



Eco-Schools

Indian Ocean

# ECO-SCHOOLS INDIAN OCEAN

## DISASTER RISK REDUCTION TOOLKIT

CONDUCT A CHILD-CENTRED VULNERABILITY AND CAPACITY  
ASSESSMENT FOR YOUR SCHOOL AND COMMUNITY



An ISLANDS initiative of the Indian Ocean Commission funded by the European Union



At the end of the 1990s, climate-change related disasters affected about 66 million children per year. According to UNICEF, this number is expected to triple in the coming decades, to 200 million children annually.

Children and schools have a unique role to play in building resilience of their communities towards natural and manmade disasters. All across the Indian Ocean, schools are working to address climate change and sustainable development challenges through a holistic, student led and community focussed approach. There are many tools available to help children learn about Disaster Risk and help them become active participants of Disaster Risk Reduction Efforts. Training and awareness, integrating Disaster Risk Reduction in school curriculum, as well as analysing, planning and implementing risk reduction and adaptation measures. The community based Vulnerability and Capacity Assessment (VCA), employed internationally by the Red Cross Red Crescent, helps people understand the hazards that affect them and take appropriate measures to prevent these hazards turning into disasters using their own skills, knowledge, and initiatives.

This toolkit provides a practical guide on how to conduct a VCA with and for children alongside broader DRR initiatives in schools. Combined with the Eco-Schools VCA training module, this toolkit will help teachers, school officials and community members who are active in the school through the Eco-Schools programme and who wish to further support children's participation in school disaster preparedness and management.



## MESSAGE FROM PIROI

In the South West Indian Ocean, nearly 100 million people are at risk from natural hazards. According to UNICEF, Children typically represent 50-60 percent of those affected by disaster. The frequency and intensity of cyclones, floods, epidemics, droughts and volcanic eruptions that occur in the country cause considerable human and material losses. In 1999, in response to this, the Indian Ocean Commission (IOC) emphasized the importance of a regional disaster response project to reduce the risk and ensure the protection of property and people, as well as sustainable socio-economic development of the southwestern Indian Ocean. In the same year, the need for a regional disaster response base was affirmed by the National Red Cross and Red Crescent Societies of the region. This gave way to the creation of PIROI led by the French Red Cross, a regional platform for disaster risk management and adaptation to climate change. This platform based in Reunion includes the Red Cross and Red Crescent of Comoros, Madagascar, Mauritius, Mozambique, Seychelles, Tanzania and France (Réunion and Mayotte), the International Federation of Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross (ICRC). In order to reduce the impact of natural disasters and the effects of climate change, PIROI carries out integrated activities in the disaster management cycle. The Platform makes it possible to pool skills and proportionate resources as close as possible to vulnerable areas and thus increase its responsiveness and flexibility in the face of hazards.

If emergency preparedness and response is effective and irreplaceable, it is not enough. Contrary to what one might think hazards do not always constitute a risk for the populations: the impacts of a cyclone, a flood or a landslide can be considerably lessened if preventive actions are carried out. With this in mind PIROI has made Disaster Risk Reduction (DRR) one of its priorities and Disaster Risk Reduction Education (DRRE) among young people and communities in order to reduce people's vulnerability to risks. DRRE holds promise by involving young people as the adults of tomorrow and messengers within their families and communities. DRR projects in the region developed by PIROI, while adapted to the context of each country use a common methodology: networking of strong partnership, insertion of DRRE in schools and educational programmes, and the development of tools based on local contexts and cultural traditions. Integrating disaster risk reduction into country education systems is a priority. IOC's strong advocacy with governments has made it possible to establish partnership between each Red Cross Red Crescent Society and their Ministry of Education.

Because children are affected by disasters both at home and in school, the creation of pedagogical tools inspired by the local context and the traditions of the communities is essential to stimulate student interest and participation. School booklets are provided to each student, consisting of a risk-specific knowledge element and a series of activities to test the acquisition of knowledge as well as the assimilation of safety instructions to be followed before, during and after a disaster.

In order to strengthen DRR initiatives from community to government levels, the IOC and PIROI signed a regional partnership agreement in 2012 which was renewed in 2016. This partnership has facilitated the implementation of 15 DRR projects for more than 142,000 people by PIROI since its creation. Based on the Community Vulnerability and Capacity Assessment (VCA) used internationally by the Red Cross Red Crescent and designed in collaboration with the IOC, this child-centred toolkit combines Indian Ocean-specific case studies and best practices with a step-by-step guide to enable schools to address disaster risk reduction with the full participation of children.





## PURPOSE AND USE OF THIS TOOLKIT

### Disaster Risk Reduction in the Indian Ocean

Around the world each year, millions of people are affected by **natural hazards** and **consequent disasters**. Often the hazards facing any community can be identified in advance, and the potential impact of an event can be reduced. Working in advance to reduce the vulnerability of communities makes them more able to face challenges. Because of their unique and specific vulnerabilities, disasters can disproportionately affect **small island developing States** and the Indian Ocean Islands are well known as a region prone to natural hazards. The South West Indian Ocean (SWIO) Island States are highly exposed to hazards. Every year, an average of 13 tropical cyclones with wind speeds exceeding 63 km/h form in the region, which can affect the SWIO Island States, their population and economy as a result of high winds, flooding and storm surges. Other hazards also include flooding from non-tropical cyclone induced precipitation (e.g. monsoons), earthquakes, tsunamis, and other hazards such as drought, volcanic activity, and landslides.

These known risks are exacerbated by **climate change** and other variables that seem likely to increase the intensity of the events people face. Climate change is expected to result in a variety of environmental, social and economic effects, including threats to natural habitat, rising sea levels, loss of habitable and agricultural land, coastal erosion, increased intensity and frequency of tropical storms, decreased food and water security, and adverse impacts on human health.

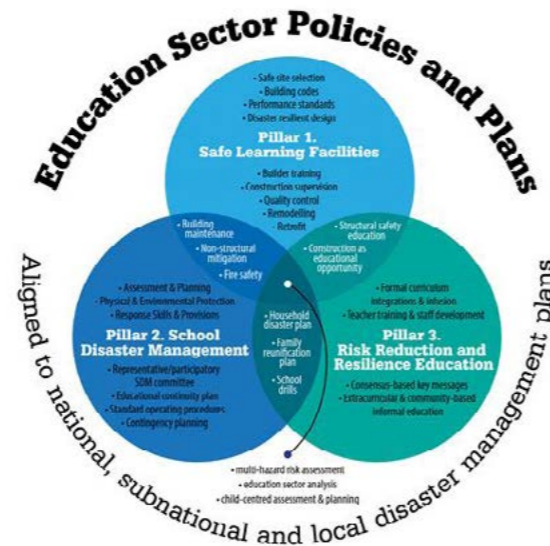
### DRR Education

The Sendai Framework for Disaster Risk Reduction 2015-2030 acknowledges the urgent need for 'all-of-society engagement and partnership' (UN 2015). The 2030 Agenda for Sustainable Development and the Sustainable Development Goals, in particular **Goal 13.3**, asks countries to integrate mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary education curricula. DRR is prominent in UNESCO's Global Action programme (GAP) (2015) which carries forward the international Education for Sustainable Development agenda, and advocates for disaster management plans to include ESD as a means of implementation.

The Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector (GADRRRES), a multi-stakeholder mechanism composed of UN agencies, international organizations, and global networks has developed a **Comprehensive School Safety Framework** addressing risks from hazards in the education sector through 3 pillars:

1. Safe Learning Facilities
2. School Disaster Management
3. Risk Reduction and Resilience Education

This toolkit provides information, tools and resources supporting mainly Pillar 3: "**Risk Reduction and Resilience Education**", but crosses with activities supporting Pillar 2, as the information obtained from educational activities undertaken can inform school contingency planning and vice versa.

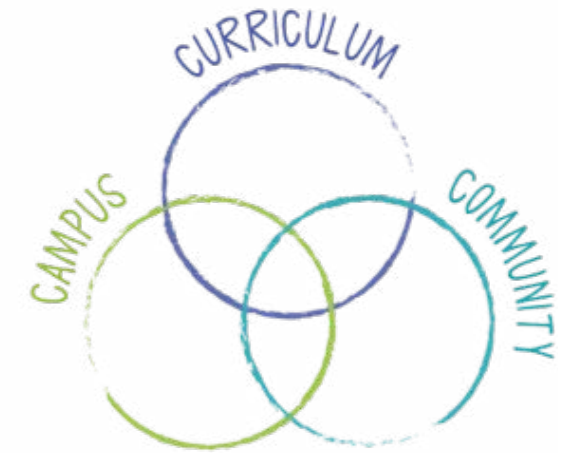


UNISDR, 2017, Comprehensive School Safety A global framework in support of The Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector and The Worldwide Initiative for Safe Schools. Available at: [http://gadrrres.net/uploads/images/pages/CSS\\_Booklet\\_2017-updated.pdf](http://gadrrres.net/uploads/images/pages/CSS_Booklet_2017-updated.pdf)

### An Eco-Schools Indian Ocean Approach to Disaster Risk Reduction

Eco-Schools Indian Ocean (IO) is a holistic, participatory Education for Sustainable Development programme which is suitable for all Indian Ocean schools. This process is primarily led in schools by the students themselves who work through ten topic areas (determined to represent the main sustainable challenges of the region): **Energy, Waste, Water, Climate Change/Disasters, Biodiversity, Livelihoods, Healthy Living, Soil and Air, Cultural Heritage and Ocean & Coast**. Eco-Schools addresses priority themes in a 'whole institution approach': refocussing curriculum learning around key challenges, implementing sustainable practices and practical projects on the school campus, and developing collaborative partnerships with the local community through seven simple steps.

Just like Eco-Schools, the Vulnerability and Capacity Assessment (VCA) is a participatory and community orientated process. The Eco-Schools IO VCA provides a first step to building DRR as a whole institution approach through the three Cs of Curriculum, Campus and Community, and will complement other DRR measures such as school contingency planning: Building children's knowledge and skills in DRR - enabling children to analyse and monitor disaster risks, vulnerabilities, and capacities in and around their school campuses and putting in place measures to affect change - and take this learning outside the school to better protect themselves and their communities.



### Why should children participate in the monitoring of hazards and risks in their communities?

#### Keeping children safe

According to the World Health Organisation, 30-50% of disaster fatalities are children. As well as injuries, children are directly affected from diseases related to malnutrition and poor water which are exacerbated by disasters. In addition, disasters disrupt education and can cause psychological trauma, separating children from their families and increasing vulnerability to exploitation and abuse. Involving children in DRR is key to helping children be safe in the case of hazards.

#### A Unique perspective

Evidence has shown that children have a unique perspective on disaster risks that can improve a community's overall resilience to disasters, addressing key challenges in creative ways. They are effective communicators of risk to each other and their communities and can be empowered to take action.

#### Respecting Children's Rights in Disaster Risk Reduction

Participation in disaster management and climate change decisions can ensure the realization of other child rights enshrined by the UN Convention on the Rights of the Child, including the right to safety, survival, protection from violence and harm, adequate health care, participation and education, all of which are compromised in the event of a disaster.

#### Adult led approaches can be limited in success

Disaster Risk Reduction (DRR) research has shown that 'adult-led' education programs and school drills which focus only on standard messages may not reduce risks for children and youth to the extent necessary because of misconceived application of rote knowledge when disasters strike.





## The Vulnerability and Capacity Assessment Methodology

This toolkit is a practical guide to help Eco-Schools address DRR through the VCA process. VCA is concerned with collecting, analysing and systematising information on a community's vulnerability to hazards in a structured and meaningful way. The information collected is used to locally identify the key risks and existing capacities of the school and surrounding community, ultimately leading to activities aimed at reducing the vulnerability of students and their families, as well as teachers and school staff to potential disasters, increasing their capacity to survive them and resume their lives.

The toolkit should be used by teachers or Eco-Schools leaders who have the necessary skills to work with children. The activities in this toolkit are:

- Build students' knowledge and capacities in DRR
- Enable students to analyse and monitor disaster risks, vulnerabilities, and capacities in their schools and communities
- Draw upon existing DRR teaching and learning resources adapted to the local context of teachers and students
- Empower students to plan DRR activities they can initiate in their schools and communities and in the context of Eco-Schools activities
- Include the findings, concerns and needs of children in youth in school management and emergency plans

The Eco-Schools IO VCA should be used as part of either an overall child centred DRR Emergency Planning process or other Eco-Schools project which aims to address the outcomes of the VCA, and should be linked with three pillars of the Comprehensive School Safety Framework.

### Guidance on using activities in this toolkit

- The exercises in this toolkit are best accomplished with groups of around 15-20 children.
- The Eco-Schools IO VCA can be carried out by your Eco-Schools Committee or as a class activity.
- The activities can be carried out with students from primary to secondary levels but may require modifications for effective application with children younger than age 10.
- Separating the groups by gender can also allow for different perspectives to be heard.
- Ideally, two teachers or Eco-Committee leaders should co-facilitate the VCA activities with children.
- A note-taker should also be present during the VCA process to document all ideas and discussions.
- A list of educational resources available in each country is provided on page 42.

### Ensuring a child-centred and participatory process:

- Allow students enough time to share their own perspectives on risks in their schools, and hazards in their communities.
- Nevertheless, adult leaders should be well-prepared with knowledge of DRR and climate change concepts so that students' questions can be answered.
- During all discussions with children use open-ended questions (rather than questions with a pre-defined answer). The knowledge and opinions of children should be valued to encourage sharing.
- The VCA process may uncover vulnerability concerns not directly related to disasters but may relate to other Eco-Schools IO themes e.g. Healthy Living, Livelihoods, Water, Soil and Air etc. These should be carefully noted and addressed within the Eco-Schools Action Plan.

## KEY CONCEPTS OF DISASTER RISK REDUCTION

Becoming familiar with some key concepts and terms relating to Disaster Risk Reduction is the first step before facilitating DRR education activities. An important distinction to make is between a hazard and a disaster: although used colloquially, 'natural' disasters are never entirely 'natural'; rather, there are natural hazards such as hurricanes and earthquakes. A disaster takes place when the consequences of a hazard event surpass a community's capacity to cope. A disaster is determined by how vulnerable a community is to a hazard. Vulnerability is not inherent, but the consequence of a combination of economic, social, physical and environmental factors. The following have been adapted from UNISDR Disaster Risk Reduction Terminology<sup>1</sup>:

### Hazard

A source of potential damage or harm such as a process, a human activity or a phenomenon that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation. Hazards may be natural or caused by humans.

### Vulnerability

Vulnerability relates to weaknesses and the difficulty in resisting a hazard or responding when a disaster occurs. Vulnerability depends on several factors, such as people's age and state of health, local environmental and sanitary conditions, as well as on the quality and state of local buildings and their location with respect to any hazards.

### Capacity

Capacity is a combination of all the strengths and resources available within an organization, community or society to manage and reduce disaster risks. Capacity may include knowledge, skills, tools, buildings, good leaders, services (health centres, schools).

### Disaster

Disaster is characterized by serious disruption of the functioning of a community or society at any scale, causing widespread human, material, economic and environmental losses. It results from the combination of hazards, conditions of vulnerability and insufficient capacity or measures to reduce the potential negative consequences of risk.

### Disaster risk

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined by hazard, exposure, vulnerability and capacity.

### Disaster risk reduction

Disaster risk reduction is aimed at preventing new and reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and therefore to the achievement of sustainable development.

### Resilience

Resilience is the ability of a system, community or society, which is exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a way that is timely and efficient. These include the preservation and restoration of its essential basic structures and functions through risk management.

<sup>1</sup> UNISDR Terminology: <https://www.unisdr.org/we/inform/terminology>



# ECO-SCHOOLS INDIAN OCEAN VULNERABILITY AND CAPACITY ASSESSMENT

## Objectives and Contents

The following activities have been adapted for the Indian Ocean context from Plan International Child Centered DRR Toolkit (2010) and International Federation of Red Cross and Red Crescent Societies. (2007) VCA Toolbox with reference sheets. They are complemented by examples of hazards and disasters which have occurred throughout the Indian Ocean, and can be used to provide local context where relevant throughout the activities. Additional resources developed in each country as well as resources available online can be found on page 42. It is recommended to document each activity with photographs and notes of the findings of students. These findings can be used in the next steps following the VCA training activity.

<b>Define the concepts of hazard, vulnerability, capacity, risk, and risk reduction</b>	<b>Activity 1:</b> Introductory Activity <b>Activity 2:</b> Exploring DRR Concepts
<b>Identify and rank hazards, vulnerabilities, capacities, and risks in their community</b>	<b>Activity 4:</b> Transect Walk <b>Activity 5:</b> Hazard Identification
<b>Analyse their community's disaster history and seasonal disaster calendar</b>	<b>Activity 5:</b> Hazard Identification <b>Activity 6:</b> Seasonal Calendar
<b>Identify and analyse disaster causes and risks (including climate change)</b>	<b>Activity 8:</b> Hazard Ranking <b>Activity 9:</b> Vulnerability Identification
<b>Link identified vulnerabilities to opportunities for capacities and resources that can reduce risk</b>	<b>Activity 10:</b> Transforming vulnerabilities into capacities and identifying prevention, preparation, and mitigation activities <b>Activity 11:</b> Stakeholder mapping and influencing
<b>Plan for disaster preparedness, prevention, and mitigation activities</b>	<b>Activity 12:</b> Conclusion and Evaluation

## Curriculum Links

Curriculum Area	Activities
Arts	Drawing activities in Activities 1, 2, 3, 4, 5, 9, 11
Language and literature	Reading and discussing disaster examples throughout the manual
Biology and environmental sciences	Learning about hazards and climate change-related disasters in Activities 1 to 9
History	Exploring the history of past disasters in their communities in Activities 6 and 7
Geography	Looking at existing maps and redrawing maps and community features in Activities 3 and 4
Social science studies	Understanding disaster vulnerabilities through child rights lenses in Activities 1 through 12
Civics or citizenship studies	Mapping stakeholders, engaging with partners in Activities 11 and 12
Health education	Learning safe and unsafe practices related to disasters in Activities 1 through 12







## Debriefing

After the body map activity, a discussion should be facilitated to encourage students to think about what they hope to achieve in their Eco-Schools VCA. This will provide a baseline in later evaluating the programme.

**Objectives:** Students will discuss expectations for the programme

**Time:** Approximately 15 minutes.

**Materials needed:** Paper cards, markers, pencils.

1. The children should be divided in small groups of 4 to 5. One person should be responsible for notetaking.
3. The following questions can be used to guide the discussion for 15 minutes:
  - Hopes and Expectations: What do you hope to learn or achieve in this training and after?
  - Fears: Do you have any concerns or problems, which you hope can be discussed in this training?
4. Combine all notes afterwards into two columns – Hopes and Expectations, and Fears. Keep the notes safe to be used during the evaluation session at the end of the VCA.
5. If there are expectations that cannot be met, a thought corner can be created for expectations that might be addressed during other curriculum subjects or within your Eco-Schools Action Plan.

## Activity 2: Exploring DRR concepts

Using drama, storytelling, and group discussions, the activity will enable students to understand the various concepts around Disaster Risk Reduction, and distinguish each concept from each other.

**Objectives:** Students will be able to define hazard, vulnerability, capacity, resilience through community examples.

**Time:** 30-45 minutes.

**Materials needed:** None.

1. In groups of 3-6 students, ask students to reflect on potential natural disasters and how they might affect a real or imaginary community.
2. Ask each group to select a scenario of a natural disaster that they can depict in a role play.
3. Allow the groups to come up with a creative drama role play, support if needed and requested by the group.
4. Reflect after each role play by asking what participants understood from the skit. Allow the actors to clarify their message and to expand on it.

**Here are some possible scenarios to get you started. They can be adapted to suit your local context:**

*Some children are going to school in a busy town but heavy rain has burst the riverbanks causing a big flood, there is a radio station and a health centre on higher ground where – how will they get there?*

*In a small rural community, the school is told that a cyclone is coming – how do the children help the school and village to prepare?*

*There is a school on the edge of a big forest, someone on the other side of the forest carelessly throws a cigarette away and starts a fire – the children need to prevent a disaster but what can they do?*





Facilitate a discussion using the following questions:

1. Using and adapting the definitions found in “Key Concepts of Disaster Risk Reduction”, discuss the types of disasters or hazards presented in the role-plays - ask the children to define, in their own words, what a hazard is. Write the students’ definition of **hazard** on a large card.
2. Discuss the possible weaknesses or vulnerabilities of the communities presented in the roleplays - ask the children to define, in their own words, what vulnerability is. Write the students’ definition of **vulnerability** on a large card.
3. What did they find in the communities that could help during the disaster situation? Explain that these features are the capacities (or capabilities) in the community. Based on this example, ask the children to define, in their own words, what capacity is. Write the students’ definition of **capacity** on a large card.
4. How could the characters in the role plays use their capacities to reduce risks? Can they imagine ways that the characters could adapt to or recover from the effects of the disaster situations? Explain that the capacities of the community can help build resilience. Write the students’ definition of **resilience** on a large card.
5. Conclude the discussion with any questions the students might have about the various definitions. Be sure to display the definitions in a prominent place.

In addition to drawing upon numerous resources on the web regarding key disaster risk reduction concepts (available page 36), you can also use the manuals and toolkits developed in each country to go further in-depth about definitions and concepts. These include:

**Comoros:** “Mieux connaître les risques de catastrophes naturelles pour se protéger”

**Mauritius:** “Zeness Pran Kont”, Second Edition

**Seychelles:** “Rediksyon Risk Dezas-Terminoloji Kouran”

**Reunion:** The two booklets “Paré Pas Paré” for teachers/facilitators and students, respectively

**Madagascar:** Arovako amin’ny loza voajanahary ny fireneko



For younger pupils, the activity can be complemented with the reading of “L’île aux Mille Dangers” translated into the languages of each country above.

Source: PIROI - Croix-Rouge Française





### Activity 3: School and Community Maps

Mapping is a way of setting out in visual form the resources, services, vulnerabilities and risks in a community. Mapmaking can provide a way for adults and children alike to make sense of the world and each other's place within it and better know the local environment which surrounds your school. A lot of the value in community mapping lies in the collaborative sharing and discovering experience that leads to the map's creation. In Disaster Risk Reduction, maps can be used in very practical ways to indicate the location of health clinics, schools, water sources and shelter or to identify locations at particular risk such as areas prone to floods or health hazards, indicating which groups are vulnerable.

**Objectives:** Students will be able to portray their school and the surrounding neighbourhood from their perspective, identifying important locations and landmarks, including settlements, residential areas, other schools, government and public buildings and infrastructures. The community map provides the basis for identifying risks and vulnerabilities.

**Time:** Approximately 2 hours.

**Materials:** Range of different maps (topographic where available, traditional maps), several large pieces of paper or flip charts, markers, crayons and pencils.



**Tip:** Maps can be drawn on the ground or in the sand or on a flipchart or blackboard. However, as this drawing will be revisited several times throughout the process it is important to photograph or redraw the map on good quality paper so that it can be displayed on a school wall or Eco-Schools Notice Board for use in subsequent VCA activities.

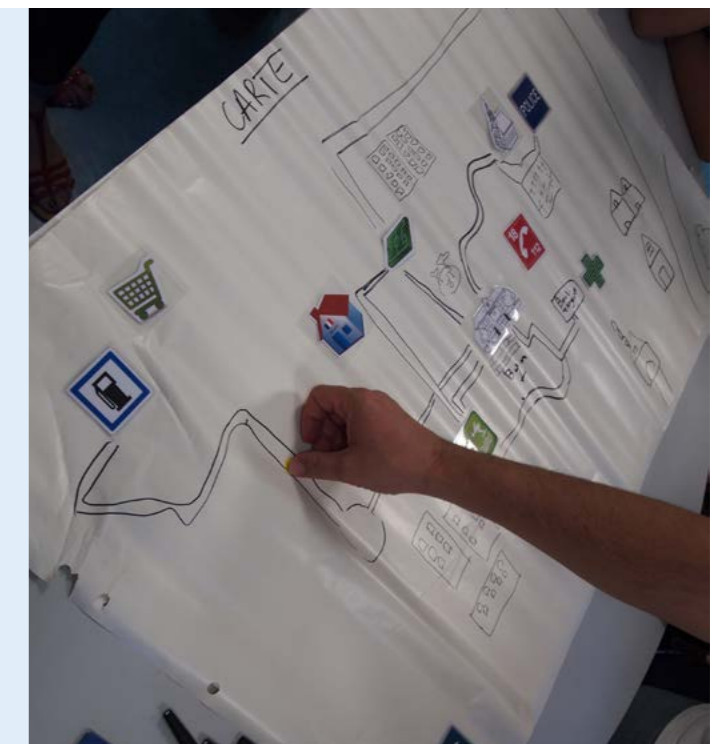
#### PART 1 – Mapping your school

1. Brainstorm with students about the use of maps, asking the students "What can maps tell us?". Use the range of different maps found to provide some clues as to the different uses of maps. Connections to geography curricula can be made here.
2. On a large piece of paper or on a flip chart, request a volunteer to draw an outline/perimeter of the school.
3. In groups of 4 to 5 students, ask each group to each draw the school's main features such as the classrooms, administrative buildings, playground, kitchen or canteen and toilets.
4. Guide students in identifying key areas that require consideration during the occurrence of a hazard or an emergency, with the following questions:
  - What are the entry and exit points?
  - What is the roof made of? Is it strong enough to withstand extreme weather events such as cyclones?
  - Are there areas in the physical structure of the school that might require attention and improvement?

#### PART 2 – Mapping your school neighbourhood

5. Beginning with the community map, ask the students to brainstorm what are the items they will have to include in their maps, such as buildings, infrastructure, landmarks and natural features. Make a list of all the items noted by the students in order to facilitate the mapmaking process.
6. Ask one of the students to draw the boundaries of their community if they are known, indicating the North.
7. Ask another student to come up to the map and insert the school as well as landmarks, roads and buildings.
8. Ask a third student to draw the other schools, public and government buildings in the community.
9. Ask the remaining students to comment and add more information to the existing map. These can include roads, rivers, mountains, beaches, crop fields, water facilities, etc.
10. If there are many students, it may be worth dividing them into smaller groups to do separate maps and ensure active participation of all. Maps can be compared in groups. Different maps reflect different priorities and these are worth discussing. For example, very often, maps drawn by girls may illustrate different resources, priorities, interests and problems than those drawn by boys.

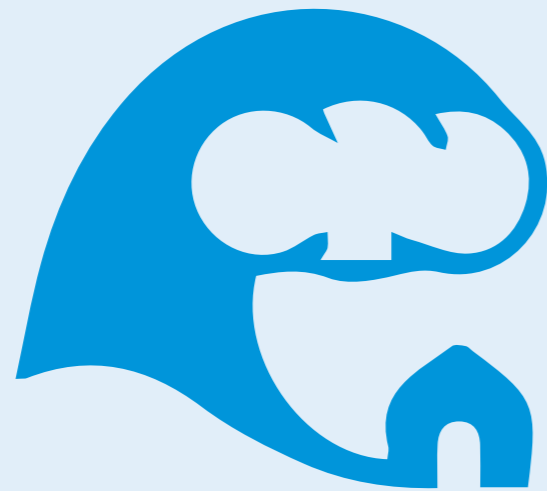
The school and community maps are not static. They are meant to be used and continually improved or added upon as you progress through the various activities. The transect walk activity that follows will be particularly useful in completing the maps, as students may record items that they had not thought about during the mapmaking activity.



Source: PIROI - Croix-Rouge Française







## HAZARDS AND DISASTERS IN THE INDIAN OCEAN

### Tsunami – Seychelles

The devastating Indian Ocean tsunami that occurred on December 26, 2004 even affected countries very far from the source including the Seychelles archipelago. The damage to coastal infrastructure was most severe where roads and buildings were immediately adjacent to beaches, and where natural coastal features had been removed. Thankfully this Tsunami occurred during school holidays. Two people died in the Seychelles, which compared to the totals elsewhere in the Indian Ocean was a small casualty figure. However, had the waves occurred at high tide and during a normal weekday, when docks would have been busy and schools along the coast occupied, the loss of life could have been far higher.

## Activity 4: Transect walk

A transect walk involves walking through the school and into the local community to observe the people, the surroundings and the resources. After the transect walk students can return to complete the community map they created in Activity 3. Like an Eco-Schools Environmental Review, the transect walk will help students get a feeling for the issues and capacities which exist in your community. In the action planning and monitoring and evaluation phases, it can be used to see what changes have occurred in a community.

**Objectives:** Students will observe the environment and human activities, behaviour, values, attitudes, practices and capabilities within their schools and communities and identify issues that might be worth further exploring. They will also identify danger zones, evacuation sites and local resources used during emergency periods, land use zones, health issues and commercial activity in the community.

**Time:** 1 hour to half a day

**Materials:** Notebooks and pencils, and cameras if available, to record observations

### PART 1 – Conducting a school walk

1. Prior to beginning the activity, refer to the following questions below, and if necessary ask relevant school officials to be available to answer students' questions during the school walk.
2. Distribute the following checklist to students, or ask them to copy the items listed below in their notebooks prior to starting the walk.
3. Go around the school with the students, talking to school officials and ask students to observe all school physical features.

Questions to teachers and school officials	YES	NO	COMMENTS
Is there a school contingency plan?			
Is there a school disaster management or preparedness committee?			
If yes, does it include students, parents, staff, and external officials such as national disaster risk reduction agency representatives or representatives of organizations such as the Red Cross/Red Crescent Societies?			
Is there an evacuation map that is visible to all?			
Are the exit routes clearly shown?			
Are there safe places for evacuation? Are they large enough for all students?			
Are there fire extinguishers?			
Do teachers know how to use them?			
Do all buildings and roofs appear in good condition? If no, which ones might require attention?			
Are there areas in times of rain that are slippery?			

4. Following the walk, return to the classroom and discuss the points where students answered "no". Ask them to identify the weaker points both in terms of planning and physical structure and draw them on the map developed during Activity 3.



## PART 2 – Conducting a transect walk in the school neighbourhood

1. To conduct a transect walk, look at the community map drawn and decide with the children what path they would like to take on the walk. Use a google map or other official map to support decision making.



**Tip:** The route can be decided by pinpointing the area most at risk, drawing a line on the community map that goes through or “transects” all zones, walk from one point to another, for example from north to south, or from the highest point to the lowest point, from the mountains to the waterside. Measures should be taken to ensure the safety of children at all times during the transect walk.

2. Decide together what you want to look for on the walk. This may include:
  - The social environment: churches, temples or mosques, sports fields, shopping areas, restaurants, main areas of concentration (children, adolescents, adults);
  - The physical environment: characteristics of housing construction, roads and streets, drainage, etc.
3. Ask students to bring along a piece of paper and pencils with them so that they may note their observations. Teachers and facilitators can ask questions to trigger children’s observations of hazardous locations and capacities in the communities.
4. Ask students to carefully observe and whenever possible, conduct interviews with the community members they encounter to understand the changes over time of the social and physical environment.
5. Upon return, debrief the walk either (1) combining all that they have written down during the walk (2) add each feature they noticed to their Community Map.

### Facilitate a discussion using the following questions:

- Were all areas the same? What were the conditions as the students progressed through the transect (dry, muddy, slippery, dangerous, dirty, etc.)?
- What were the houses and buildings like? Are there differences in the type and quality of construction?
- What are the key facilities observed (schools, shops, or health centres)? Were these easy or difficult to access?
- Are there any differences in the way people interact in different areas?
- Did the students feel comfortable in all areas of the transect? If no, which ones did they feel comfortable in and which ones did they rather not go into?
- Did the students have areas that they preferred? Which ones and why?
- Were there areas that the students heavily disliked? Which ones and why?
- Were there areas that the students strongly associated with particular hazards?



## HAZARDS AND DISASTERS IN THE INDIAN OCEAN



### Torrential Rains – Mauritius

As soon as a torrential rains warning comes into force in Mauritius, the public is advised to keep school children indoors. Torrential rains can be particularly dangerous if they occur when students are on their way to school or on their way back home. In March of 2008, after torrential rain warnings were declared in the middle of the day, a young girl lost her life coming back from school, when she descended from a bus and got caught by the muddy waters overflowing from a river. During this day, four other people lost their lives. This tragic event raised awareness among parents island-wide about the importance of safety procedures in the case of torrential rains and other extreme weather events.





## Activity 5: Hazard Identification

Hazard Identification will highlight specific problems and issues seen when walking through the school and community which need to be further explored and addressed within the VCA.

**Objectives:** Students start identifying hazards within and around their school, then working their way outwards to the community.

**Time:** Approximately 30 minutes

**Materials:** Community Map prepared in Activity 3, small cards, markers, and large pieces of paper or flip charts.

1. Display the school map and community map developed by the children where they all can see it.
2. Review the definition of hazards discussed during Activity 2. Probe them on what they remember, and refer to the pictures they drew.
3. Option 1: **Competition** – each student is asked to write down (or draw pictures) on the cards of one hazard in the school or neighbourhood and successively place them on the community map, challenging the next student to write down a different hazard.

Option 2: **Brainstorming** – divide the students into groups of 4 to 5 and ask them to write down all the hazards they can think of. In plenary, list all the hazards found by each group to define a list of hazards they are vulnerable to. Ask them to think of symbols they would like to use for each hazard, and divide the hazards among the different groups for the students to draw. Each group then designates a leader to come place the hazards on the map.

**Leader:** probe for more answers by asking about recent events, etc. use the below list (as appropriate) to help:

### List of possible hazards for use:

- Cyclone
- Flood
- Fire
- Chemical accident
- Stampede
- Civil disturbance
- Medical emergency
- Explosive / bomb threat
- Road accident
- Hostage / kidnapping
- Act of terror / war
- Volcano eruption
- Earthquake
- Social – abuse, violence, alcoholism



This activity can be complemented by the game "Riskland" found online here: <http://www.unisdr.org/we/inform/publications/2114>  
You may also find different games adapted to your local context, such as Risk Pèï in Reunion Island.





## HAZARDS AND DISASTERS IN THE INDIAN OCEAN



### Volcano – Comoros

The islands of the Comoros Archipelago were formed by volcanic activity. Mount Karthala, an active shield volcano located on Ngazidja is currently one of the most active volcanoes in the world. With a minor eruption as recently in May 2006, and prior eruptions in April 2005 and 1991, Karthala poses a hazard of which citizens in Ngazidja are well aware. In the 2005 eruption, which lasted from 17 to 19 April, 40,000 citizens were evacuated.

## Activity 6: Seasonal Calendar

A seasonal calendar helps to explore the changes taking place in a community over the period of one year. It can be used to show weather patterns, such as hurricanes, floods or periods of drought, periods of stress, hazard, disease, hunger, debt and/or vulnerability. The activity can help a community to rethink its living habits according to its vulnerability to hazards during the year.

**Objectives:** Students will identify the time periods when recurrent hazards occur.

**Time:** Homework time plus 45 minutes in class

**Materials:** Seasonal Calendar and Disaster History template, Flipcharts, markers, Worksheet template

As a take-home assignment, students are asked to find out the period when a hazard usually strikes. The students can explore and discuss with other parties or resource persons (parents, grandparents, teachers, friends, siblings, community/religious leaders, from newspapers, from books, etc.).

1. Recreate the seasonal calendar and disaster history template on a blackboard or flipchart. Ask each student to copy the template onto an A4 sheet.
2. Ask the students to take home the templates, to investigate and fill in information talking to their parents, neighbours, and members of their community. They should write down their sources of information.
4. Back at school the students present their findings to the rest of the group.
5. Review and synthesize the information they have gathered, and together create one common seasonal calendar for your locality.
6. Facilitate a discussion about the findings. Look for relationships and patterns and highlight particular areas of concern.





## Seasonal Calendar Example

No	Type of Risks	Months												Impacts	Source of info
		1	2	3	4	5	6	7	8	9	10	11	12		
<b>Hazards</b>															
	Flood														
	Heavy rain														
	Forest Fire														
	Drought														
	Cyclone														
	Mud slides														
	Big waves														
	Low temps														
	High temps														
<b>Health</b>															
	Flu, coughs/colds														
	Stomach illness														
	Water-borne illness														
	Conjunctivitis														
	Fungal infection														
	Head lice														
<b>Seasonality</b>															
	Low income														
	High income														
	Rainy season														
	Dry season														
	Crop harvest														
	Hunting/Fishing Season														
	Migration														

Students put a small or large cross in the corresponding months when the hazards occur. School breaks and holidays should also be indicated.



## HAZARDS AND DISASTERS IN THE INDIAN OCEAN



### Cholera Outbreak - ZANZIBAR, Tanzania

Cholera outbreaks tend to be associated with the rainy seasons in Zanzibar, when heavy rains clog sewer systems and periodically exacerbate the main factors associated with the spread of cholera. In a major outbreak from March to April 2016, over 3000 cases, from five regions were reported and over 50 people died. Cholera outbreaks not only cause the loss of life, but also interruption of education for many children due to school closures and long periods of absence.





## Activity 7: Disaster History Profile, and Climate Change

This tool promotes a better understanding of the most significant events of the past and how the community has developed over time. It can lead to a shared understanding of the community's history and identity. Through the profile, students will get to know and understand how the community has evolved.

**Objective:** Students will learn, appreciate and write down the efforts made by earlier generations. The students will also be stimulated to think ahead: What do past changes tell us about trends in risks? Where may things be getting worse? What needs to be done to manage those risks?

**Time:** Homework time plus 45 minutes in class

**Materials:** Paper and pencils

As a take-home assignment, students are asked to investigate the history of disasters that have struck the community by discussing with other parties or resource persons (parents, grandparents, teachers, friends, siblings, community/religious leaders, from newspapers, from books, etc.). Doing it this way can encourage stronger relationships between the children and other members of their community. Ask them to try to ensure they get information from adults of both sexes and take note of who said what, to allow some later consideration of why men and women may have different views.

1. Redraw the Disaster History profile below on a blackboard or flipchart. Ask each student to copy the template onto an A4 sheet.
2. As homework: Ask the student to investigate and fill in information, remembering to include the sources of information.

No	Year	Disaster	Impact	Source of info

5. Back at school the students present their findings to the rest of the group.
6. Review and synthesize the information they have gathered, and together create one common Disaster History Profile or timeline for your locality.
7. Ask them if they have noticed any patterns. Did the disasters get worse, more frequent, or changed over time? Reflect on what the future holds if the same patterns of behaviour and trends persist?
8. Explain that one of the causes of disasters is climate change. Ask the students what they already might know about climate change and have them share their knowledge.
9. Explain that there are two ways to respond to the impacts of climate change: **mitigation** and **adaptation**. Explain that "**mitigation**" means finding and acting on ways to stop warming the earth (ask children if they can list ways to do this). "**adaptation**" means finding and acting on ways to lower the risks and effects of a changing climate.



### HAZARDS AND DISASTERS IN THE INDIAN OCEAN

#### Cyclone Enawo – Madagascar

Intense Tropical Cyclone Enawo which struck Madagascar in March 2017, was the strongest cyclone to strike Madagascar since Gafilo in 2004. In the district of Maroantsetra, landslides and strong winds caused widespread infrastructural damage, and rendered 500 people homeless. There, a landslide also killed one adult and two children, and injured six others. In total Cyclone Enawo caused 81 deaths. According to UNICEF at least 80,000 children had their schooling disrupted with 420 classrooms damaged and significant losses of teaching and learning materials.

Source: PIROI - Croix-Rouge Française





## Activity 8: Hazard Ranking

The following two activities will allow you to assess the main hazards and vulnerabilities faced by the school and neighbourhood and prioritise areas for action.

**Objectives:** Students will rank hazards based on impact, frequency, and priority to address.

**Time:** 30-45 minutes

**Materials:** Flip chart, markers, a large bag full of dried beans (or small pebbles, or grains of uncooked rice as available)

1. Divide the students into two groups based on their gender. Alternatively, divide into two random groups, or groups to 4 or 5 students if there is a large group.
2. On a large piece of paper on the floor or in the sand, reproduce the following chart with the hazards children listed in Activity 5 (use the pictures with illiterate or pre-literate children to represent each hazard identified) in a column. Next to this column, create three columns titled "impact," "frequency," and "priority". Reproduce as many tables as there are groups.

### Hazard Ranking Template:

Hazard	Impact	Frequency	Priority to address

3. Review the list of hazards in Activity 5 and write them in the hazard column, or use the drawings made by students to place them in the hazards list.
4. Give each child a handful of dried beans, small pebbles, or uncooked rice or any culturally appropriate item they can use to fill out the boxes.
5. Ask the students to place the dried beans, uncooked rice or pebbles in each box according to the impact: the greater the impact, the larger the number of individual units of beans, rice or pebbles.
6. Repeat the exercise for the frequency: the greater the number of pebbles, the more frequent a hazard is.
7. Ask the students to place a greater quantity of rice, beans or pebbles according to priority to address. Alternatively, the students can also brainstorm using a numerical ranking what are the hazards to address in priority.
8. Each group can then present their ranks to the other group(s).
9. Engage students and facilitate discussion with the following questions: Is there a difference on the hazard ranking between boys and girls or the groups? Why? Can there be a consensus between the groups for the hazard ranking?
10. Document and record all the comments of the students, and if the exercise was carried out in the sand or with pebbles, rice or beans, photograph the final ranking tables in each group.



## HAZARDS AND DISASTERS IN THE INDIAN OCEAN



### Forest Fires - Reunion

In 2010 within two days three sites caught fire throughout the island: Le Volcan, La Grande Chaloupe and Les Hauts de l'Ouest. In October 2011, the west of the island was taken up by forest, destroying 2677 hectares within the National Park. Because of violent winds, fire fighters had trouble containing the fire. Thirty homes near the fire of the National Park, Saint Leu had to be evacuated.



## Activity 9: Vulnerability Assessment

This activity enables you to gather a lot of information about the main vulnerabilities faced by the school and community.

**Objectives:** Students will identify and analyse vulnerabilities in their schools and communities.

**Time:** Approximately 20-30 minutes

**Materials:** Large cards, Markers, pencils, crayons, Community Map

1. Review the top hazards ranked in Activity 8.
2. Review the meaning of “vulnerability” that was discussed in Activity 2.
3. Either individually or in groups, ask students to write down on cards the vulnerable areas, buildings, groups, families for each hazard posted. Start by thinking about the school and then moving outwards into the local community.
4. Display the community map in a place that is readable and accessible to all, ask the students to place their cards on the map.
5. Ask students to consider why are the areas, buildings, groups, families they chose considered vulnerable?
6. Engage students in a discussion on their own capacities in helping to prevent disasters, such as knowledge, institutions, and relationships.
7. Document all capacities listed.

## Activity 10: Transforming vulnerabilities into capacities and identifying prevention, preparation, and mitigation activities

Once you have a clear idea of what the main vulnerabilities of your school and community are, actions and priorities can be developed to reduce the potential effects of a threat.

**Objectives:** Students will be able to identify the ways in which vulnerabilities can be transformed into capacities for mitigating, preparing for, or preventing disasters. The students will also learn how to distinguish between prevention actions, preparation and mitigation actions.

**Time:** 45-60 minutes

**Materials:** Flip chart paper, markers, large cards (in three different colours)

1. Use role play and a scenario between a predator and prey, such as a cat and mouse chase as a way to open the activity. Request two volunteers to each play a role, one of the powerful (predator), representing a hazard, and the other one, the vulnerable (prey). Brainstorm ideas with the students as to what makes the mouse vulnerable and what is his capabilities in terms of escaping the cat. Discuss ideas on what could be done to protect the mouse – or other prey chosen.
2. Return to the list of hazards that were ranked and vulnerabilities identified in Activity 9. Divide the group into 3-5 groups, and assign a different hazard to each group.
3. Using the hazard and the list of vulnerabilities for each hazard, ask each group to brainstorm what actions can be taken to transform the vulnerabilities into capacities.
4. Ask a student leader in each group to write down each of the proposed activities on a flipchart, or if the students are pre-literate, document the proposed actions.
5. Each group then presents their list of actions in plenary, and their findings can be complemented by comments and suggestions from the other groups.





## DISASTER RISK REDUCTION INITIATIVES IN THE INDIAN OCEAN

### Learning about risks in Reunion

Reducing vulnerability starts with increasing knowledge and awareness about hazards and disaster risk reduction measures. Since 2011, PIROI as part of its objective to promote prevention, preparedness, response and recovery has been undertaking a Disaster Risk Reduction (DRR) campaign among children and youth through the Paré pas Paré project. As with other projects of the Red Cross and Red Crescent societies, the project uses a partnership approach with local authorities to sensitize and prepare Reunion Islanders to the 7 major natural hazards present in Réunion: cyclones and strong winds, landslides, floods, volcanic eruptions, forest fires, earthquakes, storm surges and tsunamis. With mascot turtle Timoun at the helm and the use of educational materials and games, in-school sensitization sessions powered by the Red Cross' network of volunteers have contributed to reducing the vulnerability of primary school children aged 8 to 11 years old. The majority of the 29 000 children reached made significant progress in their knowledge of natural risks and disaster risk reduction measures.



Source: PIROI - Croix-Rouge Française

### Identifying and learning about hazards in Madagascar

The Malagasy Red Cross, with the financial support of the European Commission for Humanitarian Aid and Civil Protection (ECHO) through the "MIATRIKA" project, in collaboration with the National Office for Risk and Disaster Management (BNGRC) and Météo Malagasy has supported comprehensive disaster risk reduction activities at the school level to prepare and involve students, parents and teachers in primary schools in mainly operates in three regions in Madagascar: Analamanga, Menabe and Vatovavy Fitovinany. One of the main components of the project is school level preparation and family emergency planning in collaboration with the Ministry of Education. The project operates in 16 primary schools of the regions with a direct target of 1599 students aged 8 to 12 years. The goal is to strengthen the resilience of the community in preparing and responding to natural hazards. Communities in the intervention zones are particularly sensitive to three common hazards: cyclone, flood and fire. The project works with the Ministry of National Education to promote Disaster Risk Reduction education through the use of a manual developed for students which includes theoretical lessons and exercises, games and activities to facilitate learning. School evacuation plans are also being developed, along with the installation of Early Warning System materials in schools. Last, family contingency plans for students' families are being developed. The family contingency plan was tested with the passage of the cyclone Enawo in March 2017. This plan allowed families to be better prepared and reduced the damage from the cyclone and subsequent flooding.



Source: Malagasy Red Cross



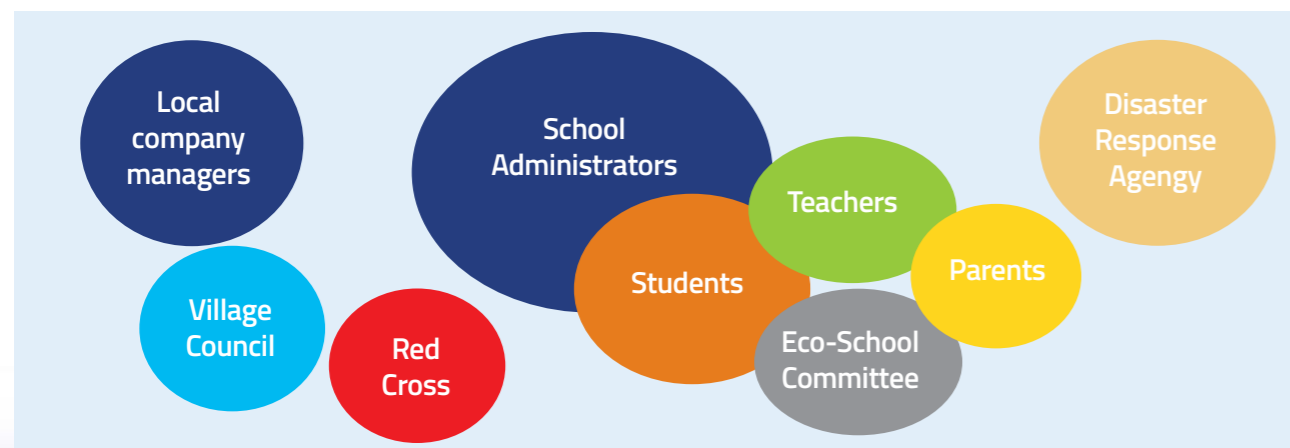


## Activity 11: Stakeholder Mapping

This tool uses a diagram to show key organizations, groups and individuals in around your school and a community, the nature of their influence and the perceptions that the students have of whether this influence is good or bad.

**Objectives:** Students will identify the actors and institutions involved in disaster prevention and mitigation or preparation and how they can be influenced to help reduce disaster risks.  
**Time:** 1 hour.  
**Materials:** cards, tape and markers.

1. Students can be separated in two groups by gender if the group is mixed gender.
2. Create a competition where each participant is asked to write down or draw on the large cards one actor or stakeholder in the community. Give a few examples to start things off, such as "school management", "teachers". Each student is asked to race against the others and place the large cards in the empty board while other students are challenged to write down different stakeholders from the ones that have been placed in the board.
3. Ask students to rank the importance of a person or group in relation to disaster risk reduction in their school and in their community. Request a volunteer to draw a circle for each organization or group's importance: the size of the circle represents importance, the more important the bigger the circle.
4. Ask the students to what extent the organizations are linked to each other and note the kind of relationship between the groups exist. Where there are weak relationships, the cards are placed further away each other. For actors with strong relationships, the cards can overlap.
5. Ask each group to also include children's role, boys' and girls', in the community.
6. Ask each group to present their work to other students.
7. Compare the work of the male group and the female (or of the two groups if the training is same-gender).
8. Trigger discussions with the following questions:
  - a. Is there a difference between the work of the two groups? Can there be a consensus between them?
  - b. Which of the stakeholders identified are possible for us to reach?
  - c. How can we improve our relationship to some of the groups to work with us to reduce risks?



## Activity 12: Evaluation and Next Steps

**Objective:** Students will be able evaluate their Eco-Schools VCA and identify their next steps in DRR.  
**Timing:** 15 minutes..  
**Materials:** Notes from Activity One; Large piece of paper or blackboard.

### Evaluation

- a. Refer to the hopes, fears, and expectations identified in the first activity. Turn any negative statements (such as, I am afraid I won't understand DRR) to positive statements (I now understand DRR). List the statements in one column. Go through each statement and ask the students to draw a happy face if they feel the objective has been met, a sad face if it has not been met, and a neutral face if they are not sure. Make an action plan to resolve any objectives that need to be revisited and resolved.

### Other optional participatory evaluation activities:

- Ask the children to create a quiz of all the concepts they learned.
- Ask the children to create a 10-minute sketch that covers the main concepts and issues they've covered during the Eco-Schools Indian Ocean VCA.





## Next steps

The Eco-Schools IO VCA is meant to complement other DRR education activities and Disaster Risk Reduction initiatives in schools and their local communities. The VCA will allow stakeholders to further integrate students' views in these various initiatives and educational activities. Further resources on these activities can be found throughout the toolkit at on page 42.

**1. Integrate children's views in a school disaster risk reduction and preparedness plan or contingency plan.** Alongside the views of teachers and other school administrators, the result of the child-centred VCA can be a main source for creating a school's disaster preparedness plan. This can be facilitated through the Eco-Schools committee, with student representatives sharing children's findings.

**2. Integrate children's views in a community disaster preparedness plan or VCA.** The child-centred VCA provides a complement to the Red Cross / Red Crescent Societies VCAs and their views can be integrated in the final community VCA. These can further inform regional and national disaster preparedness plans developed by local authorities and experts.

**3. Integrate the actions proposed by children in the Eco-Schools' Action Plan.** This can be an empowering process for students as it gives them the opportunity to take some direct action and act as change agents in their schools and communities. In addition, the results of the actions or small scale projects can be showcased in their communities and among parents, encouraging the latter to further participate in DRR initiatives.

**4. Conduct DRR advocacy and awareness-raising.** Based on the stakeholder mapping activity, encourage students to design advocacy or awareness-raising activities. Excellent tools include participatory photo or video projects which can be used within the schools or in community forums.

**5. Mainstream DRR by linking the VCA results to regional or national DRR agency plans.** One of the most accessible ways of mainstreaming child-centred DRR is in education programming. For example, integrating information about DRR, climactic risks, and community based action can be done via school curricula, the setting up of student-led DRR committees, conducting regular emergency drills and the inclusion of contingency planning as part of annual school plans.

## WHO CAN HELP?

Country	Responsible Government Body	Red Cross/Red Crescent Societies
Comoros	Centre des Opérations de Secours et de la Protection Civile (COSEP) Direction Générale de la Sécurité Civile Ministère de l'Intérieur Address: BP 74 Moroni Union des Comores Tel: (269)7739288 / 7739002 Fax: (269)7735225 Email: dgsc.comores@gmail.com	Croissant-Rouge comorien (CRCo) Avenue de la Ligue des Etats Arabes  B.P. 240  Moroni  Union des Comores. Tel: (269) 3224104 Email: crco.comorestelecom@gmail.com
Madagascar	National Disaster and Risk Management Office - Bureau National de Gestion des Risques et des Catastrophes (BNGRC) Address: Antanimora Antananarivo, Madagascar 101 Tel: (261) 20 22 594 50 / (261) 34 05 480 68/69 Web: www.bngrc-mid.mg	Croix-Rouge Malagasy Address: 1, rue Patrice Lumumba Tsaralalàna, Antananarivo 101 Madagascar Tel: (261) 34 14 221 11 Email : contact@crmada.org grc-rrc@crmada.org
Mauritius	National Disaster Risk Reduction and Management Centre Ministry of Social Security, National Solidarity and Environment and Sustainable Development Address: Line Barracks, Port-Louis Republic of Mauritius Tel: (230) 207 3900 Web: <a href="http://ndrrmc.govmu.org/">http://ndrrmc.govmu.org/</a>	Mauritius Red Cross Address: Sainte-Thérèse Street Curepipe Republic of Mauritius Tel: (230) 676 3904 Email: mrcs.headquarters@outlook.com Web: <a href="http://www.redcrossmauriti.us.org">http://www.redcrossmauriti.us.org</a>
Seychelles	Department of Risk and Disaster Management Address: Global Village, Block B, Suit No3, Victoria Mont Fleuri, P.O Box 445 Republic of Seychelles Tel: (248) 2522622 / (248) 4672200 Email: drdm@gov.sc / drdm@seychelles.net Web: <a href="http://drdm.gov.sc">http://drdm.gov.sc</a>	Red Cross Society of Seychelles Address: Providence P.O.Box 53 Mahe Republic of Seychelles Tel: (248)4374543 / (248)4374544 / (248)2521964 Fax (248)4374546 Email: hqredcross@ymail.com
Réunion	L'état-major de zone et de protection civile de l'océan Indien (EMZPCOI) Préfecture de La Réunion Address: 6, rue des Messageries 97404 ST DENIS CEDEX Tel : 02 62 40 77 77 Email : emzpcoi@reunion.pref.gouv.fr <a href="http://www.reunion.gouv.fr/le-cabinet-du-prefet-a26.html">http://www.reunion.gouv.fr/le-cabinet-du-prefet-a26.html</a>	Plate-forme d'Intervention Régionale de l'Océan Indien Croix-Rouge française - PIROI Address: 1, rue de la Croix-Rouge ZAC de la Mare 97438 SAINTE-MARIE Ile de La Réunion Tel: (262) 53 08 92   Fax: (262) 72 17 02 Email : piroi@croix-rouge.fr
Zanzibar, Republic of Tanzania	Second Vice President's Office Zanzibar	Tanzania National Red Cross Society Mwai Kibaki Road Plot 53 Block C Mikocheni Dar es Salaam Postal Address: P.O. Box 1133 - Dar es Salaam Contact Information: Tel: (255) 22 2600 185   Fax: (255) 22 2600 15



## LEARNING AND TEACHING RESOURCES

The activities in this manual are modules Red Cross and Plan International staff has used successfully with children in different cultural contexts. Additional complementary resources and training manuals by other organizations for working with children and communities in DRR have also been used. All these resources can be consulted for additional ideas. The activities in this manual can be modified, and others can be used to replace them, as long as they are participatory, child-friendly, and support the same set of objectives for child centred DRR.

### Disaster Risk Reduction Education Tools in the Indian Ocean

#### Comoros

In order to encourage disaster risk reduction in the Comoros, the Red Crescent has undertaken a project to sensitize 4,000 youth throughout the 3 islands of the Comoros. To support the elaboration of your Hazard and Vulnerability Capacity Assessment in your school, you can draw upon existing educational tools and materials on disaster risk reduction in the Comoros. One of these is a manual developed by the Comoros Red Crescent in collaboration with the Ministry of National Education, Research, Culture and Arts Responsible for Youth and Sports for Grades 4 and 5 and with the support of PIROI. The handbook titled "Understand the risks of natural disasters to protect yourself!" details all the hazards that Comorians face.

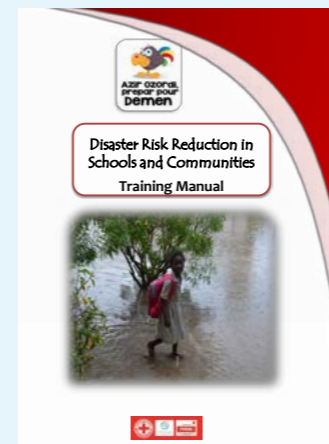


#### Madagascar

The Ministry of Education has developed manuals on Disaster Risk Reduction that are used in the primary school system at levels 4 and 5, accompanied by a teacher's manual. These can be used in conjunction with this toolbox and can support the facilitation of activities.

#### Mauritius

As part of its programme "Zeness Pran Kont", the Mauritius Red Cross has elaborated a manual under the same title targeted for students grades 5 and 6, following the flash floods that occurred in 2013. The manual has since been reviewed through a participatory process with all concerned stakeholders and the new edition will be available in 2018.



#### Seychelles

The Red Cross Society of Seychelles has developed a training manual on Disaster Risk Reduction as part of its programme "Azir Azordi, Prepar Pou Demen". The content of the manual is adapted to the local context and aims to promote leadership by children and young people in planning, analysing and conducting disaster risk reduction activities in their respective schools and communities. You may find some overlap between the toolkit and this manual and can draw from both to undertake a student-led Hazard and Vulnerability Capacity Assessment.

#### Reunion

The "Paré Pas Paré" programme has now been running for over 6 years, and includes a series of educational materials such as manuals and educational games which you can draw upon when using the activities in this toolkit.





## TEACHING AND LEARNING RESOURCES

### Child-Centred Disaster Risk Reduction Education Tools

**Plan International Child-Centred DRR Toolkit – First Module – Training Children on Disaster Risk Reduction through the Hazard, Vulnerability and Capacity Assessment (HVCA)**  
<https://plan-international.org/publications/child-centred-disaster-risk-reduction-toolkit>

**International Federation of Red Cross and Red Crescent Societies – Asia Pacific Zone South East Asia Regional Office.** Children in Disasters – Games and guidelines to engage youth in risk reduction  
This publication provides guidance to Red Cross and Red Crescent National Societies but can also be used by teachers and educators in facilitating DRR learning with children and youth. As with other resources in this toolkit, it encourages the promotion of effective child and youth centred DRR activities.  
[http://www.preventionweb.net/files/16726\\_16726childrenindisastersgamesandgui.pdf](http://www.preventionweb.net/files/16726_16726childrenindisastersgamesandgui.pdf)

#### **Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector.**

The website provides a wealth of resources for understanding DRR education and multiple tools and links for teaching and facilitating DRR learning. Specific tools and resources from the website are further listed and described according to relevance to this toolkit.  
<http://gadrrres.net>

#### **UNESCO –UNESCO Associated Schools. *A Teacher's Guide to Disaster Risk Reduction – Stay Safe and Be Prepared***

This publication is one part of a three-book series, which aims to introduce concepts, exercises and good practices on disaster preparedness and response to teachers, students and parents. The approach is to ensure comprehensive disaster preparedness and resilience-building through the involvement of the whole (school) community, starting with students, parents and teachers. Child and student-led activities are encouraged.

This Teachers' Guide is organized around four steps to becoming a DRR educator: (1) the rationale for implementing DRR programmes and basic concepts in facilitating DRR learning; (2) ideas on how to facilitate DRR in classrooms, with colleagues, within the community and in co- and extra-curricular activities; (3) making schools safer; (4) supporting students' psychosocial recovery after a disaster.  
<http://unesdoc.unesco.org/images/0022/002289/228963e.pdf>

#### **The Disaster Risk Reduction Education Toolkit of the Caribbean Disaster Emergency Management Agency (CDEMA). *Disaster Risk Reduction Education Toolkit***

This education toolkit was developed by CDEMA as part of a wider Regional Comprehensive Disaster Management Strategy for 2014-24, which emphasizes the importance of education and learning in creating a regional culture of safety and resilience. The toolkit was designed for primary and secondary school students and aims to foster a culture of active participation of all in DRR.  
[http://www.cdema.org/joomdocs/CDEMA\\_DRR\\_Edu\\_Toolkit\\_MAY\\_22\\_2015.pdf](http://www.cdema.org/joomdocs/CDEMA_DRR_Edu_Toolkit_MAY_22_2015.pdf)

#### **SENDAI Framework for Disaster Risk Reduction For Children (developed collaboratively by the ChildFund Alliance, Plan International, Save the Children, UNICEF and World Vision).** (publication)

A short handbook for children and youth to better understand the SENDAI Framework for Disaster Risk Reduction, an international document adopted at the World Conference on Disaster Risk Reduction at Sendai, Japan in 2015. The document identifies four priorities for action, namely (1) understanding disaster risk; (2) strengthening disaster risk governance to manage disaster risk; (3) investing in disaster risk reduction for resilience; (4) enhancing disaster preparedness for effective response and "build back better" in recovery, rehabilitation and reconstruction.  
[http://www.preventionweb.net/files/46959\\_cfsdrrforwebrasterizedsm.pdf](http://www.preventionweb.net/files/46959_cfsdrrforwebrasterizedsm.pdf)

#### **UNISDR and UNICEF - *Let's learn to prevent disasters: educational kit and riskland game***

The kit is aimed at providing a tool for educators and children to learn about DRR. This includes a booklet with accessible information and exercises as well as a board game titled 'Riskland' whereby players learn about ways they can help to reduce disaster impacts.  
<https://www.unisdr.org/we/inform/publications/2114>

## Interactive media

### **Resources in English**

#### **Save the Children – Disaster Risk Reduction Educational Animation Cartoon (video)**

<https://resourcecentre.savethechildren.net/library/disaster-risk-reduction-drr-educational-animation-cartoon>

#### **Global Alliance for Disaster Risk Reduction & Resilience in the Education Sector. Comprehensive School Safety Assessment Suite (toolkit and mobile app)**

<http://gadrrres.net/resources/comprehensive-school-safety-assessment-suite>

The Comprehensive School Safety (CSS) Assessment Suite includes information and guidance as well as mobile application tools to assist students and communities in identifying hazards and risks relating to their school

#### **Humanitarian Practice Network. *10 things you should now about disaster risk reduction.* (video)**

<https://www.youtube.com/watch?v=y16aMLeh91Q>

A short video using infographics to explain what disaster risk reduction is and the common tools and approaches in DRR.



## Resources in French

### UNESCO - *Education à la prévention des catastrophes* (video)

Introduction to Disaster Risk Reduction education.  
<https://www.youtube.com/watch?v=RWBjMAFYECk>

### Minushtah TV - *Act Now (French) - Journée internationale de prévention des catastrophes* (video)

[https://www.youtube.com/watch?v=3e\\_YCMEIEMc](https://www.youtube.com/watch?v=3e_YCMEIEMc)  
The video is a short animation posted on the occasion of the International Day for Disaster Reduction, which celebrates how people and communities reduce their risk of disasters and raises awareness about the importance of disaster risk reduction. International Day for Disaster Reduction is celebrated on October 13<sup>th</sup>.

## General information on policy and practice around child-centred disaster risk reduction

### Resources in English

**Plan International.** Child-Centred Disaster Risk Reduction – Building resilience through participation – Lessons from Plan International.

This publication details the child-centred disaster risk reduction work by Plan International. Aimed mostly at development and humanitarian practitioners, donors and policy makers, it provides a series of case studies focusing on child-centred DRR and demonstrates how this approach supports the delivery of the Hyogo Framework's Priorities for Action and the fulfillment of children's rights to education, health and participation in disaster risk contexts.

[http://www.fire.uni-freiburg.de/Manag/Children%20Docs/DRR-Building\\_resilience\\_through\\_participation.pdf](http://www.fire.uni-freiburg.de/Manag/Children%20Docs/DRR-Building_resilience_through_participation.pdf)

**UNICEF – Children in a Changing Climate.** *Children and Disaster Risk Reduction: Taking stock and moving forward.*

This publication provides an overview of child-focused and child-led disaster risk reduction approaches and techniques through a number of case studies across a range of interventions, making observations and recommendations for best practice and way forward. The case studies are grouped around three themes: Knowledge, Voice and Action.

[http://toolkit.ineesite.org/resources/ineecms/uploads/1057/Children\\_and\\_Disaster\\_Risk\\_Reduction.pdf](http://toolkit.ineesite.org/resources/ineecms/uploads/1057/Children_and_Disaster_Risk_Reduction.pdf)

**UNISDR – Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector.** Comprehensive School Safety – A global framework in support of the Global Alliance for Disaster Risk Reduction and Resilience in the Education Sector and The Worldwide Initiative for Safe Schools.

This publication provides an overview of the three pillars of comprehensive school safety to reduce the risks of all hazards to the education sector: Safe Learning Facilities; School Disaster Management; Risk Reduction and Resilience Education.

<http://gadrrres.net/uploads/files/resources/CSS-Framework-2017.pdf>

## Resources in French

**UNICEF.** *Adaptation aux changements climatiques et réduction des risques de catastrophe dans le secteur de l'éducation - MANUEL DE RÉFÉRENCE*

UNICEF has developed this resource manual to assist governments and education practitioners in mainstreaming and integrating climate change adaptation and disaster risk reduction into the education sector. This document identifies the main entry points in terms of policy, planning and advocacy and defends a process based on the reality of each country and a socio-economic analysis. To meet the challenges of quality education and seize opportunities to achieve it, it is essential that multiple stakeholders participate, collaborate and communicate.

[https://www.unicef.org/education/files/FR\\_UNICEF-Climate\\_full\\_report\\_\(1\).pdf](https://www.unicef.org/education/files/FR_UNICEF-Climate_full_report_(1).pdf)

**UNESCO – UNICEF.** *La réduction des risques de catastrophes dans les programmes scolaires : Études de cas concernant trente pays.*

This report examines countries that have integrated disaster risk reduction into their education system. It describes national experiences and highlights the main problems in countries where disaster risk reduction is not made a priority and where there is no specific training for teachers in this area.

<http://unesdoc.unesco.org/images/0023/002303/230303f.pdf>





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*Ministry of Education and Training Vietnam and UNESCO Vietnam (ND) Assessment and Preparedness Toolkit for safe and sustainable schools prepared for natural hazards, climate change, biodiversity loss, safety threats and other risks*. Available at: <http://unesdoc.unesco.org/images/0024/002445/244511e.pdf>

Koelle, B (2014) *Serious Fun - Facilitating interactive games for adaptation and disaster risk reduction* Published by the Red Cross Red Crescent Climate Centre, Second edition, Cape Town Available at: [https://www.preparecenter.org/sites/default/files/facilitation\\_cards\\_for\\_15\\_games.pdf](https://www.preparecenter.org/sites/default/files/facilitation_cards_for_15_games.pdf)

This toolkit has been prepared to assist schools and students in understanding some of their vulnerabilities and capacities in the context of Disaster Risk Reduction. It is not intended to replace official guidance on school contingency planning. It is the responsibility of the school establishment to ensure that appropriate school emergency procedures and plans are in place. If you require assistance with respect to school emergency planning, please contact your country officials listed on page 41.



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