METHODOLOGY GUIDE

Disaster risk awareness and education in small island developing states

French Red Cross
PIROI
DISASTER MANAGEMENT
center

with the support of

AFD
AGENCE FRANÇAISE
DE DÉVELOPPEMENT

Projet
3 Océans

Foreword

This methodological guide has been designed to support **Red Cross and Red Crescent Movement practitioners** - specifically project managers, coordinators and volunteers - working in the field of disaster risk reduction (DRR) education in Small Island Developing States (SIDS). These tools apply a community and school-based disaster risk management approach adapted to the SIDS context, in order to identify best practices and improve advocacy.

Since its creation in 2000, the **Indian Ocean Regional Intervention Platform (PIROI) has placed particular emphasis on strengthening risk-related knowledge** through awareness raising and education, risk governance and community resilience building. **This methodological guide therefore capitalises on the experience of 18 DRR projects**, benefiting more than 155,000 people, carried out in the South West Indian Ocean by the local National Societies (NS), with the support of PIROI. The guide aims to develop a culture of risk and participates in the dissemination of DRR practices, with the ambition to equip NS, RC/RC partners, NGOs and other DRR practitioners operating within similar contexts. Ultimately this guide will **serve to strengthen the resilience of populations** challenges related to natural disasters and climate change.

The SIDS of the South West Indian Ocean are among the most vulnerable in the world. The region is already facing the effects of climate change, including rising sea levels, soil erosion, flooding, water scarcity, increased frequency of natural disasters, which are accelerating the social and economic impacts on local populations.

The 3 Oceans project, implemented by the French Red Cross Regional Response Platforms (RRPs) with the support of the French Development Agency (AFD), aims to implement mechanisms to reduce the impact of natural hazards, health crises and climate change on populations in the three ocean basins. **The objective of this project is to address the environmental vulnerabilities of regional island states** by focusing on cooperation, integration and knowledge sharing. Thus, this methodological guide for disaster risk education, developed from experiences in the Indian Ocean, can benefit all island countries sharing the same issues.

PIROI would like to thank its Red Cross and Red Crescent partners and collaborators for their contribution to the development of this guide, as well as the teams of the regional Ministries of Education, and the technical and financial partners, in particular the French Development Agency for its financial support in the framework of the 3 Oceans project.

Christian PAILLER
Head of Regional Delegation - PIROI

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This work would not have been possible without the support of Ms. Zoé Trevisan, Disaster Risk Reduction Manager, and Ms. Camille Charrier, Planning, Monitoring, Evaluation & Reporting Manager at PIROI, and Ms. Valentina Evangelisti, Disaster Risk Reduction Technical Manager at CRF, who contributed to the development of this guide.

We sincerely thank the French Red Cross, members of the PIROI DRR team, the German Red Cross based in Madagascar, and representatives of the national societies of the Union of Comoros, Mauritius, Seychelles, Madagascar, Mozambique, and Tanzania, who dedicated time during the surveys, and for their generosity in sharing their experiences in disaster risk reduction.

Thanks also to all the institutional, technical and academic partners based in Reunion Island, Mayotte and the Union of Comoros, as well as disaster risk reduction actors operating in Mozambique and Madagascar, for sharing their knowledge and resources to develop the guide.

The experts who developed the guide

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About the methodology guide

This methodological guide was prepared jointly with the PIROI teams (Reunion Island/Mayotte), the French Red Cross International Relations and Operations Department, the German Red Cross based in Madagascar, the Comoros Red Crescent, the Mauritius Red Cross, the Seychelles Red Cross Society, the Malagasy Red Cross, the Mozambique Red Cross and the Tanzania Red Cross. Consultations with disaster risk reduction stakeholders in the Indian Ocean, Pacific and Caribbean regions have enriched the content of the guide.

Objectives of the guide

This guide aims to provide a standardised methodology for the development and implementation of a disaster risk awareness and/or education project on natural and climate-related hazards in small island developing states. It promotes approaches, good practices and pedagogical tools to facilitate the creation of disaster risk education activities for the public and in schools and extracurricular activities. The methodological guide is a tool for sharing experiences with partners, DRR actors and donors.

Who this guide is for

This guide is not intended to train Red Cross and Red Crescent Movement teams in DRR, but rather to support practitioners within the Red Cross and Red Crescent Movement, specifically project managers, coordinators and volunteers with basic DRR skills.

It can also serve as a practical guide for Red Cross and Red Crescent Movement partners and DRR stakeholders in implementing disaster risk education and awareness projects.

Use of the guide

The information in the guide can be adapted and used in different ways:

❑ From a global perspective, to monitor the process of developing a disaster risk awareness and/or education project, and to adapt pedagogical tools in relation to institutional, operational and cultural contexts, and the interventions of other DRR actors.

❑ From an autonomous point of view, to consolidate a project step according to the required thematic area.

The methodological guide is associated with a toolkit, comprising a set of guides and pedagogical tools. The toolkit is hosted on the PIROI website.

Instructions for use

Each section follows a similar framework:

❑ A description related to the section of the guide.

❑ A box with an example or advice.

❑ One or more case studies.

❑ Hyperlinks to tools available in the toolkit and/or key references.

List of acronyms

BRGM   Geological and Mining Research Bureau

CCA   Climate change adaptation

DEAL   Directorate of Environment, Planning and Housing

DRM   Disaster Risk Management

DRR   Disaster Risk Reduction

EVCA   The Vulnerability and Capacity Assessment

FRC   French Red Cross

IFRC   International Federation of Red Cross and Red Crescent Societies

IPCC   Intergovernmental Panel on Climate Change

NGO   Non-governmental organisation

PIROI   Indian Ocean Regional Intervention Platform

RCRC   Red Cross and Red Crescent Movement

SADC   Southern African Development Community

SIDS   Small Island Developing States

UNDRR   United Nations Office for Disaster Risk Reduction

Guide sections

Sections in the guide

After an introduction that outlines (1) the concepts of disaster risk reduction, (2) the DRR situation in the Small Island Developing States and Territories of the south-west Indian Ocean, (3) the strategic objectives of the French Red Cross and PIROI in terms of DRR and climate change adaptation (CCA) and (4) the child protection approach; the guide is presented in information and guidance sections following the 5 steps for developing a disaster risk awareness and education project.

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Identification of needs

- Identification of priorities
- Understanding disaster risk

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- Capacity building

SECTION 5
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- Evaluation of initiatives and skills
- Collaboration and exchange of practices

Browsing mode

To browse the methodology guide, simply

❑ Click on the illustration in the menu bar at the top of the guide

❑ Click on the icon to return to the "Guide sections" page

❑ Within the sections, navigation icons provide access to further information:

 Information in annexes

 Direct link to the toolkit

 Link to a key reference

 Tip

 Example of a tool or approach

INTRODUCTION

Concepts of Disaster Risk Reduction

Disaster Risk Reduction issues in Small Island Developing States in the South West Indian Ocean

Disaster Risk Reduction and climate change adaptation in SIDS

Disaster Risk Reduction and climate change adaptation in FRC & PIROI

Child protection approach
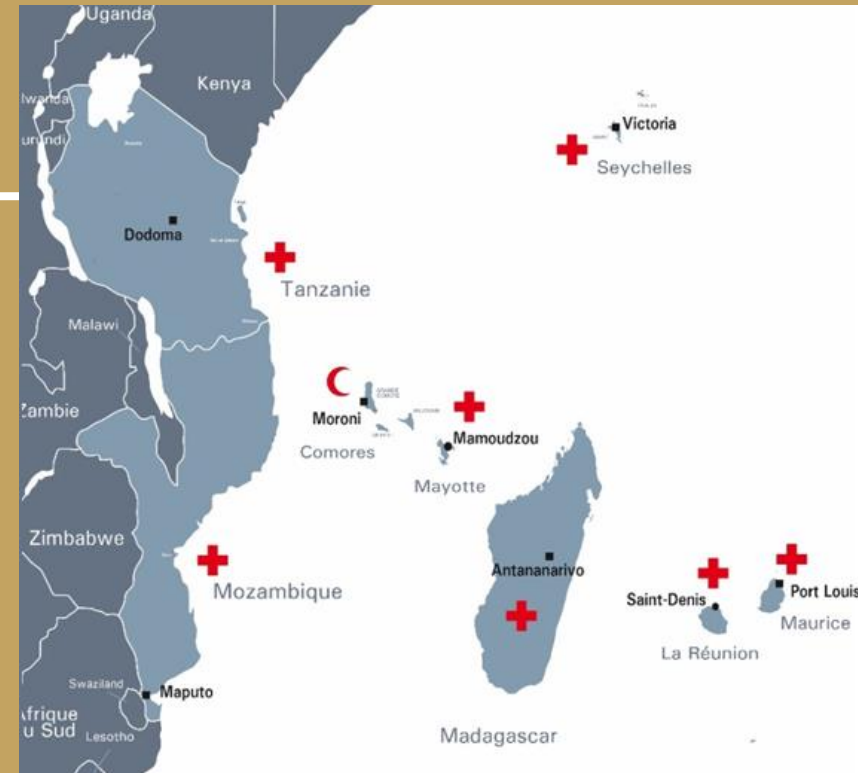
Mapping of PIROI members

Concepts of Disaster Risk Reduction

Video 2 min

📎 Occurrence of extreme natural events worldwide

From 2009 to 2018
343 disasters worldwide

In 2019
396 disasters worldwide

Over the past two decades, more than 4 billion people have been affected by disasters, with an estimated global economic loss of more than €2400 billion. In 2019, at least 396 disasters affected 95 million people, costing almost 110 billion euros. Regionally, 40% of the events took place in Asia, representing 74% of the people affected by disasters worldwide.

Comparison of the number of extreme natural events, globally, in 2019 and over the period 2009-2018

	Drought	Earthquake	Extreme temperature	Flood	Landslide	Mass movement (dry)	Storm	Volcanic activity	Wildfire	
2019	16	32	21	194	25	0	90	4	14	2019
2009-2018	17	25	21	149	19	1	99	4	9	2009-2018
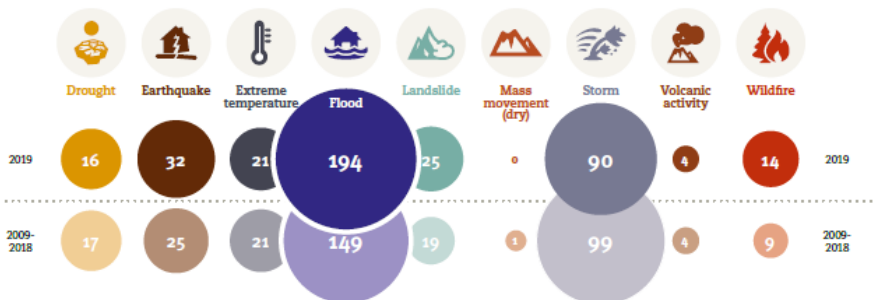
Source: Natural Disasters 2019 report - Emergency Events Database (EM-DAT)

What is disaster risk reduction?

According to the UNDRR "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"

Disaster risk formula

$$Risk = Hazard \times Vulnerability / Capacity$$

Risk
Combination of the probability of an event and its negative consequences that result from the interaction between natural (hazard) or human actions and vulnerability conditions

Hazard
A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation

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

Capacity
The combination of all the strengths, attributes and resources available within an organisation, community or society to manage and reduce disaster risk and strengthen resilience

Major risk
Flooding causes damage to inhabitants, buildings, etc.

Natural hazard
Flooding of a river with overflow of the major channel.

Challenges (vulnerability)
Exposed locality and presence of inhabitants, buildings, infrastructures and economic activities, etc.

Disaster Risk Reduction issues in Small Island Developing States in the South West Indian Ocean

Millions of people are victims of the effects of extreme natural events every year, be it floods, cyclones, droughts or earthquakes. Countries and populations are affected unevenly and differently by these phenomena, depending on their level of vulnerability and existing capacities to cope with disasters. For example, states that invest in preparedness and mitigation measures, disaster risk education and climate and environmental protection are better prepared for extreme natural events.

Small island developing states (SIDS) are not exempt from natural and climatic events. In 2020, Pacific island states, such as Vanuatu, were the most disaster-prone countries in the world due to their high exposure to natural hazards and the increasingly significant effects of climate change (e.g. sea level rise, temperature variation, etc.).

From 1970 to 2020, SIDS in the southwest Indian Ocean have been affected by 51 extreme events: 36 storms, 5 floods, 2 earthquakes, 6 volcanic eruptions and 2 droughts.

Causing the death of 186 people and affecting approximately 1.95 million people.

Economic losses estimated at 1.2 billion USD

The SIDS of the southwest Indian Ocean: Union of Comoros, Mauritius, Seychelles, Reunion Island and Mayotte, are also very exposed to natural events such as cyclones, storms, floods, earthquakes, tsunamis, volcanoes, droughts, etc. As a result of global warming, the intensity of weather events is trending upwards. Moreover, SIDS are highly exposed and vulnerable to rising sea levels, increased temperatures and changes in precipitation.

Source: Centre for Research on the Epidemiology of Disasters, Emergency Events Database

Threats related to natural and climatic hazards are not without consequences on the lives of people, and on the fields of agriculture, fisheries, tourism, ecosystems, access to basic services such as education, health, transportation, access to drinking water and energy resources. These effects pose challenges to the economic viability of SIDS in the southwest Indian Ocean.

In view of DRR, the region has set priorities for investment in:

❑ A better understanding of disaster risk

❑ Disaster risk prevention and mitigation measures, and climate change adaptation (CCA)

❑ Collaboration between disaster risk management (DRM) agencies, the Ministry of Finance and key sectoral ministries

❑ Capacity building on risk terminology and concepts, economic loss and damage information management

❑ An iterative system including tools for probabilistic assessment of natural and economic risks, and awareness of risk concepts and statistics

Disasters and DRR in Mauritius

Throughout its history, Mauritius has been prone to cyclones, floods, earthquakes, and tsunamis. In addition, rising sea levels are increasingly threatening due to climate change.

On March 30, 2013, heavy floods were devastating and took with them 11 people in Port Louis, the capital of the Island. This tragic event served as a signal to the population and the local authorities to raise awareness of the danger. A National Disaster Risk Reduction Management Centre (NDRRMC) was established to "increase the country's resilience to disasters, reducing loss of life and negative impacts on economic, social, physical and environmental assets, through strategic engagement and participation of all levels of society in understanding and managing identified threats."

Disaster Risk Reduction and climate change adaptation in SIDS

> Ban Ki-moon (UN Secretary General): *"Climate change happened because of human behavior, so it's natural that it's up to humans to solve this problem. It may not be too late if we take decisive action today"*

Climate change impacts in SIDS

In SIDS, climatic phenomena (e.g. cyclones, droughts, heat waves, heavy rains, floods, storms) and rising water levels will be common and numerous in the coming years.

According to the Intergovernmental Panel on Climate Change (IPCC), the predictable effects of climate change are:

❑ Rising sea levels with limited access to land in coastal areas.

❑ Contamination of soils and drinking water by the intrusion of marine waters, resulting in limitations to agriculture and a decrease in drinking water and food resources.

❑ Migration of coastal populations inland.

❑ Increase in climate-sensitive diseases (e.g., vector-borne, food-borne, and water-borne diseases such as malaria, dengue, and diarrheal disease), and in the morbidity rate associated with these diseases.

❑ Consequences on ecosystems (e.g. degradation of coral reefs and mangroves) and island biodiversity.

Shared objectives and approaches between DRR and CCA

As mentioned in the Paris Agreement and the Sendai Framework for Action on DRR 2015-2030, climate change adaptation (CCA) and DRR have become key development issues for SIDS, which are investing more in:

❑ Reducing poverty and investing in a more secure future.

❑ Promoting the coordination of DRR and CCA measures to strengthen the resilience of states and populations.

❑ Integrating DRR and CCA initiatives into international policy discussions and into the policy, planning and implementation of development ministries (infrastructure, water, agriculture, energy, housing, etc.).

❑ Reducing vulnerabilities to natural hazards, whether severe, slow or long-term.

❑ Recognising that populations are disproportionately affected by natural hazards.

❑ Using NGOs, civil society and partners for implementation at the community level.

❑ Promoting common instruments such as risk assessments, adaptation and mitigation measures, insurance, etc.

Disaster Risk Reduction and climate change adaptation in French Red Cross & PIROI

The French Red Cross (FRC) is a member of the International Red Cross and Red Crescent Movement. Internationally, it pursues the development strategies of the International Federation of Red Cross and Red Crescent Societies (IFRC). It also works with host national Societies to advocate, build capacity and share knowledge and experience.

The French Red Cross internationally is committed to mobilising its technical expertise through its network of human and logistical resources to respond effectively in the emergency, recovery/reconstruction and development phases. Since 1998, the French Red Cross has been administering disaster risk reduction programmes, with a focus on a participatory approach with states and populations.

The French Red Cross areas of action in disaster risk reduction

Disaster Preparedness:
Raising awareness of risks

Response preparedness: knowing how to organize in the event of a disaster

Mitigation: setting up micro-projects to limit the impact of disasters

The Indian Ocean Regional Intervention Platform (PIROI) is a tool of the French Red Cross attached to the International Relations and Operations Directorate (DROI). Since 2000, it has been running a regional disaster risk management programme in the South West Indian Ocean.

Since 2007, PIROI has made disaster risk reduction a priority. The platform develops different approaches to DRR intervention and climate change adaptation. Acting on the community level is at the heart of its activities, including awareness-raising projects, particularly among youth, support to authorities for preventive information, and micro-projects in the context of climate change to promote resilient communities.

PIROI is based on 4 axes to manage disaster risk:

❑ Response preparedness: being organized in the event of disasters (e.g. pre-positioning of equipment, contingency plan, training, etc.)

❑ Emergency response: providing assistance to affected populations (e.g. deployment of human resources and implementation of emergency operations, etc.)

❑ Rehabilitation and reconstruction: supporting post-emergency rehabilitation or development projects (e.g. support to food security, etc.)

❑ Prevention and mitigation: implementing measures to mitigate the impacts of disasters (e.g. disaster risk education, climate change adaptation micro-projects, etc.)

ⓘ **PIROI's "*Paré pas Paré*" project in Reunion Island**

In 2011, the project "*Paré pas Paré*" was launched in Reunion Island, with the aim of raising awareness of the Reunionese population, particularly young people in schools, to the natural hazards affecting the region.

Paré pas Paré has inspired the creation of several similar projects in Mayotte, Mauritius, Seychelles and the Union of Comoros. It has even been developed in the Caribbean via the Americas-Caribbean Regional Intervention Platform (PIRAC). In addition, *Paré pas Paré* has expanded by applying its risk prevention expertise to specific hazards such as floods, dengue fever and more recently COVID19.

The child protection approach

What is a child?

In accordance with The Convention on the Rights of the Child, a child is defined as every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier.
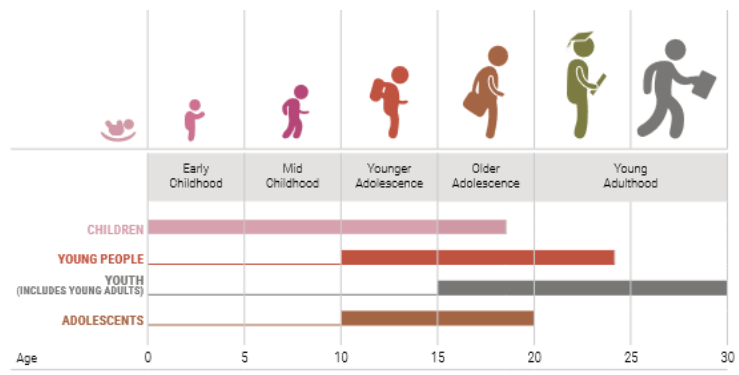
Source: figure adapted from UNDRR "Engaging children and youth in disaster risk reduction and resilience building"

The 4 fundamental principles concerning children

- Non-discrimination
- The best interests of the child and respect for the child's opinion
- The inherent right to life, survival and development
- The right to education
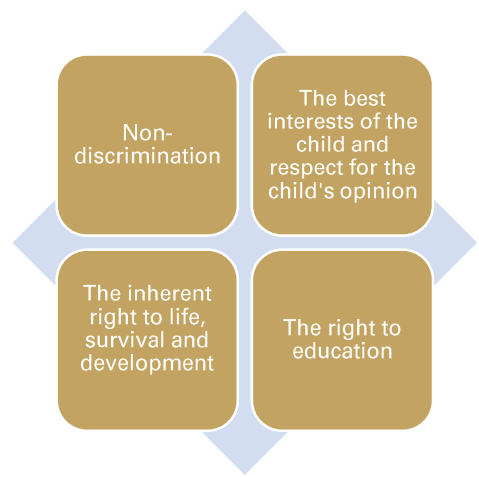
Child Protection & Disaster Risk Reduction

According to UNDRR, each year more than 175 million children are affected by disasters. In 2014, disasters forced 9 million girls and boys out of school.

According to UNICEF, children generally represent 50-60% of those affected by a disaster (e.g. death, injury, trauma, limited access to basic services such as education, etc.). During disasters, children's vulnerabilities increase (e.g., family separation, abuse, exploitation, etc.). Hence a child protection approach to DRR can include the following:

❑ **Maintain education in emergencies** to protect children and keep them in a learning system.

❑ **Educate a child about disaster risk** and make sure they use that knowledge. Education is an investment for future generations.

❑ **Communicate disaster risk** through children as agents of change in communities.

❑ **Ensure their participation in discussions and decisions** to account for their needs and ideas in order to reduce disaster risk.

> ℹ **Children in a Changing Climate Coalition (CCC)**
>
> Defend and promote children's rights in global agreements. Since 2007, CCC has been sharing knowledge and working with children as agents of change by building their capacity to prepare for and respond to shocks and stressors.

SECTION 1

Identification of needs

Identification of priorities

Understanding disaster risk

Case studies: Mayotte, Vanuatu and the Indian Ocean

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SECTION 1
Identification of priorities

The first step in designing a project is to analyse the situation, taking into account strengths, interests and constraints, to ensure that the project meets the needs of national Societies and key stakeholders.

Needs analysis

Conducting a preliminary situation analysis is an essential first step to identify needs for disaster risk awareness and education.

At this stage, the DRR team should carry out the following key actions:

❑ Contextual study: know the environment in which the activities will be implemented, and obtain additional information to adapt your strategy to future considerations.

❑ Identification of needs and constraints: determine the needs of the target audience and partners, and the constraints that may affect the project's progress. It is also necessary to assess your capacity to intervene and implement, for example through a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis.

❑ Defining design priorities: disaster risk awareness activities may or may not be prioritised accordingly:

   • The first data collected.

   • The technical information available.

   • The experience of the DRR team and volunteers.

The criteria of "sustainability and ownership" should be taken into account at this stage.

Identify reasons for action

At this stage, it is important to ensure that:

❑ The objectives of the intervention are fully in line with your mandate.

❑ The activities correspond to your institutional capacity.

❑ The available resources (material, human and financial) are clearly identified.

❑ The presence of other actors in the area is fully integrated.

It is good practice to carry out consultations to seek and analyse the views of stakeholders. This ensures that the project is contextually appropriate and meets the needs of local actors.

The sources of information for this initial qualitative and quantitative data analysis are:

❑ Interviews with key stakeholders, target audience and/or partners.

❑ Documentation (e.g. similar activities, history of natural and climatic hazards and their consequences, evaluations, etc.)

❑ Field observations.

The information gathered will be supplemented, if necessary, in further studies such as those related to understanding disaster risk.

SECTION 1
Understanding Disaster Risk

Prior to project implementation, understanding disaster risk is an essential step in identifying potential hazards that may (i) disrupt project implementation, and (ii) threaten states and populations.

Understanding disaster risk can be done at different scales: regional, national, sub-regional, local or community. In addition, deploying a participatory and inclusive process involving a multitude of institutional, technical, scientific and community stakeholders can provide a holistic view of the context.

This phase helps to formulate appropriate projects and actions such as disaster preparedness in schools and awareness campaigns for the general public.

This understanding is achieved through studies such as:

- ❑ Contextual and feasibility studies.
- ❑ Socio-anthropological studies.
- ❑ Impact studies of past and future natural events.
- ❑ Knowledge, Attitudes and Practices (KAP) surveys.
- ❑ Risk, vulnerability and capacity assessments.

Gender mainstreaming in evaluations

- ❑ Train the DRR team and volunteers on gender-sensitive and inclusive DRR.
- ❑ Organise community meetings to assess the consequences of a hazard, travel patterns and communication patterns of men and women.
- ❑ Encourage different vulnerable groups/individuals to participate in surveys to share good practice and to identify methods and pedagogical tools adapted to different groups.
- ❑ Develop collection and analysis materials that are accessible to different groups.

SECTION 1
Understanding Disaster Risk

The 7 key steps of the EVCA

ⓘ The Vulnerability and Capacity Assessment

The improved vulnerability and capacity assessment, known as EVCA, developed by the Red Cross Red Crescent, allows for a participatory and multidimensional diagnosis to understand:

❑ **Natural and climatic hazard risks:** understanding the nature, characteristics, occurrence and severity of events.

❑ **Vulnerabilities:** identification of disparities according to gender, socio-economic, geographical, physical and environmental characteristics.

❑ **Capacities:** identification of the means, resources and skills that can be mobilised to develop DRR practices while taking into account existing gaps.

This assessment is not done in a uniform systematic way. It will depend on the level of knowledge of the teams on the risks linked to natural and climatic hazards and their consequences in the area of intervention and on the communities to which they intervene.

Assessment has advantages such as (i) the collection and analysis of accurate and contextual data, (ii) the involvement of institutions and communities throughout the process, (iii) complementarity with other sectoral and academic studies, and (iv) instruments that are adaptable to different contexts (rural or urban) and target risks (natural hazards, climate change, conflicts, etc). However, it is an analysis that requires the mobilisation of an experienced team and the investment of actors and communities over a long period of time.

Getting prepared within the National Society

Preparing for the evaluation

Introduction to the community

Hazards and issues assessment

Vulnerability assessment

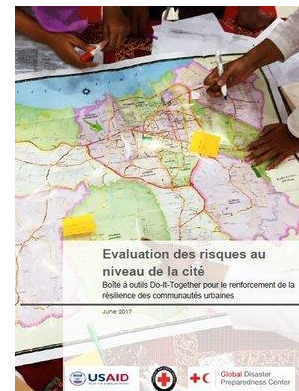Capacity assessment

Analysis and identification of risk levels

SECTION 1
Case studies

Disaster risk perception in Mayotte

In 2020, during the launch of a DRR project in Mayotte, PIROI commissioned the ESOI consultancy firm to carry out a socio-anthropological study. This study enabled the teams to gain a better understanding of the perception of risks related to natural hazards among the population of Mayotte and to subsequently design awareness-raising actions.

- The strongest risks felt by the majority of respondents are earthquakes and volcanoes.

- Experienced and perceived (e.g. May 2018 earthquake): fears related to understanding "where it comes from," not knowing what to do and the trauma of having experienced the event.

- Behaviours: uncertainty about what behaviours to adopt, lack of confidence in the messages (e.g. getting under the table in case of an earthquake, we don't believe it) and fear of theft. Establishment of decision-making mechanisms within the family around older men, and mutual support between families and neighbours.

- Beliefs: religious beliefs (e.g. divine will), folk knowledge, tales and legends and the importance of premonitory dreams.

Mapping Urban Systems in Luganville, Vanuatu

The Vanuatu Red Cross Society (VRCS) organised a city-wide risk assessment, involving the municipality, local government bodies, civil society organisations and local and national businesses.

Vulnerability and Capacity Assessment in the Indian Ocean Eco-Schools: Eco-DRR Toolkit

The regional DRR education programme of PIROI and the Indian Ocean Commission aims to reduce risks through resilience education Indian Ocean eco-schools.

A DRR toolkit for conducting a vulnerability and capacity assessment in schools and the community was created. This toolkit provides information, tools and resources that support "learning about risk reduction and resilience" while keeping a link to "school-based disaster management." Information obtained from the educational activities undertaken can inform the school's emergency planning and vice versa.
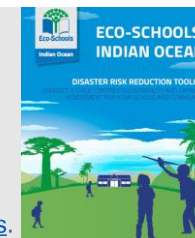
SECTION 2

Project design

Targeting the audience

Targeting the areas of intervention

Identification of the partner

Case studies: Madagascar, Mayotte, Reunion Island, Union of Comoros and Mauritius

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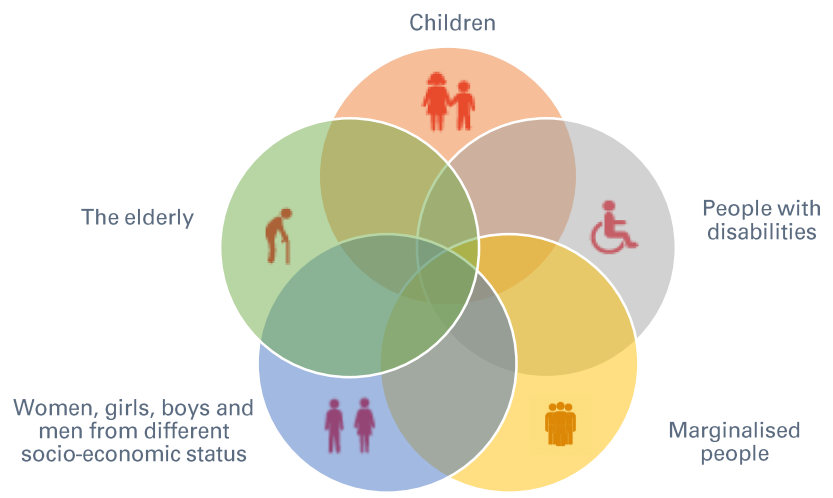- Understanding disaster risk

SECTION 2
Targeting the audience

The relevance of a disaster risk awareness and education project depends in part on its targeting. In other words, taking into account the important categories of the population that are at risk from natural and climatic hazards.

When sequencing the target audience, it is essential to consider gender and inclusion, which ensures that all people can participate and be aware of disaster risk, while taking into account their cultural diversity, needs and rights, regardless of age, gender, disability, ethnicity and/or socioeconomic status.

> "Men and women are part of the same society, which we know does not mean that they have the same rights, education and opportunities, whether in "normal" conditions or in a disaster. "
> Women Disaster Reduction and Sustainable Development, UNDRR Secretariat

Most vulnerable groups and individuals to disaster risk

Children

People with disabilities

The elderly

Women, girls, boys and men from different socio-economic status

Marginalised people

Non-exhaustive list of target audiences for disaster risk awareness and education

Children and young people are very responsive to awareness and behaviour change initiatives. By empowering them while taking their views into account, they act as key informants and agents of change.

Children and youth

Adults are targeted more during mass events, and during specific awareness raising in their environment. Adults and older people have historical and traditional knowledge to anticipate and adapt to recurring natural and climatic hazards.

Adults

People with disabilities provide an accurate assessment of the situation and the needs to be adapted before, during and after a disaster in relation to physical, communication, environmental and cultural barriers.

People with disabilities

From an early age, students can be taught and learn rules to follow. Young people have the ability to recognise and prepare for disaster risk.

Students

Education professionals, including teachers, are targeted to promote DRR in the school curriculum and to facilitate the adoption of best practices by the younger generation.

Teachers

Facilitators have a key role in projects and are a target audience in their own right. The training tools, especially in pedagogical techniques, are dedicated to them.

Facilitators

State services ensure the strengthening of relations with National Societies to guarantee support and agreements for the implementation of DRR projects. Professionals are important for the transmission of know-how that allows the appropriation and replication of awareness-raising methods and tools.

State actors & relevant sector professionals

SECTION 2
Targeting the areas of intervention

For the targeting of intervention areas, it is important to look at:

❑ Areas most exposed to natural hazards (meteorological and climatic hazards), whether urban or rural, depending on residential areas.

❑ Areas where there is the greatest impact on people in terms of loss of life and their homes.

❑ Areas where key infrastructure, such as school structures, may be damaged.

Cyclone-prone areas in Seychelles
Based on (i) residential areas, (ii) residential losses and (iii) losses to education and health infrastructure
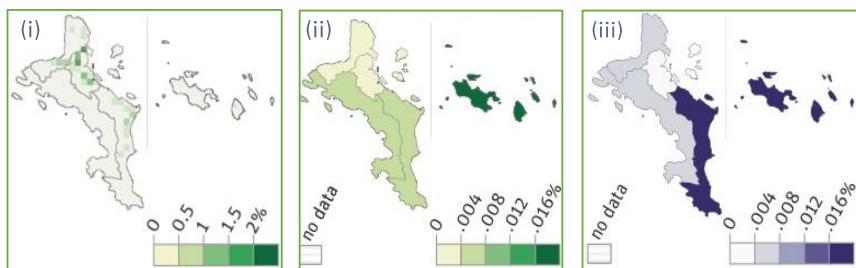
Source: Disaster Profile Seychelles – GFDRR 2016

Timing of the intervention

It is important to identify the appropriate time for broadcasting messages on disaster risk reduction.

❑ Depending on the season and the weather forecast, to encourage people's attention and memory.

❑ Depending on people's "free time," such as in the morning or evening, for broadcasting via radio or TV.

Identification of intervention areas

❑ At the national level: online resources, such as PreventionWeb and ThinkHazard, provide information on country exposure and vulnerability. Priority areas are often pre-identified in national DRR strategies.

❑ At the local level: there are several ways to define precisely which area or neighbourhood to target. To be as accurate as possible, these methodologies should involve volunteers and key individuals/groups such as authorities/municipalities, local associations, students, teachers, village leaders, neighbourhood representatives, professionals, etc.

• Mapping of the vulnerable area showing natural hazards (meteorological and climatic hazards).

• Field observation and interviews with authorities and disaster-prone populations to make an inventory of the most exposed and vulnerable populations and existing disaster-prone infrastructure (schools, urban centres, roads, communication facilities, etc.)

• Focus groups with local authorities to assess capacity to provide information to populations and to raise awareness "before, during and after" a disaster.
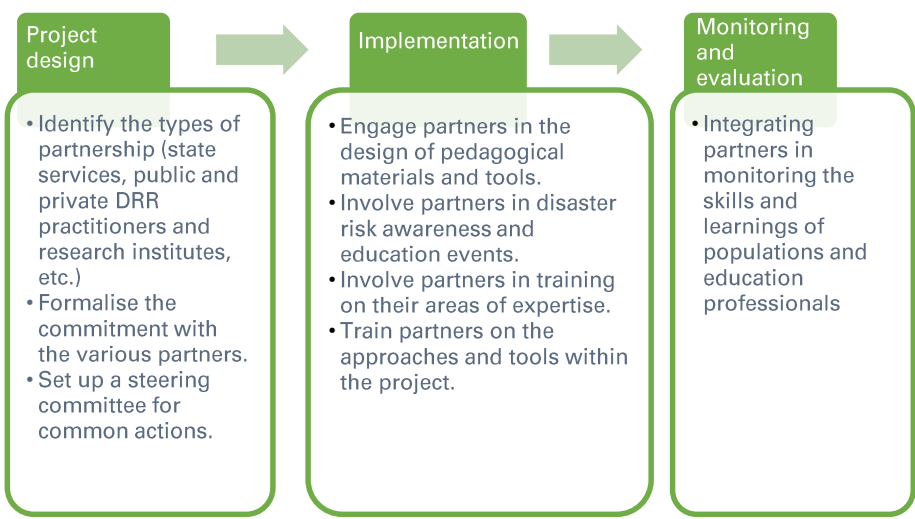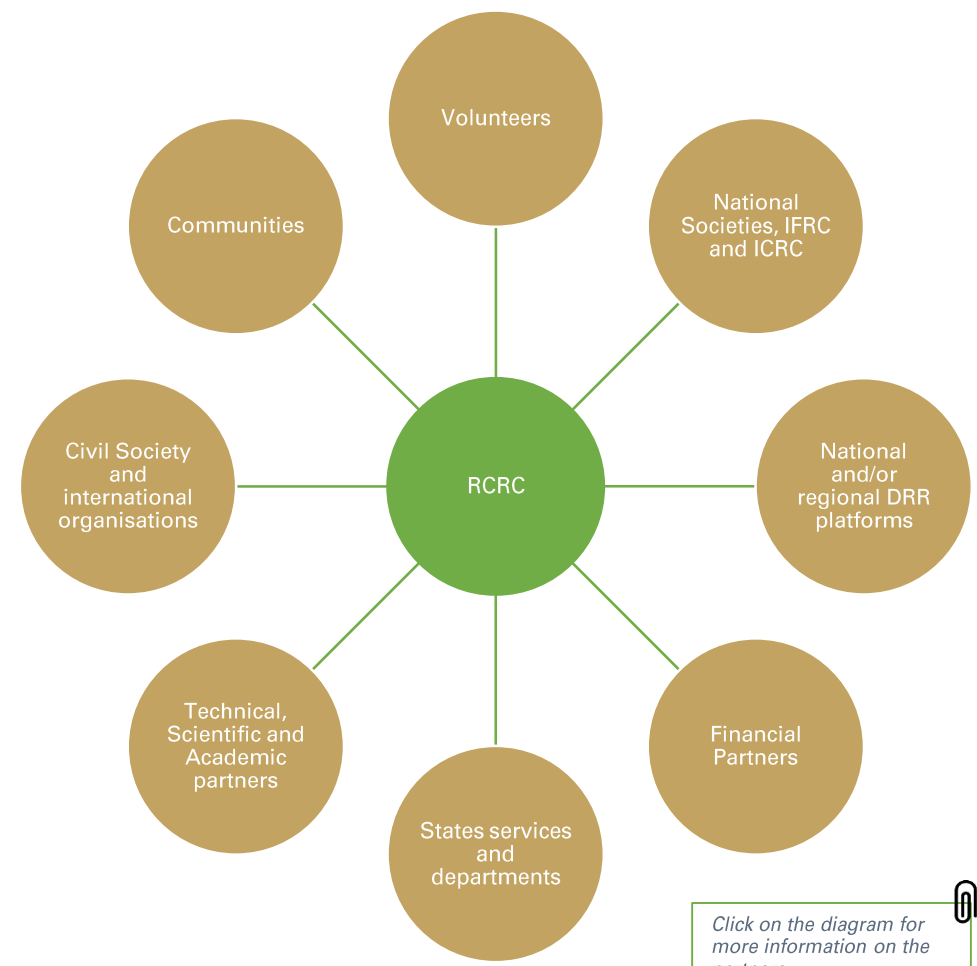
SECTION 2
Identification of the partner

The field of DRR requires the involvement of a multitude of actors at different scales to provide appropriate expertise for the planning and implementation of disaster risk awareness and education activities.

Various types of partners

Project design
- Identify the types of partnership (state services, public and private DRR practitioners and research institutes, etc.)
- Formalise the commitment with the various partners.
- Set up a steering committee for common actions.

Implementation
- Engage partners in the design of pedagogical materials and tools.
- Involve partners in disaster risk awareness and education events.
- Involve partners in training on their areas of expertise.
- Train partners on the approaches and tools within the project.

Monitoring and evaluation
- Integrating partners in monitoring the skills and learnings of populations and education professionals

Factors contributing to an effective partnership

❏ Involvement of institutional partners to facilitate the integration of DRR into national DRR strategies, and into the school curriculum.

❏ Collaboration with technical (private and/or public), academic and/or scientific partners to benefit from their expertise, which is complementary to that of the Red Cross and Red Crescent Movement.

❏ Regular exchanges (e.g. strategy, feedback, creation of pedagogical tools, etc.) to establish a trusting and sustainable relationship over the long term.

❏ Development of an exit strategy for the appropriation of methods and tools by institutional and operational partners.

Volunteers

Communities

National Societies, IFRC and ICRC

Civil Society and international organisations

RCRC

National and/or regional DRR platforms

Technical, Scientific and Academic partners

States services and departments

Financial Partners

*Click on the diagram for more information on the partners*

SECTION 2
Case studies

Engaging communities through local targeting committees (LTC) in Madagascar

In Madagascar, within the DRR projects conducted by CARE and Humanity and Inclusion, local targeting committees (LTCs) are established at the Fokontany (village) level.

These committees, along with local authorities, are trained in targeting communities at risk of being affected by disasters. They thus have a key role in identifying vulnerable communities. On the other hand, LSCs and local authorities are also trained in emergency response management (e.g., targeting, organisation, distribution, monitoring and evaluation, and complaints management), and during emergency response, they are responsible for targeting in conjunction with NGOs.
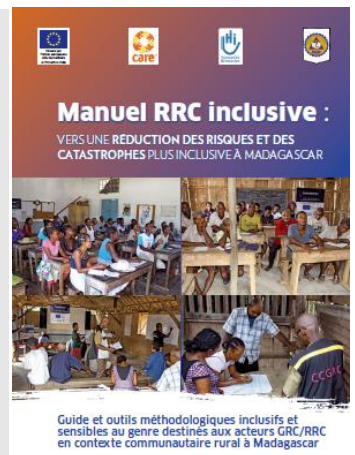
Targeting specific sectors of activity in Mayotte

A good practice for the "adult" target audience is to specifically target more professional sectors of activity. In Mayotte, the BRGM and the DEAL have developed booklets and guides with best practices for all stakeholders designing a construction project, including building professionals. These guides provide clarity on geophysical phenomena, through informational illustrations, extending accessibility for a broad audience. BRGM and DEAL aim to continue working towards more professionalism to meet the specific challenges of each sector of activity.

SECTION 2
Case studies

Partnership between the PIROI and the Ministry of Education in Reunion Island

Since 2011, PIROI has a framework agreement with the Rectorate. This collaboration has enabled the two institutions to build trust in order to:

- Create a school manual on natural hazards and what to do in the event of a disaster, adapted to the students of CM1, CM2 and 6ème.

- Train teachers on DRR and support them with a teaching manual.

- Conduct disaster risk education sessions in primary and secondary schools.

From 2020 onwards, teachers will directly run DRR sessions within their academic curricula, and since 2011 more than 43,685 pupils have been sensitised.

Partnership between the Comoros Red Crescent (RCCO) and the Volcano Observatory (OVK)

The Karthala Volcanological Observatory (OVK) regularly monitors the volcano's activities and takes action to warn the population and authorities of possible volcanic eruptions. The Comorian population is vulnerable to volcanic activities, and the last volcanic eruption has shown the need to strengthen community preparedness. It is in this context that OVK and CRCO are working together to raise awareness among communities on how to better prepare themselves "before", cope "during" and recover "after" a volcanic eruption.

Partnership between the Mauritius Red Cross…

And the National Disaster Risk Management Centre (NDRRMC)

The NDRRMC in Mauritius is the lead state authority for risk management, risk reduction and disaster response coordination. Under the Mauritius Disaster Risk Management Act 2016, the Mauritius Red Cross is part of the National DRR Council.

Collaboration between the NDRRMC and the Mauritius Red Cross has been enhanced since the enactment of the NDRRMC Act in 2016, to (i) conduct training and awareness sessions on disaster risk to communities, and (ii) coordinate emergency preparedness and response actions.

And community youth groups

Young people are strongly involved in DRR activities, in order to:

- Learn about disaster risk and volunteer to run awareness sessions in their community.

- Informally communicate key messages to the community about natural hazards and what to do before, during and after a disaster.

- Educate the younger generation in primary and secondary schools, non-formal schools and community centres.

SECTION 3

Planning

Consideration of communication

Diversification of communication channels

Transmission of messages

Case studies: Reunion Island, St Martin and Mauritius

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Section 5
Monitoring and evaluation
- Evaluation of initiatives and skills
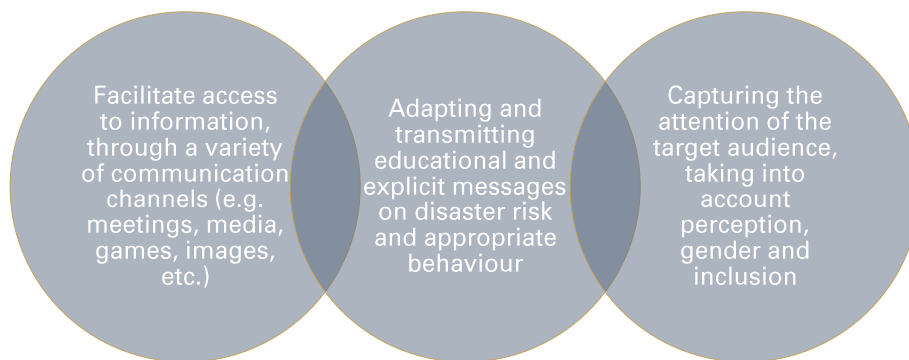- Collaboration and exchange of practices

SECTION 3
Consideration of communication

The unequal access to reading and writing requires disaster risk awareness and education projects to take into account the communication components described below. Communication plays a role in the acceptance of disaster risk and behavioural change within a state and a population.

Components for good disaster risk communication

Facilitate access to information, through a variety of communication channels (e.g. meetings, media, games, images, etc.)

Adapting and transmitting educational and explicit messages on disaster risk and appropriate behaviour

Capturing the attention of the target audience, taking into account perception, gender and inclusion


ℹ Communication challenges

❑ Low initial perception of disaster risk by populations.

❑ Low receptivity of the messages, related to the confidence of the population in the source, the relationship with the government and the credibility of the message.

❑ Complexity of translating "technical issues" to an audience unfamiliar with DRR, such as explaining the characteristics of a natural and climatic hazard, the associated uncertainties and protective measures.

❑ Tilt towards alarmist messages and/or excessive communication, leading to denial among the population.

❑ Difficulties in choosing communication methods:

- Mass communication that can reach a large number of people, but with limits in awareness, acceptance and involvement of individuals.

- Personalised communication informing a specific target audience, but with less quantitative impact.

❑ Low sustainability of awareness actions due to low frequency of communication, such as reminders to the population (e.g. simulation exercises).

SECTION 3
Diversification of communication channels

Disaster risk communication can be carried out through different methods, with the aim of facilitating access to information by different audiences through multiple transmissions. Three main communication channels are used by national Societies for disaster risk awareness and education.

Graphic representations

Events and public awareness campaign

Audio and digital transmission
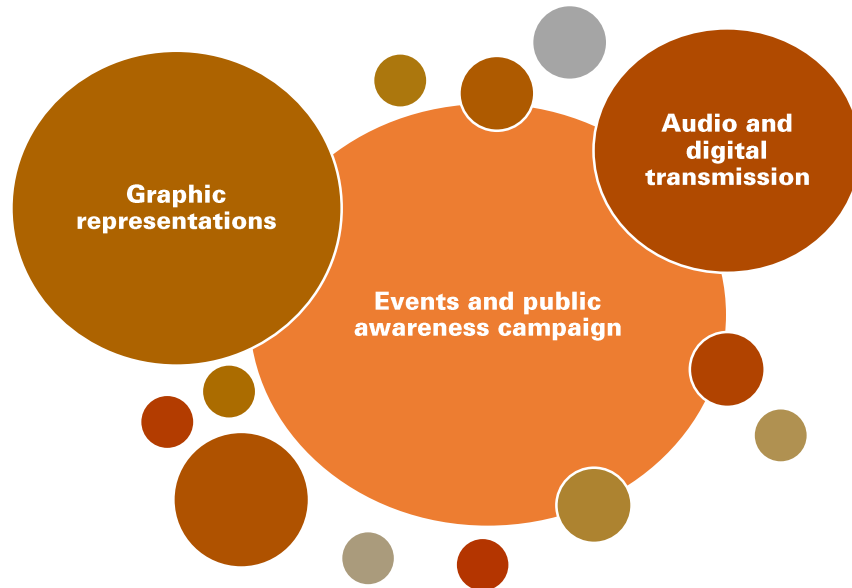
Events and public awareness campaign

The most common means of communication among National Societies in the Indian Ocean:

❑ Mobilise a large number of people of all ages, cultures and social groups.

❑ Organise events and/or campaigns that can be mobile or static.

❑ Set up animations on a specific day (e.g. International Disaster Reduction Day on 13 October), on a market, at an information meeting with communities, etc.

❑ Request volunteers to run stands with attractive, participatory and fun materials, such as board games, card games, brochures, etc.

Prerequisites

❑ Inform the authorities and the population about the event in advance.

❑ Adapt the messages and visuals to all audiences and ages.

❑ Involve the DRR team and volunteers in the organisation of the campaign.

❑ Have several participatory tools available to capture the public's attention over a set period of time.

❑ Choose games that are popular and regularly used by the population.

❑ Convey messages that are easy to assimilate by an audience unfamiliar with DRR.

❑ Mobilise 4-6 volunteers to facilitate and answer questions.

SECTION 3
Diversification of communication channels

Graphic representations for children and adults

Visual communication channels adapted by National Societies and partners to reach children and adults.

❑ Use of a visual tool adapted to the culture and language of the territory (e.g. form of habitat, local language like Chi-mahore in Mayotte) and taking into account the age and living environment of the population.

❑ Complementary to an oral transmission, such as during a debate, a forum, an exhibition, or a coffee shop, etc.

❑ Combination of writing, images and/or colours on specific media such as posters, comics, stories, SMS, etc.

PIROI's story telling and COVID19 banner

❑ Placement in strategic locations according to the type of tool (e.g. places of passage for posters such as markets, airports, town halls, etc. and places of culture for comics and stories such as schools, media libraries, etc.)

Prerequisites

❑ Define messages and visuals in relation to a specific age group.

❑ Ensure that images and messages are understandable at first view.

❑ Define messages that are understandable without prior explanation.

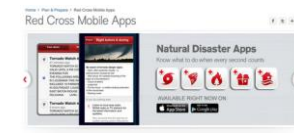❑ Engage local artists and the community in the creation of appropriate images and messages.

Audio and digital transmission to young people

This type of tool is increasingly being developed within National Societies, particularly to target adolescents.

❑ Interaction with a specific audience (e.g. teenagers, young adults) with a virtual setting and using multimedia such as the internet, mobile phones, video games and/or digital tools.

Virtual Game "InondAction" PIROI   *American Red Cross natural disaster apps*

❑ Raising awareness by associating very specific messages with a concrete audio-visual example (e.g. radio and TV spots, reports, theatre plays or films).

❑ Transmission and implementation at a specific time of the day.

Prerequisites

❑ Define messages and visuals according to a specific audience and natural hazard.

❑ Engage professionals specialised in the creation of digital tools.

❑ Pay close attention to the cost of producing and distributing this type of tool.

❑ Establish a strategy for communication and use of the tool.

❑ Mobilise volunteers to explain and support the public in understanding the messages and using the tool.

❑ Verify the use of and access to audio-visual and digital tools by the target audience (e.g. rate of connectivity in the small island states of the Indian Ocean: Digital 2021 – We are Social).

SECTION 3
Transmission of messages

DRR team and volunteers should adapt pedagogical tools and messages according to:

❑ The period of disaster risk communication.

❑ The local context, building on local traditions and cultural norms. A good practice is to adapt communication tools (e.g. traditional stories) and representations (e.g. mascots) already known by the populations to convey messages and capture the attention of the public. The drawings should be representative of the resources, habitats of the people and the environment.

❑ People's perceptions of the disaster according to their status, age, gender, culture and local beliefs. Be aware that each person has a different view of a natural hazard and how it will affect them: "what is a disaster for one, may be a simple event for another."

❑ The language used. Even if experts are involved in the project, the technical and/or scientific language should be popularised to facilitate understanding by a public unfamiliar with DRR. Awareness-raising tools should be translated into local languages for better appropriation.

ℹ Natural hazard pictograms

Pictograms are a suitable means of communication for people with difficulties in understanding written text (e.g. illiterate, foreigners, linguistically disadvantaged populations, etc.). They can be complemented by colour codes indicating severity, as in the early warning system: green, orange and red. Similarly, action icons can complement hazard symbols, but research is needed to communicate clearly through pictographic warning. Remember to adapt the pictograms according to cultural differences and local experiences, as a universal symbol for the whole world does not work.

Complex pictogram of a flood: indications of an evacuation action and a time. Beware that the time and the numbers are easy to misunderstand.

Icon "Flood" Schoolbook, Union of Comoros

Adaptation of messages and tools to target audiences

	ADULTS	YOUTH	CHILDREN
Type of messages	Concrete messages, such as technical messages transmitted by state services (e.g. weather messages during a cyclone)	Precise and targeted messages, easy to remember and to transmit quickly (e.g. consequences of a cyclone on a house)	Generic messages through education (e.g. what to do before a flood)
Time to capture attention	Short duration between 30 and 45 minutes	Short duration between 30 and 45 minutes. More interactive than adults, especially through social networks and new technologies	Long duration between 1 and 2 hours provided they actively participate
Most appropriate tools	Posters, leaflets, radio/TV spots, SMS messages, mock-ups, guide, virtual game, etc.	Video and digital games, role-playing games e.g. Escape Game), visual tools (e.g. video on a specific natural hazard for event memory), collaborative games, comics, sketch, etc.	Preference for tools that stimulate the imagination, especially for the youngest. Interactive and competitive games (e.g.,board games, paper pot), stories, comics, school books, plays, etc.

SECTION 3
Case studies

Digital Marathon "Volcano Game Jam" in Reunion Island

In 2019 and for the 6th year, the Cité du Volcan and the Collectif Bouftang organised the "Volcano Gam Jam" inviting professionals and amateurs to participate in a competition to create a video game in 48 hours.

Red Cross in St Martin launches song contest to promote disaster awareness

Through the "Be Ready Be Safe" song contest, aspiring rappers and other musicians can create an original song to promote awareness and help minimise the risks associated with earthquakes and hurricanes.

Dood's Caravan in Mauritius

Since 2017, the Mauritius Red Cross has been organising a travelling awareness campaign called "The Dood Caravan" during the month of April.

The campaign aims to raise awareness among young and old alike to "better inform, train and encourage a culture of risk among Mauritians." The caravan is a major event that requires several months of preparation, and mobilises around twenty volunteers. This campaign also mobilises state and private partners.
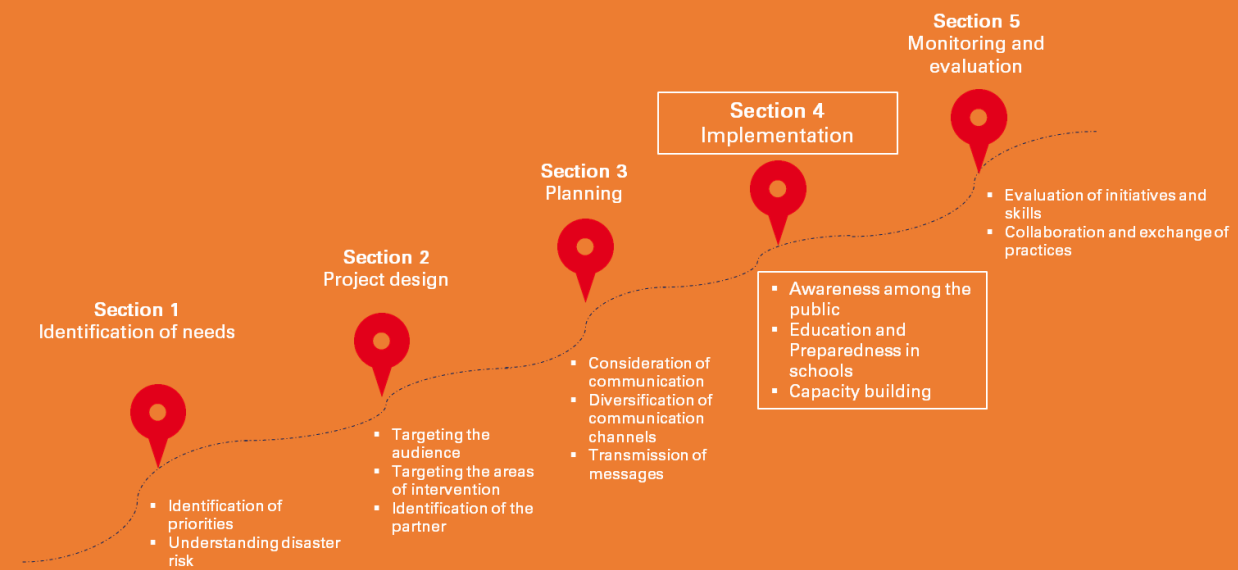
SECTION 4

Implementation

Awareness among the public

Education and preparedness in schools

Capacity building

Case studies: Seychelles, Union of Comoros, Reunion Island, Samoa, Guadeloupe, Mozambique and Tanzania

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SECTION 4
Awareness among the public

For many years, DRR actors have been raising awareness of disaster risk among states and populations with the objectives of (i) engaging and influencing decision-makers for change within populations, and (ii) generating individual and/or collective behavioural change through knowledge of natural and climatic hazards and the practice of what to do in real conditions.

Why raise awareness about disaster risk

- Low awareness of disaster risk
- Lack of knowledge about how to act or react to disaster risk
- Setting up of inappropriate protective behaviours
- No or low trust in elected officials and messages
- Disaster risk anxiety

Why?

How to raise awareness of disaster risk

The 3 objectives of disaster risk awareness raising
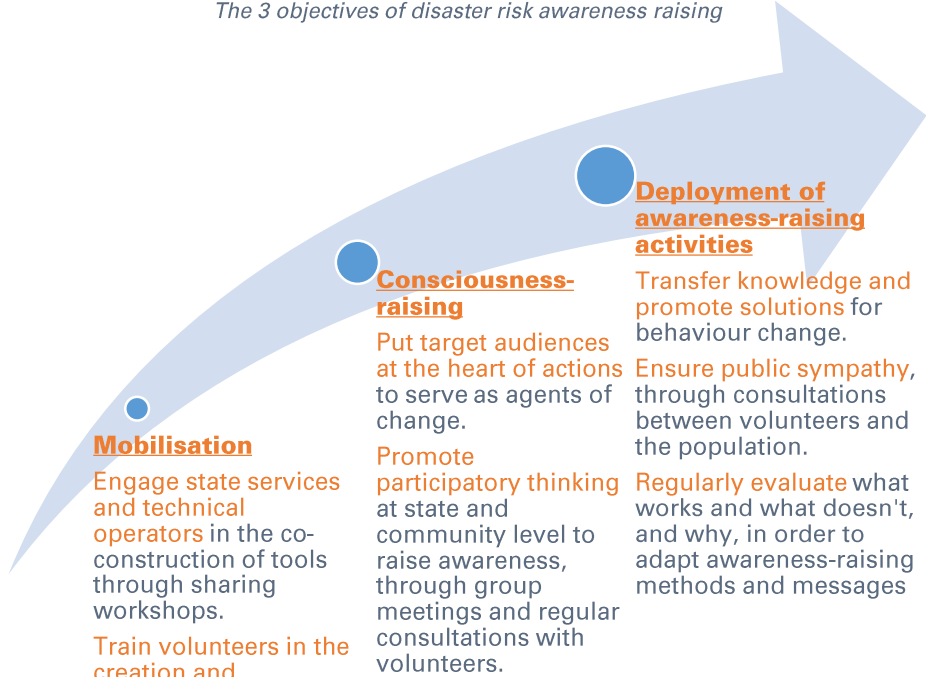
Mobilisation

Engage state services and technical operators in the co-construction of tools through sharing workshops.

Train volunteers in the creation and transmission of messages throughout the year.

Consult with vulnerable populations throughout the project to ensure ownership of the messages and improve the situation in the future.

Consciousness-raising

Put target audiences at the heart of actions to serve as agents of change.

Promote participatory thinking at state and community level to raise awareness, through group meetings and regular consultations with volunteers.

Deployment of awareness-raising activities

Transfer knowledge and promote solutions for behaviour change.

Ensure public sympathy, through consultations between volunteers and the population.

Regularly evaluate what works and what doesn't, and why, in order to adapt awareness-raising methods and messages

SECTION 4
Awareness among the public

All you need to know to keep your cool during a crisis

The consequences of a disaster demonstrate the need to invest more in disaster risk reduction and climate change adaptation. This includes raising awareness to prevent impacts on health and livelihoods and to minimise damage to homes and the environment.

Therefore a link between awareness raising and disaster preparedness, is critical to encourage and empower local officials and the population to be better prepared for emergencies.

𝒊 **Disaster risk awareness**

A gateway to **community-based disaster preparedness**

❑ Sensitised populations deepen their knowledge on natural and/or climatic hazards and learn what to do in these situations.

❑ Local people know what to do 'before' a disaster, such as preparing a family plan and an emergency kit.

❑ Sensitised state services and operational experts can better inform citizens about actual and potential disaster risk to fulfil their preventive information mission.

❑ State services and operational experts improve the exchange of knowledge and information to facilitate rapid decision-making and action at both individual and collective level.

𝒊 The Flooding project, *nout kartié lé paré* of PIROI in Reunion Island

Since 2017, this project targets populations most exposed to flood risks to raise awareness, expose vulnerabilities and strengthen preparedness in case of a disaster.

Within this project, the teams developed the Family Flood Risk Preparedness Plan, outlining specific instructions a family should implement to prepare for a flood, including : where to get information, how to set up a catakit, how to prepare the home, how to take out a home insurance policy, behaviours to adopt in case of flood, etc.

SECTION 4
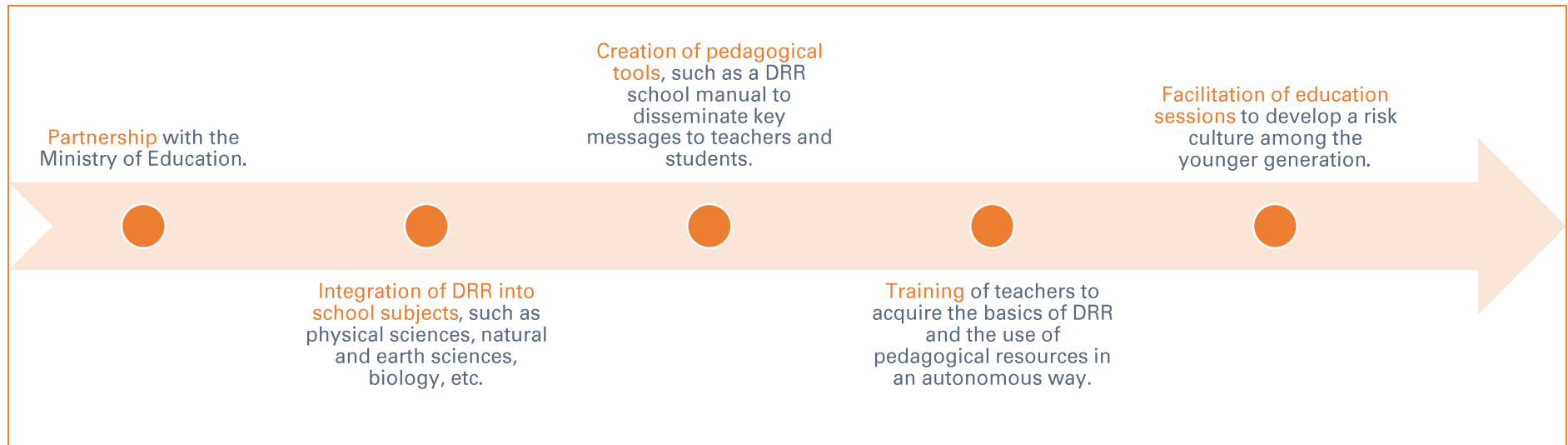# Education in schools and extracurricular activities

Disaster risk education enables children to acquire knowledge about natural and climatic hazards and learn what to do at the right time. This gives children the confidence to live with natural hazards in a sustainable and responsible manner.

To enable the acquisition of knowledge, pedagogical tools, such as school books and educational games, should be aimed at both teachers and pupils. Integrating DRR into school curriculums is a sustainable approach to systematically prepare future generations.

🛈 The benefits of DRR education in schools

❑ Increased knowledge and skills in relation to natural and climatic hazards and the behaviours to be adapted and/or adopted.

❑ Increased confidence and positive mental state: the child sees themself as an agent of change.

❑ Strengthened links within communities, including among parents and local authorities, to convey key messages.

❑ Disaster risk education involves looking beyond this, i.e., bringing the voices of children to decision-makers and relevant authorities to promote DRR and climate change adaptation by making meaningful changes in the community (e.g. not putting a school in a flood-prone area).

Steps to integrate DRR into the education system at primary, secondary and university levels

Partnership with the Ministry of Education.

Creation of pedagogical tools, such as a DRR school manual to disseminate key messages to teachers and students.

Facilitation of education sessions to develop a risk culture among the younger generation.

Integration of DRR into school subjects, such as physical sciences, natural and earth sciences, biology, etc.

Training of teachers to acquire the basics of DRR and the use of pedagogical resources in an autonomous way.

SECTION 4
Disaster prepardness in schools

Disaster preparedness in schools is part of the global framework "Comprehensive School Safety," led by the Global Alliance for Disaster Risk Reduction and Resilience in Education (GADRRRES).

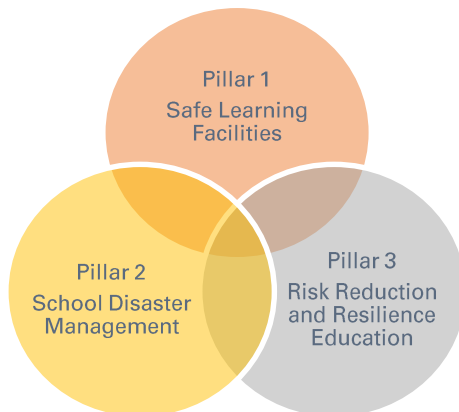For disaster preparedness and risk reduction in schools, national Societies of the RCRC movement work on the three pillars of the Comprehensive School Safety Framework (CSSF), as defined by the UNDRR.

The 3 pillars of the integrated approach to DRR in schools

Source: Comprehensive School Safety Framework, UNDRR

School Disaster Management

This pillar is important for planning and managing the DRR process:

❑ **Assessment and planning:** establishing continuity plans to ensure that school operations continue in the event that natural and climatic hazards disrupt the school year

❑ **Physical, environmental and social protection:** establish funding and enforcement mechanisms for infrastructure maintenance

❑ **Response skills and provisions:** develop procedures and practices for dealing with disasters and anticipated emergencies, and strengthen the DRR and emergency skills of school staff

❑ **Operational procedures:** conduct school disaster drills at least once a year for each anticipated natural hazard to practice and improve skills and plans, and have a minimum of 3-7 days' supply for emergencies and disasters

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ⓘ The Simulation Exercise (SIMEX)

The school simulation exercise is performed to take proactive measures to prepare for emergencies. During this SIMEX, local authorities, school staff, children and parents test:

❑ Their assessment of the situation, and the distribution of roles and responsibilities.

❑ The execution of the tasks and instructions taught in the preparedness plan, and the effectiveness of communication mechanisms.

❑ Access to safety areas and the presence of essential materials (e.g. sanitary kit, drinking water, torch, etc.)

This school exercise allows children and adults to learn and practice protection measures and to build confidence in these measures.

SECTION 4
Capacity building

Throughout the year, it is critical to build the capacity and knowledge of volunteers, teachers and local actors to inform people about disaster risk through public, school and extracurricular activities, and to implement disaster preparedness measures.

A typical training course

At the end of the course, participants should leave with both theoretical knowledge and facilitation techniques.

The material available to the trainers includes:

❑ An educational and technical guide for facilitators

❑ Training materials (e.g. PPT and training video) incorporating (i) disaster risk concepts, (ii) "before, during and after" actions for each pre-identified natural hazard, and (iii) facilitation techniques.

❑ Participants' knowledge tests "before/after" the training.

The training should be divided into different sessions to give participants the opportunity to access all the modules or specific sessions according to their needs. With a view to continuous improvement, training should always be subject to a satisfaction evaluation by the participants.

For training courses lasting several days, the day begins with a summary of the day before and ends with a closing and evaluation session.

❑ Duration of the modules: 2 hours maximum.

❑ Ideal number of participants: 15 participants.

At the level of volunteers and partners

❑ Enhancing the skills of the volunteer network requires: (i) mandatory pedagogical training and (ii) practical application in the field, which gives facilitators confidence in delivering messages.

❑ National Societies must ensure that partners, including local elected officials and education professionals, have access to:

• Technical support (e.g. school handbook) adapted and detailed for each training module.

• Pedagogical resources, such as disaster risk education tools and videos, to facilitate sessions.

Good practice in capacity building

❑ Assess the training needs and capacities of participants beforehand.

❑ Monitor and support the development of skills through a final training evaluation, practical application and coaching sessions.

❑ Ensure regular training and organise refresher courses at least once a year.

❑ Have a learning plan to track DRR knowledge.

❑ Gradually give more responsibility to volunteers and partners for the organisation and implementation.

❑ Develop training of trainers to deploy knowledge at local level.

SECTION 4
Case studies: awareness and education to disaster risk

"Disaster challenge game" in Seychelles

The Seychelles Red Cross Society has developed an educational game for children and adults to learn about the risks of natural hazards and how to behave while having fun! In the form of a "Goose" board game, players move around according to the "natural risk" card and their response to prepare themselves in case of disaster. This game is used in schools and at public events.

Dengue awareness campaign in Reunion Island

PIROI has set up activities for children and adults so that they can receive information on the spread of the virus and learn how to prevent it. The awareness-raising activities are organised during events for the general public and are led by volunteers from the French Red Cross who have been trained by the project team, accompanied by professionals from the Regional Health Agency.

Teachers' booklet, Union of Comoros

In the Union of Comoros, the government, in partnership with the United Nations Development Programme (UNDP), developed a pedagogical guide for primary education to enhance children's learning about disaster risk from an early age. A first version of the manual was published in 2008. The guide is intended for primary school teachers, counsellors and school inspectors. Although not all topics are included in the Comoros school curriculum, the guide aims to introduce key concepts and encourage the teaching of the main natural hazards:

- Volcano (e.g. Karthala volcano)
- Earthquake
- Landslide
- Tsunamis
- Tropical cyclones
- Flood

The topic of climate change is integrated in an additional module.

Expert contribution for the school booklet in Reunion Island

As part of its *"Paré pas Paré"* disaster risk prevention and reduction programme, the French Red Cross has developed a Pupil's Booklet, specific to Reunion Island. In order to adapt the awareness-raising messages for pupils in CM1, CM2 and 6ème, specialists in major risks, pedagogy and child psychology worked together during educational workshops. The information was contextualised to the 7 natural hazards of Reunion Island and to the age groups of the pupils. In addition, the teachers benefited from the organisation's pedagogical expertise and its facilitation of disaster risk education sessions.

SECTION 4
Case studies: Disaster preparedness in schools

Samoa exercises prepare students for tsunamis

In 2017, UNDP launched a regional initiative to increase tsunami awareness and preparedness in 18 Asia-Pacific countries.
In Samoa, virtual reality headsets were used to prepare children for the drills, so that they could experience their environment would be like underwater environment.

Students were also asked to evacuate in less than 15 minutes to escape a tsunami in Samoa!
The exercises were supported by the Samoan government, Samoa Disaster Management Office, Samoa Meteorological Division, Samoa Police, Samoa Fire Service and Samoa Red Cross.

Video 3,25 min

Earthquake simulators to raise awareness in Guadeloupe

Within the framework of the Particular Plan for Safety in Guadeloupe, the rectorate, in collaboration with the DEAL, provides an earthquake awareness tool for secondary school students. The pupils are made aware of the seismic risk by feeling its effects. The equipment is installed on the school site for about 15 days, then it rotates between secondary schools.

In addition, a "SISMO-BUS" has been developed by the Directorate of Risk Management and Prevention in collaboration with the Guadeloupian association of ethics and vigilance. This mobile prevention tool (mobile platform) allows primary school children to be in a real situation to better understand the seismic risk. Before putting it into practice, the pupils have a theory lesson on the composition of the earth, details of earthquakes in the Lesser Antilles and the emergency kit.

Basic emergency plan for schools in Mozambique

Video 9 min

Save The Children and UN-HABITAT worked in collaboration with the Ministry of Education to develop emergency plans (PEBE) in 6 schools in the provinces of Nampula, Zambezia and Gaza.

To develop these plans, the following steps were taken:

- Initial assessment and stakeholder consultation
- Pre-design of the concept and tools
- Agreement on the PEBE package including training materials, kits, components and manual.
- Training of 6 schools and development of PEBEs.
- PEBE framework approved in 2019

The main objective of the PEBE is to ensure the safety of students, teachers, staff, infrastructure and school facilities. Drafting the PEBE in each school provides an opportunity for a practical disaster planning and preparedness exercise, further integrating the DRR programme as part of school activities.

Systematic DRR activities in schools:

- Establishing and training school committees to develop a school preparedness plan and manage a rapid response to events
- Helping to identify measures to ensure the safety of students, teachers and other school staff
- Assessing and planning for the safety of the school's infrastructure and assets
- Identifying basic adaptation, prevention and mitigation, preparedness and response measures at school level
- Enabling school communities and, in particular, school disaster management committees to work closely with local community disaster risk management committees

SECTION 4
Case studies: capacity building

The "Conduct in a flooded environment" training course (CATMI) in Reunion Island

In connection with the *"Inondation Nout Kartié"* project, PIROI proposed a CATMI training course. This training was developed with partners including the Gens de Rivières training organisation, the DEAL's Hydrological Surveillance Unit and Météo France. It is a broad-based training course for all stakeholders in disaster risk management, including municipal and inter-municipal staff and awareness-raising actors. The training consists of a theoretical component, a hands-on practical exercise and a case study.

Training of Trainers on "Disaster Management " in Tanzania

In 2019, the Tanzania Red Cross trained 60 volunteers in disaster preparedness. The training was designed as a mixed learning approach, using a combination of face-to-face and online training, complemented by simulation and pilot exercises. Volunteers' knowledge was significantly improved through training on the online platforms. In addition, the knowledge transfer plan enabled some volunteers to receive "training of trainers" to explain the key principles of disaster management to newcomers.

In order to attract and retain newly trained volunteers, Tanzania Red Cross is looking to develop training centres and help volunteers set up alternative income-generating activities to fund the branches.

SECTION 5

Monitoring and evaluation

Evaluation of initiatives and skills

Collaboration and exchange of practices

Case studies: Reunion Island

Section 1
Identification of needs
- Identification of priorities
- Understanding disaster risk

Section 2
Project design
- Targeting the audience
- Targeting the areas of intervention
- Identification of the partner

Section 3
Planning
- Consideration of communication
- Diversification of communication channels
- Transmission of messages

Section 4
Implementation
- Awareness among the public
- Education and Preparedness in schools
- Capacity building

Section 5
Monitoring and evaluation
- Evaluation of initiatives and skills
- Collaboration and exchange of practices

SECTION 5
Evaluation of initiatives and skills

An evaluation is an analytical process that focuses on the achievements, results and impacts of a project. The monitoring and evaluation process is accountable to target audiences and partners and serves as iterative learning for national Societies.

Different proxies should be used to measure specific elements at different scales, as shown in the table below. Monitoring and evaluation of practices and skills allows for adaptation of approaches and messages while responding to emerging needs.

At the initiative level	At the level of DRR teams, volunteers and teachers	At population level
• **Quantitative indicators:** collection of precise data on activities (e.g. number of sessions, number of people and pupils reached, number of visitors at a public event or number of participants in a training course). • **Qualitative indicators:** assessment of the quality of interventions and messages (e.g. satisfaction questionnaires). • **Activity reports:** description of disaster risk awareness and education activities and training. • **Monitoring and evaluation surveys** at the beginning, middle and end of the project: measuring the relevance, quality and impact of activities internally or with the support of evaluation professionals to ensure impartiality in judgement (e.g. survey of knowledge, attitudes and practices).	• **Database:** monitoring of facilitators' training and needs. • **Standardised strategy** for refresher training: identification of topics, training time, etc. • **Learning programme:** indications of several thematic levels and progressive delegation of responsibilities. • **Exchange sessions** such as focus groups, and individual or group debriefing sessions. • **Self-assessment on key skills acquired:** measurement of knowledge acquired and level of confidence to convey key information. • **Knowledge tests** before and after the courses.	• **Database:** monitoring and measuring the evolution of the target audience's knowledge throughout the project. • **Surveys to assess the needs and gaps of the target audience** in order to adapt disaster risk awareness and education tools and messages (e.g. community focus groups, interviews with local authorities, online questionnaire, etc.). • **Pre- and post-knowledge assessment questionnaires:** collecting the target audience's knowledge before and after an awareness-raising and disaster risk education session.

SECTION 5
Collaboration and exchange of practices

The benefits of a collaborative DRR system

National, regional and international collaboration systems:

❑ Promote positive synergies of knowledge and expertise through exchange of experiences and networking between national Societies, partners and actors in DRR. This exchange improves practices and shared information among all parties (e.g. involvement of meteorological services in cyclone and storm-related messages).

❑ Encourage strategic and technical exchanges between national Societies, and with states and key DRR actors in the region of intervention.

❑ Develop and coordinate projects and pedagogical tools in disaster risk awareness and education.

❑ Plan and organise specific trainings, such as training on gender and inclusion in DRR, to improve technical skills within the region of intervention.

❑ Mobilise funding for DRR, particularly in disaster preparedness, disaster risk information, and disaster preparedness in schools.

❑ Advocate with government departments and donors to ensure that disaster risk awareness and education are better integrated into national and international policies.

The means for effective collaboration

The tools for collaboration and the exchange of practices include:

❑ Lessons learned workshops bringing together all projects aimed at DRR awareness and education at country and/or operational region level.

❑ Thematic seminars with all stakeholders involved in DRR to learn lessons and identify strengths and gaps to adapt the DRR approach.

❑ Strategic coordination workshops to share disaster risk awareness and education activities and broaden opportunities for collaboration.

❑ Visits and study tours to exchange good and bad practices, and to learn from other National Societies and organisations.

❑ Peer-to-peer coaching sessions to facilitate exchanges and harmonise approaches to DRR between national Societies.

❑ Training workshops to train National Societies, states, partners and stakeholders in DRR on the methods and pedagogical tools developed.

Indian Ocean Tsunami Information Center (IOTWS)

This center coordinates, with the Member States of the Indian Ocean Commission, the implementation of the ocean-based tsunami early warning system ((near coastal areas), as part of a comprehensive multi-hazard disaster reduction strategy. The centre enables states to improve tsunami preparedness and awareness in coastal communities through "IO Wave" tsunami simulation exercises.

SECTION 5
Case studies

Creation of the PIROI Center

PIROI is developing a <u>regional centre of expertise, training and innovation</u>, dedicated to disaster risk management and climate change. This regional centre of expertise will strengthen the capacity of PIROI and its partners to train specialists in disaster risk reduction and management. Currently, the majority of training courses are organised in Reunion Island in order to draw on the expertise of PIROI and its partners (e.g. civil protection, volcanological observatory, Météo-France, university, regional health agency, etc.). Eventually, these courses will also be offered in the other member states of the Indian Ocean region.

Collaboration with the University of Reunion: Master's Degree in Risk and Environment

Since 2020, a <u>Master's degree in Risk and Environment</u> is open to individuals in the Indian Ocean to improve their knowledge on disaster risk management through initial or continuing education. This training is accessible to all degree holders from the Geography or Science and Technology sectors.

GLOSSARY

Glossary

Climate Change

Climate change refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer (IPCC)

Climate change adaptation

In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate and its effects (IPCC)

Community

A social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage (Cambridge)

Disaster

A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts (UNDRR)

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 probabilistically as a function of hazard, exposure, vulnerability and capacity (UNDRR)

Disaster risk management

Application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses (UNDRR)

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 (UNDRR)

Education

Process of teaching or learning of someone in this or that field of activity; all the intellectual, cultural and moral knowledge acquired in this field by someone, by a group (Larousse)

Exposure

The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas (UNDRR)

Gender

Gender is used to describe the characteristics of women and men that are socially constructed, while sex refers to those that are biologically determined (WHO)

Hazard

A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation (UNDRR)

Health risk

Immediate or long-term risk representing a direct threat to the health of the population requiring an adapted response from the health system. These risks include infectious risks that can lead to contamination of the population (Ebola, flu pandemic...) (WHO)

Inclusive education

A process that aims to increase participation and reduce exclusion by effectively addressing the diverse needs of all learners. It takes into account the individual teaching and learning needs of all children and young people in marginalized and vulnerable situations (Handicap International)

Mitigation

The lessening or minimizing of the adverse impacts of a hazardous event (UNDRR)

Natural hazard

Natural hazards are predominantly associated with natural processes and phenomena (UNDRR)

Glossary

Preparedness
The knowledge and capacities developed by governments, response and recovery organisations, communities and individuals to effectively anticipate, respond to and recover from the impacts of likely, imminent or current disasters (UNDRR)

Prevention
Activities and measures to avoid existing and new disaster risk (UNDRR)

Reconstruction
The medium- and long-term rebuilding and sustainable restoration of resilient critical infrastructures, services, housing, facilities and livelihoods required for the full functioning of a community or a society affected by a disaster, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk (UNDRR)

Response
Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected (UNDRR)

Resilience
The ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions through risk management (UNDRR)

Risk
Combination of the probability of an event and its negative consequences (UNDRR)
The notion of "natural risk" covers all the threats that some natural phenomena and hazards pose to populations, structures and equipment (French Ministry of Ecological and Solidarity Transition)

Sensitisation
Extent of common knowledge about disaster risk, factors that lead to disasters, and actions that can be taken individually and collectively to reduce exposure and vulnerability to hazards (UNDRR)

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

ANNEXES

Annex 1 : Natural hazard classification

Group of hazards (source: Em-DAT)	Type of Hazards	Hazards Sub-Type
Geophysical phenomenon "A hazard originating from solid earth"	Earthquake	Ground movement Tsunami
	Mass Movement (dry)	Rock fall Landslide
	Volcanic activity	Ash fall, Lahar Pyroclastic flow Lava flow
Meteorological phenomenon "A hazard caused by short-lived, micro- to meso-scale extreme weather and atmospheric conditions that last from minutes to days"	Extreme Temperature	Cold wave Heat wave Severe winter conditions
	Storm	Extra-tropical storm Tropical storm (e.g. cyclone, hurricane or typhoon) Convective Storm
Hydrological phenomenon "A hazard caused by the occurrence, movement, and distribution of surface and subsurface freshwater and saltwater."	Flood	Coastal flood and marine submersion Riverine flood Flash flood
	Landslide	Avalanche (snow, debris, mudflow, rock fall)
	Wave action	
Climatological phenomenon "A hazard caused by long-lived, meso- to macro-scale atmospheric processes ranging from intra-seasonal to multi-decadal climate variability"	Drought	
	Glacial Lake Outburst	
	Wildfire	Forest Fire Land fire: Brush, bush, pasture
Biological phenomenon "A hazard caused by the exposure to living organisms and their toxic substances or vector-borne diseases that they may carry. Examples are venomous wildlife and insects, poisonous plants, and mosquitoes carrying disease-causing agents such as parasites, bacteria, or viruses (e.g. malaria)"	Epidemic	Viral Disease Bacterial Disease Parasitic Disease Fungal Disease
	Insect infestation	Grasshopper Locust

Annex 2: What is a…

The following are definitions of the most common natural hazards (meteorological or climatic) in SIDS

❑ Cyclone

A cyclone is characterised by torrential rains and very violent winds, which can reach 350 km/h. Caused by a significant drop in atmospheric pressure, cyclones, a phenomenon of tropical regions, are large-scale whirlwinds. Given their strength, their extent, and the areas where they occur, cyclones have devastating consequences on populations and infrastructure.

Tropical cyclones are among the most destructive natural phenomena, impacting wide areas. The greatest damage to life and property is not from the wind, but from secondary events such as storm surges, flooding, landslides and tornadoes.

❑ Storm

A storm occurs when an atmospheric disturbance (or low pressure system) generates winds exceeding 89 km/h. These high winds are accompanied by heavy rainfall and sometimes thunderstorms. Storms can have a considerable impact on people, their activities and their environment.

❑ Flood

Floods are classified among sudden onset phenomena, although different types may occur with different speeds:

- Flash floods
- River floods (mostly seasonal)
- Coastal floods, associated with tropical cyclones, tsunamis, storm surges

Factors influencing the severity of the hazard are: depth of water, duration, velocity, rate of rise, frequency of occurrence and season.

❑ Landslides

Landslides are more widespread than any other geological event. They are defined as downslope transport of soil and rock resulting from natural phenomena or man-made actions. There can be different types of movements: falls, slides, topples, lateral spread, and flows.

Landslides may also be secondary effects of heavy storms, earthquakes, and volcanic eruptions. Frequency of occurrence, extent and consequences of landslides may be estimated, and high risk areas are determined by local geology, geomorphology, hydrology and climatology and vegetation.

❑ Earthquake

Earthquakes can be defined as the shaking of earth caused by waves moving on and below the earth's surface, causing: surface faulting, tremors vibration, liquefaction, landslides, aftershocks and/or tsunamis.

Aggravating factors include the time of the event and the number and intensity of aftershocks.

❑ Fire

Wildfires, occurring recurrently, are caused by both people and acts of nature. They are often associated with slash and burn activities, which in times of drought, can escalate beyond control. In 50% of cases, the initial cause is unknown. Human negligence often plays a role.

Sources: Translation based on Prévention des risques majeurs and WHO Natural disaster profiles

❑ **Volcano**

Volcanic eruptions result from the release of energy caused by the movement of magma near the earth's surface. The volume and magnitude of the eruption varies depending on the quantity of gases, the viscosity of the magma and the permeability of the ducts and chimneys of the volcano.

Two kinds of eruptions constitute volcanic hazards:

• Explosive eruptions: These occur when gases dissolved in molten rock (or magma) expand and escape into the air. The force of escaping gas violently shatters solid rocks.

• Effusive eruptions: Here it is the flow of lava, and not the explosions themselves, that constitute the major threat. Lava varies in its composition and quantity.

❑ **Tsunami**

Tsunamis are giant sea waves that are produced by submarine earthquakes or slope collapse into the seabed.

Tsunamis can travel thousands of miles at 300-600mph with very little loss of energy. They reach the coast with devastating impact on shoreline communities. Successive crests can arrive at intervals of every 10 to 45 minutes and wreak destruction for several hours.

❑ **Epidemic**

An epidemic constitutes abnormally high rates of an illness, specific health-related behaviour, or other health-related events within a community or region. The community or region and the period in which the cases occur are specified precisely. The number of cases required to classify an epidemic varies according to the agent, size, and type of population exposed, previous experience or lack of exposure to the disease, and time and place of occurrence (WHO).

❑ **Drought**

Drought is a prolonged dry period within a natural climate cycle. It is a slow-onset phenomenon caused by rainfall deficit combined with other predisposing factors.

• Meteorological drought is a natural event that results from climatic causes, which differ from region to region. It is typically defined by a precipitation deficiency over a pre-determined period of time.

• Agricultural drought is defined more commonly by the lack of soil water to support crop and forage growth. The relationship between precipitation rates and infiltration of precipitation into the soil is often not direct. Infiltration rates vary depending on antecedent moisture conditions, slope, soil type, and intensity of the precipitation event.

• Hydrologic drought is defined by deficiencies in surface and subsurface water supplies, causing periods of below average water content in streams, reservoirs, ground-water aquifers, lakes and soils.

❑ **Temperature variation: heat wave or cold wave**

Heat waves constitute a level of very high heat during the day and night for at least three consecutive days. The definition of a heat wave is therefore based on two parameters: heat and duration.

Severe cold is characterised by its persistence, its intensity and its geographical reach. The episode of cold weather lasts at least two days, with temperatures reaching values well below the seasonal norms for the region concerned. The extreme cold, like the heat wave, constitutes a danger for the health of all.

Sources: Translation based on Prévention des risques majeurs and WHO Natural disaster profiles

Annex 3 : Red Cross and Red Crescent Movement partners

Partnership	Role	Ocean Indian environment	References
Volunteers	Volunteers are at the heart of the Movement's actions to provide assistance and support to vulnerable populations.	In the Indian Ocean, after having received the appropriate "animation and DRR" training, volunteers are actively involved in disaster risk education for the population and in schools.	"Red Cross Volunteers" https://media.ifrc.org/ifrc/what-we-do/volunteers/what-is-a-volunteer/
National Societies of the South West Indian Ocean	The National Societies (NS) are active in the fields of relief, health, promotion of humanitarian principles and values, capacity building, disaster risk management, vulnerability assessment and capacity building at community levels.	NS in the Indian Ocean include the Comoros Red Crescent, the Malagasy Red Cross, the Mauritius Red Cross, the Mozambique Red Cross, the Seychelles Red Cross Society, and the Tanzania Red Cross. - Projects to strengthen the resilience of populations and elementary school students (Mayotte, Union of Comoros, Mauritius, and Seychelles): raising awareness among the population, and education in CM1 and CM2 classes. - Community capacity building projects through awareness and disaster preparedness in Mozambique and Tanzania. - Urban DRR project & education in schools on flood risk in Madagascar	www.facebook.com/Croissant-Rouge-Comorien, https://www.croixrougemalagasy.mg/presentation/notre-identite http://www.redcrossseychelles.sc/ http://redcrossmauritius.org/ www.trcs.or.tz/ www.redcross.org.mz
The International Federation of Red Cross and Red Crescent Societies (IFRC)	The Federation coordinates and leads international relief operations during natural and non-conflict man-made disasters. It provides capacity building for National Societies.	Regional office in Nairobi: working on humanitarian diplomacy, health, water and sanitation, disaster risk management, and food security. - National Society development - Improving the effectiveness of NS and IFRC emergency response - Coordinating Movement representation - Developing communication and accountability programmes to beneficiaries and migration management programmes	https://media.ifrc.org/ifrc
The International Committee of the Red Cross (ICRC)	The ICRC is an independent and neutral institution that provides protection and assistance to victims of armed conflict and other situations of violence. It provides humanitarian assistance in emergency situations and also promotes respect for international humanitarian law and its incorporation into national legislation.	The main activities of the ICRC regional delegation in Antananarivo, Madagascar include visits to people deprived of their liberty, cooperation with national Red Cross and Red Crescent societies and the promotion of international humanitarian law. In Mozambique, the ICRC operates in the north of the country, which has been weakened by conflict and humanitarian crisis, and exposed to the risk of disasters such as cyclones and epidemics (e.g. COVID19).	https://www.icrc.org/en/where-we-work/africa/madagascar https://www.icrc.org/en/where-we-work/africa/mozambique

Annex 3 : Red Cross Red Crescent Movement partners

Partnership	Role	Ocean Indian environment	References
National and/or regional DRR platforms	Through national and/or regional consultations, DRR platforms promote • Multi-stakeholder engagement and collaboration • DRR knowledge and skills • Advocacy for DRR • Exchange of ideas, advice and best practices • Decision-making for prevention, preparedness and mitigation • Coordination for the integration of DRR into the development process	The Indian Ocean Regional Intervention Platform (PIROI) Four main areas of work are focused on: (1) development of awareness-raising tools adapted to local needs, through collaboration between DRR actors, (2) capacity building of schools to prepare for disaster risk, (3) capacity building of vulnerable communities in disaster and health risk management and the consequences of climate change, and (4) partnership development. The Southern African Development Community (SADC) platform SADC has established a disaster risk reduction unit to coordinate regional programmes for preparedness and response to cross-border disaster risk. The SADC regional platform for disaster risk reduction was launched in 2011.	PIROI Webiste https://piroi.croix-rouge.fr/?lang=en SADC Website https://sadc.int/themes/disaster-risk-management/
Financial partners **(European Union, AFD, World Bank GFDRR, UKAID, Indian Ocean Commission, States, etc.)**	Donors provide funding for programmes in disaster risk management (DRM) and emergency preparedness and response in order to protect people and property from disasters. Funds aim to build the resilience of states and populations to enable a better response to the harmful effects of natural and man-made disasters.	The European Union in Mozambique: in 2020, a total of €14.6 million has been allocated to address humanitarian needs in Mozambique: for conflict-affected populations in the north, for disaster preparedness and education in emergencies, and for food aid in drought-stricken areas. Agence Française de Développement (AFD): The Three Oceans project aims to reduce the impact of disasters, health crises and the effects of climate change on populations within Small Island States of the 3 oceans (Caribbean, Indian and Pacific Oceans).	EU: https://ec.europa.eu/echo/what/civil-protection/european-disaster-risk-management_en and https://ec.europa.eu/echo/where/africa/mozambique_en AFD 3-Oceans: https://www.afd.fr/en/page-region-pays/three-oceans

Annex 3 : Red Cross Red Crescent Movement partners

Partnership	Role	Indian Ocean environment	References
State services	The state services involved in DRR are most often: civil protection services, DRM offices, Ministries of Education and Ministries of Health. These structures fund the development of disaster risk reduction policies and strategies, as well as disaster preparedness, mitigation and prevention measures.	The DEAL, the prefecture and the French authorities (Reunion Island and Mayotte) Academy of Reunion Island Civil protection: SIDPC (Mayotte), EMZPCOI (Reunion Island), COSEP et DGSC (Union of Comores), NDRRMC (Mauritius), BNGRC (Madagascar), INGD (Mozambique), et DRDM (Seychelles).	The DEAL: http://www.reunion.developpement-durable.gouv.fr/ Rectorate Reunion: https://www.ac-reunion.fr/ National Disaster Risk Reduction and Management Centre (NDRRMC): https://ndrrmc.govmu.org/SitePages/Index.aspx
Technical, scientific and/or academic partners	These partners (public and private) bring their expertise in their specialised fields. They ensure the quality of the services provided in DRR activities, while sharing their experience and local know-how.	Météo-France and regional weather services University of Reunion Volcano Observatory, Cité du Volcan, ONF, BRGM, etc	Météo-France: www.meteofrance.re Comoros Volcano Observatory: http://www.comores-online.com/karthala/ University: https://www.univ-reunion.fr/university-of-reunion-island
Civil society, international organisations and the United Nations	These local and/or international organisations support DRR projects with technical and logistical assistance, following their guidelines for DRR practitioners. They promote knowledge sharing and discuss the latest trends in disaster risk reduction, as well as the links to climate change and sustainable development.	Education Cluster International NGOs and UN: Save The Children, CARE, Humanity and Inclusion, UNDP, UN-Habitat, UNICEF, etc. Environmental associations (e.g. Mayotte Nature Environment, Naturalists) Civil society organisations	Global Education Cluster Mozambique: https://www.educationcluster.net/node/811 Mayotte Nature Environnement: https://mayottenatureenvironnement.com/ CARE Madagascar: https://www.care-international.org/where-we-work/madagascar
Communities	Community representatives are key to ensure the sustainability of DRR actions through their involvement and ownership of the measures. Local groups may include youth groups, women's organisations, religious groups, teachers, social groups, etc.	Creation of DRR Clubs in schools for disaster risk preparedness involving school headmasters, teachers, students and parents.	MIARO Project (HI et CARE) Madagascar: https://care.mg/2020/06/30/miaro-newsletter-2/

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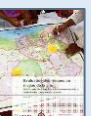
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ActionAid_Resilience Building: A Guide to Flood, Cyclone, Earthquake, Drought and Safe Schools Programming (2016)	
UNDRR_Comprehensive School Safety Framework	
Education à la Gestion des Catastrophes Naturelles, Guide Pédagogique du Maître, Union des Comores (2011)	

REFERENCES AND KEY LINKS

References in DRR	Links
Section 4: Capacity Building	
PIROI_Compte-rendu de formation CATMI (2019)	
IFRC_The Caribbean climate change adaption tool kit: guide for facilitators (2014)	
Section 5: Evaluation of initiatives and skills	
BRL_Mise à jour du plan de gestion des risques d'inondation de Mayotte 2022-2027 - Synthèse et bilan des actions de sensibilisation du public réalisées à Mayotte (2021)	
Welthungerhilfe_Rapport final d'enquête les connaissances, attitudes et pratiques et la GRC à Haïti (2012)	
Save the Children_Knowledge, Attitude and Practice Surveys in Child Protection (2012)	
PIROI_Bilan scolaire projet *Paré pas Paré* année 2019-2020	
Plan International_Child-Centred DRR Toolkit	