCES

WHEN YOU EXPERIENCE A DISASTER, YOU FEEL A LOT OF THINGS. SOMETIMES IT IS DIFFICULT TO TALK ABOUT THEM WITH GROWN-UPS. IN SUCH SITUATIONS, YOU CAN TRY TO PUT DOWN YOUR FEELINGS AND THOUGHTS ON A POSTCARD, A LETTER OR IN A PICTURE. EXCHANGE THEM WITH OTHER CHILDREN WHO HAVE BEEN AFFECTED BY DISASTERS, EITHER IN YOUR REGION OR IN A DIFFERENT REGION. YOUR TEACHERS OR PARENTS WILL BE HAPPY TO HELP FIND OTHER CHILDREN YOU CAN SHARE YOUR EXPERIENCES WITH. YOU MIGHT EVEN END UP HAVING A PENPAL FOR THE REST OF YOUR LIFE.

# THEY DID IT, SO CAN YOU!

The Code neighbourhood in Yogyakarta, Indonesia, is located alongside a river. In the aftermath of the 2010 eruption of Mount Merapi, lava floods affected the neighbourhood to the extent that the eastern and the western sides of the river were cut off from each other. With the bridge impassable, children from the one side could not communicate with their friends on the other side. With the help of a volunteer group, Cemara, children on both sides of the river wrote down their experiences during and after the flood on postcards. They put the cards into envelopes and then decorated the envelopes. The volunteers then delivered the cards to the children on the opposite side of the river.

Source: Interview with Ayu Diasti Rahmawati, October 2013.

Another way to share your experiences is by writing down stories or composing songs. You can either come up with entirely new stories and songs, adapt existing stories, or create new song lyrics for an existing song. They can help you to share how you feel and what you've gone through during a disaster, or tell the story of how you managed to, or tried to, get back to normal. They can also convey messages on what you learned from the disaster and how to be better prepared if another one should occur.

## THEY DID IT, SO CAN YOU!

In Sri Lanka, after the 2004 tsunami, children adapted a folk song/tale to become a song/tale about the different disasters the country has faced.

In Ecuador, in 1993, children composed new lyrics to a song to make it about earthquake warnings. The song was a success and was even played on the radio.

Sources:

Benson, L. and Bugge, J. *Child-led Disaster Risk Reduction: A Practical Guide*. Save the Children.

UNISDR and UNICEF (2007). *Let's Learn How to Prevent Disasters*. UNISDR and UNICEF.

![](_page_42_Picture_13.jpeg)

![](_page_43_Picture_0.jpeg)

#### # 4. IMPROVING YOUR SCHOOL SAFETY

AS A STUDENT, YOU SHOULD GET INVOLVED IN IMPROVING THE SAFETY OF YOUR SCHOOL. AFTER A DISASTER HAPPENS, YOU CAN HELP IN REBUILDING AND REDECORATING YOUR SCHOOL AND TO MAKE SURE THAT IT IS BUILT ON A SAFE PLACE AND IS CONSTRUCTED RESILIENTLY. YOU SPEND A LOT OF TIME AT SCHOOL AND THEREFORE KNOW WHAT KIND OF SCHOOL YOU WANT IT IS JUST FAIR THAT YOU GET INCLUDED IN THE PLANNING PROCESS WHEN YOUR SCHOOL GETS RETROFITTED, RELOCATED OR RECONSTRUCTED. IL IS ALWAYS GREAT TO LEARN FROM A REAL LIFE PROJECT (NOT TEXBOOKS).

# THEY DID IT, SO CAN YOU!

In the Philippines, students of the Santa Paz National High School in the town of Guinsangon managed to advocate for the relocation of their school, which was situated in a location prone to landslides. The Department of Education recommended the relocation, but there was resistance from the community, which felt that that 'vague warnings' were not enough reason for a costly move. The students engaged school authorities and organized an education campaign in their community, informing them about the impacts of landslides. To support the students' campaign, their head teacher organized a community-wide referendum for the relocation plan. Because of the persuasion of the students, the students' proposal won and the school was successfully relocated, to a new school that was built with a disaster-resilient design.

Source: Plan UK (2010). Child-Centred Disaster Risk Reduction: Building Resilience through Participation, Lessons from Plan International. Plan UK.

![](_page_43_Picture_6.jpeg)

#### Take a Moment to Think about All This

![](_page_44_Picture_1.jpeg)

# Measuring Your Progress towards Becoming a Resilience Girl or Preparedness Boy

This scorecard will allow you to test how risk-smart, prepared and resilient you already are. Don't worry if you don't have all the skills or knowledge yet. You can use this tool to plan how and when to learn those skills. The card also helps you to think about who could help you with this task.

I know	Got it!	If no, I will learn it from/with/how	Until when	Got it!
about the causes of natural hazards				
about the effects of different natural hazards				_
about how the strength of different hazards is measured				
about the effects of man-made hazards				
which natural hazards my community faces				
which man-made hazards my community faces				
about how climate change works				
about the effects of climate change				
about which human activities in my community make it more exposed/vulnerable to disasters				
what vulnerability means				
what resilience means				
what disaster risk is				
which areas are vulnerable to disasters in my community				
who in my community is vulnerable to disasters				
where safe places in my school, my house, other places I am are located and on how to get to them in a disaster				
how and where to evacuate in case of a disaster				
how to help people who are more vulnerable than me when a disaster happens				
the warning signs and signals for different hazards in my home, school and community				
how to make our home, school, other places I am safer				
who in my community can help before, during and after a disaster				
and I know how I can reach them				
about how I can share my disaster story				
about where I can get help when I feel bad after a disaster				
Your score		Your new score		

I can	Got It!	lf no, I will learn it from/with/how	Until when	Got it!
swim				
climb trees				
ride a bicycle/motorbike				
prepare and cook a simple meal for me and others				
perform first aid				
purify water in an emergency				
be a disaster risk detective				
create a disaster risk map of my community				
cover, duck and hold				
plant a bush or tree				
create a family preparedness plan				
pack an preparedness bag				
make warning signs				
draw murals or make exhibition pieces				
draw an evacuation map				
make a puppet or theater show				
sing a song or tell a tale about disasters				
teach younger children about disaster risk, preparedness and resilience				
stay calm and alert when a disaster happens because I am risk smart, prepared and resilient				
Your score		Your new score		

![](_page_46_Picture_1.jpeg)

# **Glossary**<sup>1</sup>

#### • capacity

The combination of all the strengths, attributes and resources available within a community, society or organization that can be used to achieve agreed goals. Capacity 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.

#### • CLIMATE CHANGE

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods".

#### DISASTER RISK REDUCTION

The practice of reducing the risk of disaster through systematic analysis and management of the causal factors of disasters. This includes reducing exposure to hazards, lessening the vulnerability of people and property, wise land and environmental management, and improved preparedness. For education it implies the systematic analysis of and attempt to reduce disaster-related risks to enable the education system to provide (and learners to continue, and out-of-school children to access) quality education for all, before, during, and after emergencies.

#### • HAZARD

A dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

#### • PREPAREDNESS

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

#### • **RESILIENCE**

Resilience is the ability of an education system (at different levels) to minimize disaster and conflict risks, to maintain its functions during an emergency, and to recover from shocks. Resilience at the individual level is the ability to apply knowledge to minimize risks, to adapt to emergency situations, to withstand shocks, and to rapidly resume learning and other life-sustaining activities. Resilience can be strengthened when factors underlying vulnerability are addressed. Resilience is the opposite of vulnerability.

1 - From United Nations Office for Disaster Risk Reduction (UNISDR) 2009, Terminology, http://www.unisdr.org/we/inform/ terminology, and UNISDIR 2012, "Assessing School Safety from Disasters - A Global Baseline Report. ISDR Thematic Platform for Knowledge and Education 2012", http://www.unisdr.org/files/35274\_2012schoolsafetyglobalbaseline.pdf • RISK

In popular usage the emphasis is on the concept of chance or possibility ('the risk of an accident'). In technical settings the emphasis is usually placed on consequences in terms of 'potential losses'. The relationship between vulnerability and the likelihood and severity of hazards can be represented using this equation:

#### RISK = HAZARD X VULNERABILITY

The worse the hazard, the greater the risk. Likewise, risk also increases when a community, system, or even a school is more vulnerable.

#### • VULNERABILITY

The characteristics and circumstances of a community, system or asset that make it susceptible to the damaging effects of a hazard. There are many aspects of vulnerability, arising from various physical, social, economic, and environmental factors. At the education system level, vulnerability is the combination of exposure to conflict-related, natural, and human-made hazards, and the degree to which the education system at different levels is susceptible to collapse and disruption of function. At the learners' level, vulnerability is the combination of exposure to hazards and the degree to which learners are susceptible to interruption or complete loss of access to quality education opportunities.

 UNITED NATIONS' UNIVERSAL DECLARATION OF HUMAN RIGHTS: see http://www.un.org/en/documents/udhr/

![](_page_49_Picture_0.jpeg)

# A Student's Guide STAY SAFE AND BE PREPARED

This guide is part of a three-book Compendium on Disaster Risk Reduction (DRR) that aims to introduce concepts, exercises and best practices on disaster preparedness and response to teachers, students and parents.

The Compendium is based on the belief that comprehensive disaster preparedness and resilience-building is most successful when the whole (school) community, starting with students, parents and teachers, is involved and when the process actively encourages students to take the lead on some activities.

In this Student's Guide, young people from 11 to 18 years will find loads of interesting information on Disaster Risk Reduction (DRR). The guide explains the basic DRR concepts, explores the psychosocial effects of disasters, and provides tips for different activities young people can do in class, at school, at home and in the community to improve disaster preparedness and response. With appropriate support from parents and teachers, young people can become well-prepared and disaster-smart!

THIS GUIDE IS DESIGNED FOR YOU, THE DISASTER FIGHTER OF TOMORROW!

![](_page_49_Picture_6.jpeg)