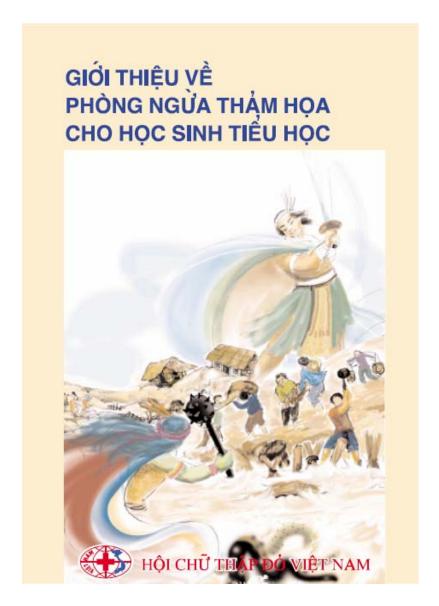
An introduction to disaster preparedness for primary school children



VIETNAM RED CROSS SOCIETY

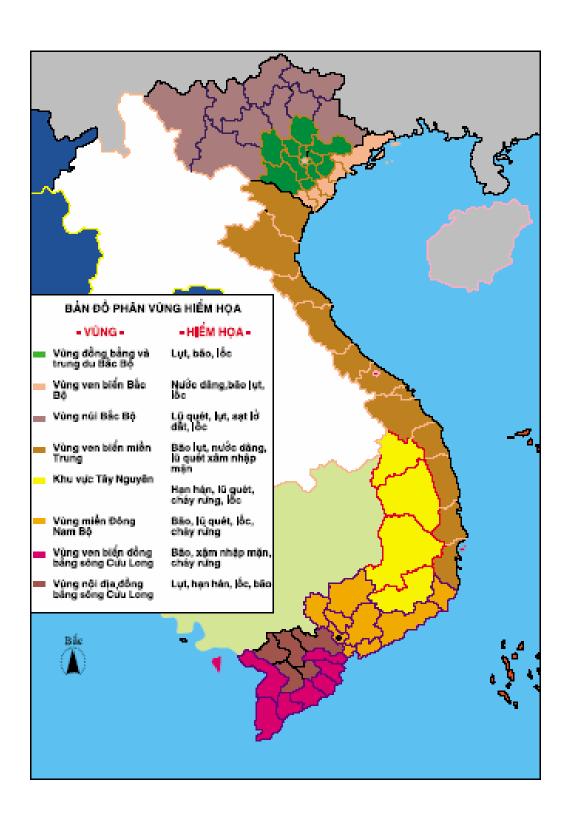
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Forward

Some years ago, Uncle Ho said: "A precious book is a good friend".

This indeed is such a book!

Annually our country is besieged by disasters. Family lives are ruined through loss of life, income and possessions. As I write, the floodwaters rise in the Mekong Delta and as a nation we are deeply saddened by the fact that over 200 children's lives have been lost.

We in the Red Cross are committed to helping communities prepare for and respond to disasters. In each province and in each district we have men and women whose work it is to help at the times of disasters. Their task too is to prepare themselves and others for these disasters - floods, typhoons, landslides and many others. They are well aware too that: "The fate of the country depends upon the children's study". A vital part of their work for the Red Cross is to educate our children to understand the disasters that might happen, to be able to prepare for them and to respond properly to these events.

This book I believe is "precious" and our children's lives precious too. It aims to help children and their families to know what practical steps to take before, during and after disaster to reduce the risk of loss of live and livelihood. Disasters may impact on many aspects of our lives but the magnitude of the loss can be reduced through a better understanding of these events.

Teachers! Help the children in your care to understand this book. Teach them the practical steps clearly. Make it speak to them!

Children! Use this book, share the knowledge that this book provides with your friends, your family, your neighbours and we can each live more safely.

Professor Nguyen Trong Nhan, President of the Vietnam Red Cross Society

Hanoi September 2000

Acknowledgements

Many people have contributed to the development of this edition of "An introduction to disaster preparedness for primary school children".

In 1997, the European Union Humanitarian Office under its disaster preparedness programme (DIPECHO) approved funding for the UNDP/Disaster Management Unit and the Central Committee for Flood and Storm Control (CCFSC) to implement a pilot programme to introduce basic disaster preparedness messages to primary school children. The implementing partner was the Vietnam Red Cross Society (supported by the International Federation of the Red Cross and Red Crescent Societies).

Members of the CCFSC, UNDP/DMU, the Ministry of Education and Training the VNRC and IFRC jointly developed the first edition of the "Disaster preparedness training programme for school children in Vietnam" for primary school children in Grades 4 and 5. During 1999 this was published and later piloted in three provinces of Thanh Hoa, Quang Tri and Long An.

Evaluation of the programme was undertaken by the UNDP/DMU, the CCFSC and also by the Red Cross to participating primary schools in Long An and Thanh Hoa provinces.

Subsequently, the Red Cross has extensively revised the book, to include new chapters, new illustrations and a more comprehensive and, we hope comprehendible text. An easel has also been produced to compliment the book. This comprises some of the most important illustrations in the book and gives some basic teaching notes to provide guidance to the teachers.

We are grateful to the following people for their significant contribution to this edition:

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Hanoi August 2000

Hazards and disasters

1. Hazards

A hazard is any unusual event that has a potential to threaten people's lives, their property and livelihoods. For example, typhoons, floods and fire are hazards.

2. Disasters

A hazard becomes a disaster when it happens where many people are living or have their livelihoods and causes damage to them and their property. For example, during a flood many people drown or are injured, lose their animals and their property.





Tranh 1 :Hiểm hoa

Tranh 2: Thảm hoa

Picture 2 Disaster

3. Types of hazards in Vietnam

The major hazards that affect Vietnam are floods, typhoons, landslides and drought. Others include fires and whirlwinds.

4. Where hazards occur

Picture 1 Hazard

Different areas of the country may be affected by different hazards.

In the coastal provinces, the most common hazards are floods, typhoons and sea surge.

In the mountainous north and central highlands, there are flash floods and landslides during the rainy season and drought in the dry season.

In the Red River delta, there are typhoons, whirlwinds and monsoon river floods. In the south, there are floods on the Mekong River and sometimes typhoons and whirlwinds.

5. When hazards occur

Tropical low-pressure storms and typhoons generally occur in the North from June to September, in the Central Provinces from August to November and in the south from October to December. These bring heavy rainfall that often causes flooding.

Floods usually happen from June to October in the northern river systems; from August to November in the centre and from July to November in the southern and plateau river systems.

Some hazards develop slowly over weeks or months, such as river floods and droughts, therefore we can prepare for them and undertake activities to reduce the damage that they cause.

Other hazards strike suddenly, with little warning, such as flash floods and whirlwinds that are more difficult to prepare for.

There are many things that we can do to prepare for hazards to reduce the damage to our communities so that they do not turn into disasters.

The lessons in this book will explain each hazard in more detail.

- 1. What kinds of hazards have occurred in your area?
- 2. When did the last hazard (such as a typhoon, flood, landslide, etc) occur?
- Did that hazard become disaster?
- 4. Did your family know about the hazard in advance?
- 5. Describe the damage caused by the disaster to your community or your family?

Floods

1. Floods

Floods happen when the water level and speed of rivers and springs exceeds the norm.

Inundation happens when flood water overflows from rivers, springs, lakes, reservoirs, dams and dykes into low-lying areas and covers houses, farm land and trees.

2. Causes

- Long-lasting and heavy rains can cause floods.
- Construction works such as roads, railways and irrigation systems can also cause flooding by preventing the natural flow of water to the sea.
- Floods can also happen when dykes, dams or embankments break.
- Big storms may cause the sea waves to come a long way onto the land and result in flooding and saltwater intrusion.

3. Effects

- Result in injury or death to people.
- Damage houses and property and important possessions, such as: furniture, blankets, mosquito nets and documents, etc. belonging to people.
- Affect people's livelihoods because they destroy crops, kill livestock, wash away fish and shrimp or crab ponds and can cause food shortages.
- Long lasting floods can delay the planting of new crops.
- Can cause soil erosion or cover the land with sand or stones, which reduces farming area.
- Can damage facilities such as hospitals, clinics, schools, roads, railways, telephone and electricity lines.
- Can stop people's daily activities.
- Can disrupt clean water supplies and can contaminate water sources, which could cause diseases.

Floods sometimes are beneficial; for example, they replenish the nutrients in the soil.

4. There are three main types of floods:

a. Flash floods

- Often happen in the small rivers or streams in the mountainous areas.
- Are usually the result of very heavy rains in sloping areas where trees and plants have been destroyed and water cannot be absorbed into the soil.
- Happen quickly and consist of rapid flowing water, which can pick up and sweep along everything in its path.
- Start soon after the rain begins and it is difficult to determine where they occur.
- Can also happen when reservoirs or dams are broken.



Picture 3: A flash flood

b. River floods

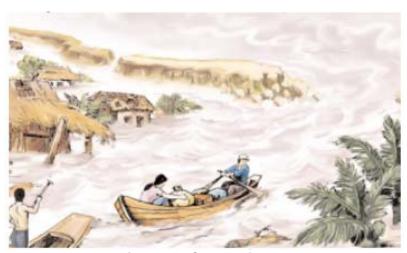
- Are characterised by river water flowing faster and at a higher level than normal.
- Are usually caused by heavy rains upstream.
- Can build up gradually, for example, in the Mekong Delta river systems, or quickly as in the river systems of the centre.



Picture 4 River floods

c. Coastal floods (sea surge)

- Occur when storm surges or sea waves arise suddenly in combination with high tides, which break or over flow the sea dyke, bringing seawater inland and preventing river water from flowing to the sea causing sudden flooding.
- Coastal floods often occur at the same time as low-pressure storms or typhoons near the shore.



Picture 5: Coastal floods

5. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

a. Before floods

- Listen to the TV, radio or public loudspeakers for flood warnings.
- Protect your valuables and important documents by putting them into a waterproof bag and store in a dry and high place.
- Reserve enough food and water for at <u>least one week</u> in a high and safe place.
- If possible, reinforce your house and make it more flood-proof. Help protect your house by filling sandbags and putting them around the house.
- If your family has a boat, make sure that it is well maintained and can be used when necessary.
- Prepare bamboo and ropes to make a mezzanine in your house to stay in. Make sure that you can escape through a window, or through the roof, should the water level become too high.
- Identify where to evacuate to if necessary and how to get there.
- Protect your water supply by covering your well and water containers, etc.
- Know where you can get help if someone in your family is injured. For example, you should know where the houses of local Red Cross members and health workers are.



Picture 6: Clear out ditches



Picture 7: Activities before floods

b. During floods

- Switch off all electricity supply to your house at the main source.
- Move up to a high and safe place, for example, a two-storey building or a hill.
 Watch out for snakes or other dangerous animals as these will also move to the higher ground.



Picture 8: Keep important things and a reserve of food in a high place in your house

- Don't walk into water if you see that an electricity wire or post has fallen into the water or touch any electrical socket to prevent electrocution.
- Don't walk, wade, swim, ride a motor bike or bicycle, play or work in flooded areas as you could be swept away and drown. Even if the water is calm you could fall into a hole, as you can not see it.



Picture 9: Evacuation

- Wear a life jacket if you have one. If not, you can use other things that float to hold onto. For example, inner tubes, big empty, plastic containers, or banana trees can be used as life buoys if you have to move into a flooded area.
- Keep away from riverbanks or springs in the flooded areas as these may be undermined and may collapse.



Picture 10: Red Cross members help people

- Don't drink floodwater. Instead collect and use rainwater to drink and cook with.
 Try always to boil the water. If you have no alternative, use filtered or purified water (using chemicals).
- Don't eat spoiled food or food that was soaked in floodwater. Such food is not clean (as there are a lot of bacteria in it) and you could be infected and become ill.



Picture 11: Collecting rainwater for cooking



Picture 12: Things that should be avoided

c. After the floods

- Use mosquito nets when you sleep during the day and at night to prevent mosquito and insect bites.
- Don't go to areas near to riverbanks, or where there was landslide or to where there are no people living.
- Don't enter any house/buildings that have been flooded unless they are checked by adult.
- Don't touch any damp electrical sockets or turn on the electricity until everything is dry or has been checked.
- Don't use any food that soaked in floodwater.
- Ask the Red Cross staff or Health Workers to check the water quality and to clean your well before using it again.
- Repair your latrine.
- Seek medical help if you or any of your family members become ill.
- Participate in cleaning up the environment in your area.
- Plant bamboo or appropriate trees around your house to protect it against floods.



Picture 13 Cleaning the environment after a flood

- 1. Which types of floods have occurred in your area?
- 2. What was the main damage caused by the flood?
- 3. What are the three most important things that you should tell your parents to do for each phase: before, during and after a flood?
- 4. If there is a big flood while you are at school, what should you do?

Tropical low-depressions and typhoons

1. Tropical low-depressions and typhoons

Tropical low-depressions and typhoons are characterised by rapid circulating winds accompanied by heavy rain. Those that affect our country are formed over the South China Sea or at the Western Pacific Ocean.

Wind speed is measured on the Beaufort Scale. This Scale grades wind speed from Force 0 to 12 and in km/h. When the wind near the centre of a storm reaches Force 6 or 7 (from 39 to 61 km/h) it is called a tropical low-depression; when the wind speed rises to Force 8 or above (62km/h and above) then it is called a typhoon.



Picture 14 Typhoons

Tropical low-depressions and typhoons may affect an area of 200-500km in diameter.

Tropical low-depressions and typhoons can move at 10 to 30km/hour over the sea and may move towards land. They can cause heavy rains, strong winds and storm surge. Once they reach land they quickly lose their strength.

It is difficult to predict the path of tropical low-depression or typhoon, or if, when and where they will strike land, as they can change their direction suddenly. However, we can use modern equipment, e.g. satellites and radar to track their position and can warn people from 6 to 12 hours before they strike.

2. Causes

The causes of tropical low-depression and typhoons are complicated.

To date, scientists have not discovered all the causes of tropical low-depressions and typhoons. However, they came to some conclusions that such storms are easily formed over the tropical sea, especially in the area between the latitudes from 5° to 20° degrees, where the sea water temperature is over 26° Centigrade.

The circulating winds of a tropical low-depression or typhoon blow towards the centre and circulate anti-clockwise.

In a strong typhoon, at the centre, the wind is weakest, the sky clear and there is no rain. This area often has a diameter of a few tens to hundreds of kilometres, and is called the "eye of the storm".

3. Effects

- Ships and boats out at sea maybe sunk.
- Storm surges push seawater onto the land causing saltwater intrusion that affects agriculture, fish, shrimp and crab production
- Saltwater may contaminate wells and other water sources.
- Houses and assets maybe damaged or destroyed.
- Schools, clinics and markets may be damaged or destroyed.
- People can be injured or killed.
- Livestock maybe killed.
- Crops can be damaged or destroyed and food stocks lost.
- Trees can be damaged, uprooted and may block roads.
- Power lines can be damaged and may cause fire or electrical accidents.
- Communication lines can be cut.
- Heavy rainfall may cause floods and landslides.

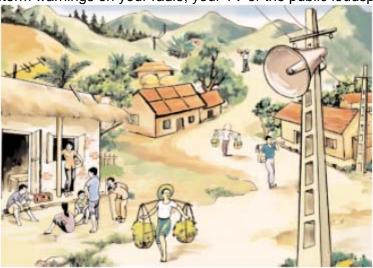


Picture 15: Serious damage caused by typhoons

4. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

a. Before a tropical low-depression or typhoon

- Help plant trees around your house and school to act as a windbreak to stop the soil being washed away.
- Help to trim dead branches and cut down dead trees to reduce the danger of these falling on your house during a storm.
- Help put important documents in a waterproof plastic bag.
- Store food, fuel, potable water, medicine and other necessary items in a safe, high place during the storm season.
- Listen for storm warnings on your radio, your TV or the public loudspeaker system.



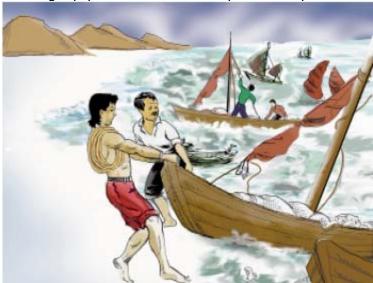
Picture 16 Listening to typhoon warnings

- Buy spare batteries for your radio and torch (to use if there is a power cut).
- Help your parents reinforce your house to make it more resistant to high winds.
- Bring inside anything that might be picked up and blown away by a strong wind.



Picture 17 Reinforcing houses before typhoons

- Protect water sources from contamination by covering wells and water containers.
- Identify a safe place to take shelter if you have to leave your house.
- Move your animals to a safe place.
- If your family has a boat, help to put it in a safe place.
- Protect your fishing equipment and fish, shrimp and crab ponds.



Picture 18 Bringing boats to a safe place to avoid typhoons

b. During a tropical low-depression or a typhoon

- Never go out to sea when there is a tropical low-depression or typhoon.
- Stay away from any broken electric wires or wet electric sockets.
- Stay inside a strong house or building and don't go out.
- Take care of smaller children and always stay close to your parents.
- Never take shelter under a tree, or stand near electric poles as they could fall on you and cause injury.

If heavy rainfall causes floods, read Lesson 2 "Floods", to know what best to do.

c. After a tropical low-depression or a typhoon

- Continue to listen to storm warnings on TV, radio or loudspeaker system.
- Remind your parents to check that the electrical sources in the house are safe before using.
- Check any damaged parts of your house to and carry out repairs.
- Check the water source, to ensure it is not polluted by dead animals, or dirty, or contains salt water.
- Check the dykes and the trees surrounding your house for damage.
- Help to check whether your family members and neighbours are affected.
- Help to check the animals are all right.



Picture 19: Activities after a typhoon

- 1. What damage can a tropical low-depression or a typhoon cause to your house?
- 2. What documents are important to your family?
- 3. What things can you do to make your house safer to withstand a tropical low-depression or a typhoon?
- 4. Are there any trees near your classroom or house, which might fall down during a tropical low-depression or a typhoon?

Landslides

1. Landslides

Landslides are earth, mud and rocks moving rapidly downwards on a slope.

Landslides often occur in the mountainous and hilly areas and may cover several kilometres.

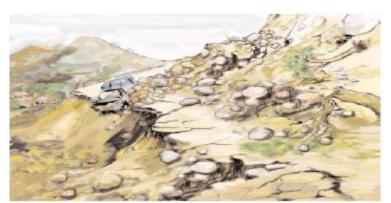
2. Causes

Landslides are a result of the natural vibrations of the earth that loosen the soil and rocks on hills or mountains.

They also occur when there are heavy rains or floods that cause the earth to become saturated and to fall down.

Landslides may also be caused by additional weight on a slope (like building works), or in heavy rains after deforestation or fire.

In addition, people's changes to water sources also may cause landslides. Landslides are more widespread than any other geological event.



Picture 20 Landslides in the hilly or mountainous areas

3. Effects

- Landslides may result in death or injury to people as they can be buried under debris or collapsed buildings.
- Mud, rocks and rubble fall with such force and speed that it will destroy or seriously damage houses, people's property and block roads.
- Land that is covered by debris can not be used for cultivation.
- Animals can also be killed or injured.

4. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

a. During the time without landslides

- Replant new trees where trees have been cut down or have died.
- Do not fell trees. You can trim some branches or take off dead wood. Do not remove the bark of the main trunk.



Picture 21 Planting trees to reduce landslides

- Find out whether, in the past, landslides have occurred near your house.
- Your family should not construct a new building in a landslide prone area, for example at the base of a slope, near a riverbank or close to the shoreline.
- Regularly observe the land around your house for signs of landslides, for example, slanting trees, cracks in the walls of buildings or on the hillsides, depressions in the ground or in the roads.
- Talk about what each of your family members should do if a landslide occurs.

b. More things to do if it starts to rain heavily for a long time

- If you live in the area where landslides occur frequently, evacuate to a safe area if you are requested to do so.
- If you are living close to a spring or river be especially alert.
- Listen to the weather forecasts and warnings on the TV and radio about heavy rains.
- Remain awake and be ready to move out to a safe area.
- Listen for any abnormal sound, which is only caused by earth movement, such as: trees breaking or the crushing of stones.
- Watch out for the change of water from clear to muddy colour, as such change is caused when there are landslides upstream. Be ready to move away. Time is short. The most important thing is to <u>save yourself</u>, don't save your belongings.
- Try to avoid the path of a landslide. If you cannot, try to roll like a ball and cover your head with your hands.

c. After a landslide

- Keep away from a landslide area because the earth is still unstable and there may be more landslides.
- Don't enter any damaged buildings if adults did not check their safety.

- 1. What should you watch out for if you live in a hilly area and it has been raining heavily for a long time?
- 2. What will you tell your parents and other family members to do if you live in an area where there have been landslides in the past?
- 3. How should you protect the trees in your area?
- 4. Have you seen any cracks in the hillsides near where you live?

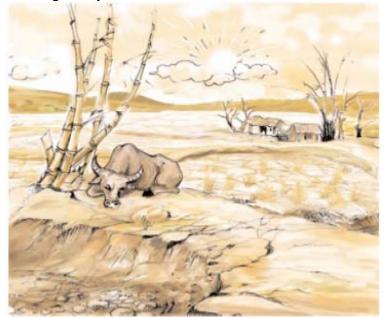
Drought

1. Drought

Droughts occur through the serious lack of rain over a long period of time, which affects either, or both, the surface or underground water supplies.

Droughts threaten people's livelihoods especially if they occur in a populated area.

Droughts can happen even when there is no shortage of rain. For example, if forest has been cut down and the ground cannot absorb water, the water will run away. Also if there has been a shortage of rain during the wet season, or the onset of the wet season is late, a drought may occur.



Picture 22: Drought

2. Causes

- Lack of rain for a long time.
- Natural environment is destroyed and the soil can not absorb water due, for example, to deforestation and slash and burn cultivation.
- People exploit and use water sources inappropriately.
- Evaporation of water from lakes and rivers which is not replaced by rainfall.
- · Alteration to world weather patterns.

3. Effects

- Difficulty in getting enough water for drinking, cooking and daily use.
- Increased sickness, especially to children and old people.
- Reduced productivity of crops and trees, which may die or cannot be replanted, may lead to food shortage.
- Fish and shrimp die as water in ponds and lakes disappears.
- Farm animals like pigs, cows and buffalo may either have to be sold or, if the drought lasts for a long time, may die due to thirst or sickness.

As rivers stop flowing, so the areas near the sea can be effected by saltwater.

4. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

a. Before drought

- Regularly listen to the TV, radio, and loudspeakers for weather forecasts and warnings of drought, especially when there has been little or no rain.
- Don't waste water. Protect all your water sources carefully.
- Repair broken pipes and taps.
- Store water in any possible container.
- Store seed crops in a safe place for use after the drought.
- Collect grass to feed the animals.



Picture 23: Storing water

b. During drought

- Listen to the radio, TV and loudspeakers regularly for advice about what to do during the drought period.
- Don't waste water. Use household water, for example, to water the plants or in the latrine.
- Collect water from the nearest safe drinking supply.

c. After drought

- Help your family to check and repair the water systems.
- Help your parents to sow seed crops.

- 1. What can you do to help your family use less water?
- 2. What sorts of containers are available in your house to store water?

Other hazards

Many other types of hazards affect our country. Some of these are detailed below.

A. Thunderstorms and Lightning

1. Thunderstorms and lightning

- a. Thunderstorms are huge dark clouds, which reach high into the sky and are accompanied by heavy rain, thunder, flashes of lightning, gusts of strong wind and sometimes hail.
- b. Lightning occurs mainly in such clouds and accompanies thunder. Lightning is a giant spark of electricity, which comes from the sky and hits the earth. It strikes high points such as tall trees, electric poles and mountaintops. Lightning has a high voltage and everything, including air, becomes an electrical conductor. Lightning is also attracted to metal objects and water, which are good conductors of electricity.

2. Effects

- Thunderstorms are dangerous because they produce lightning, which may injure people or cause their death.
- Lightning can strike and destroy buildings, trees and the electric power system in your community.
- Lightning may also start fires.
- Heavy rain from thunderstorms can also lead to flash flooding.

3. Things should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

- If a thunderstorm is approaching, go inside a building and sit on a wooden bed or chair with your feet not touching the ground.
- If you can't get inside, or if you feel your hair stand on end, which means that lightning is about to strike, crouch down and sit like a frog, on the balls of your feet, put your hands on your knees and lower your head.
- Stay away from tall things such as isolated trees, towers, fences, electricity poles, telephone and power lines, which attract lightning.
- Don't go out, ride a bicycle, hold or touch any metal things as you may be hit by lightning.
- If you are in a boat or swimming, get to land immediately because water conducts electricity.
- Turn off electrical appliances, except lights, which can be left on (as they will not increase the chances of your house being hit by lightning).
- Don't use a telephone until the storm is over.



Picture 24: Don't sit under an isolated tree during a thunderstorm

Did you know that you can tell how far away the thunderstorm is by counting the seconds between a flash of lighting and the sound of thunder. A three-second interval is about equal to 1km.

B. Whirlwind

1. Whirlwind

Whirlwinds are funnel shaped columns of swiftly circulating air, which move quickly over land or sea. The column is visible because of the material (dust, sand, straw) that they lift up from the ground.



Picture 25: Whirlwind

2. Causes

The exact causes of whirlwinds are not clear, however, they may arise when there are sharp differences in wind speed and may be worse in hot weather.

3. Effects

- Whirlwinds often occur suddenly and last for a short period. They can have a
 devastating effect on a small area. Whirlwinds can pick up houses, possessions
 and people.
- Whirlwinds occur suddenly and without warning. They can cause injury and death to people and animals as well as destroying houses, crops and trees.

4. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

- If possible, get out of its path and seek refuge in a safe place.
- Stay indoors during the duration of the whirlwind. Hide under a stairway, a table or bed.
- If you can not avoid whirlwinds, jump into a nearby ditch or lie flat on the ground.



Picture 26: Hailstorm

1. Hailstorm

A hailstorm is rain accompanied by hail, which are solid balls or lumps of ice, in different sizes and shapes, which fall to the ground. Normally hail ranges from the size of a pea to the size of a corn seed but sometimes they can be as big as a chicken egg or even bigger.

2. Causes

When thunderstorm clouds develop, water drops in the cloud are pushed up by air currents and meet freezing cold air they become frozen and then fall as hail.

3. Effects

- Hailstorms can destroy crops, damage trees.
- Large hail can cause injury and even death to people and animals if they cannot take refuge.

4. Things should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

- Stay indoors and don't go out until the hailstorm is over.
- If you cannot get inside, try to cover your head with a hard hat or with your school board or bag.

D. Fire



Picture 27: Don't play with fire

1. Fires

Fires are uncontrollable flames.

Fires may occur in populated areas, in cultivated land (at the end of a harvest) or in forests.

2. Causes

Fires may be caused by people who are careless with flammable materials, such as petrol, kerosene, rice straw, firewood and unsafe electric appliances.

They occur more in very hot weather, in the dry season or in a period of drought or in forests.

3. Effects

- Fires burn houses, crops, trees and property.
- Fires may cause death or severe burns to people and cause disfigurement.
- Fires burn different items and produce deadly toxic gases into the atmosphere.
 These gases can quickly suffocate people. Fire also generates smoke that blocks vision and stings the eyes.

4. Things that should be done to protect yourself and your family Together with your parents and other family members, undertake the following activities:

- Don't play with fire, matches or lighters.
- Don't burn rice-straw or waste near your house.
- Don't leave your kitchen when you are cooking.
- Check electric wires and household appliances regularly and make any necessary repairs.

- Talk about fire with your family and agree on what each one of you should do in case of fire.
- In case of fire, shout "Fire!" and get out of the house as quickly as possible. Once you are outside, stay out and call for help. You should never go back into a burning building.
- If you are caught in a smoke filled room, crawl on your knees to get under the smoke and escape as quickly as possible.



Picture 28: Crawling out of a building that is on fire

- If your clothes catch fire, drop to the ground, cover your face and roll back and forth until the flames go out. Don't run, as it will make the fire burn faster.
- If you or someone in your family has been injured by fire, immediately cool the burnt area with clean water.
- Do not cover or apply anything to a burn. Ask for help from the nearest Red Cross member or health worker.

- 1. What should you do to protect yourself if lightning, whirlwind or a hailstorm occurs in your area?
- 2. What should you do to prevent fire?
- 3. What should you do if you are in a burning house?
- 4. What should you do if your clothes catch fire?
- 5. What should you do if you see someone playing with fire?

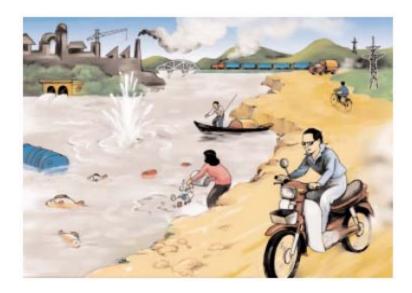
People and their effects on hazards and disasters

- 1. There are many ways that people contribute to hazards and disasters, some examples are:
- Increase in population making greater demands on land, water resources and other needs. If these requirements are not met, people will over-exploit the natural resources that will destroy the environment.
- If hazards occur in a densely populated area, the effects of the disaster will be bigger.
- Cutting the forest and not planting or farming new trees.



Picture 29: Don't cut down the forest

- Slash and burn agriculture.
- Cutting down natural mangrove forest for firewood, shrimp farming or for-tourism development.
- Destroying coral reefs, for coral to be used for building materials, or to make space for fish farms or to sell to tourists.
- Over-fishing rivers, lakes and the sea, which depletes the fish stock.
- Fishing using explosive substances or electricity.
- Building unsafe factories without proper care for waste disposal.



Picture 30: Don't pollute the environment

- 3. People can do many things to help to prepare for hazards and reduce the affect of disasters, some examples are:
- Understanding more about disaster preparedness.
- Having sufficient water and food stored in a safe place.
- Undertake family planning.
- Replant trees and protect the watershed to help prevent flash floods and landslides.
- Planting mangroves to protect dykes and reduce the impact of wind and waves.
- Detect any damage to the dykes, dams and reservoirs and report to the local authorities immediately.
- Avoid building houses in disaster prone areas.
- Follow fishing regulations. Do not fish during the breeding season.
- Factories built to meet safety and health standards, including treating waste properly, which will help to protect the environment.

Picture 31: Planting mangroves

- 1. What ways do you think that people in the area in which you live contribute to disasters?
- 2. What ways could you and your family reduce the risk of disasters?



Red Cross pioneers and disaster preparedness

1. The Vietnam Red Cross Society

The Vietnam Red Cross Society (VNRC) is a social mass organisation, which carries out humanitarian activities to help vulnerable people. It is community based and has offices throughout the country from the commune, district, province to the national level.

The VNRC plays an important role in disaster preparedness.

In many schools there are Red Cross units where school children are organised into "Red Cross pioneer units".

If there is no Red Cross unit in your school yet, talk to your friends and teachers to try to establish one!

2. Tasks of the school Red Cross Pioneer in disaster preparedness

- 1. Talk about disaster preparedness activities to other friends, family members and neighbours.
- 2. Undertake environmental protection activities, such as protecting and planting trees and cleaning up litter.
- 3. Help to take care of friends, neighbours and lonely, old or disabled people in the aftermath of a disaster.
- 4. Teach and practice First Aid to help others in case of accidents.
- 5. Help with food preparation before a disaster strikes. There should be enough food, drinking water, necessary household items and medicine for your family to use for one week.
- 6. After a disaster, participate in cleaning the environment, which will help to prevent sickness.



Picture 32: First Aid training

- 1. Do you have a Red Cross pioneers unit in the school? If not, do you want to have one?
- 2. What can you do to help your parents, friends and neighbours before, during and after a disaster?
- 3. What First Aid do you already know?
- 4. Why is it important to plant trees in the hilly areas and mangroves in the coastal areas?

Some things to do and not to do

Together with your parents and other family members, undertake the following activities:

DO

- ✓ Listen to (storm and flood) warnings.
- ✓ Reinforce your house.
- ✓ Protect drinking water sources, for example cover your wells.
- ✓ Identify safe routes and places for evacuation.
- ✓ Store food, water and common medicines in a safe place.
- ✓ Switch off the electricity in your house in a storm.
- Keep floating devices in your house (for example, an inner tube) that you can use as a life-bouy during flooding, or wear a life jacket if you have one.
- ✓ Take shelter in a safe place.
- ✓ Take care of smaller children to help them avoid accidents.
- ✓ Eat cooked food and drink boiled water.
- ✓ Use mosquito nets night and day to avoid mosquito and insect bites.
- ✓ Know where to get help in an emergency.

DON'T

- □ Touch electricity wires or sockets when they have been wet.
- Play with fire.
- □ Walk in areas that have had recent landslides or that is prone to landslide.
- □ Play, swim or walk in floodwater.
- □ Drink floodwater or eat soaked food.
- □ Go into old buildings that may collapse.
- □ Sit under trees, ride bikes or touch anything metal in a storm.
- □ Walk on riverbanks or dykes in heavy rains.

If you have any queries regarding the booklet or would like to obtain further copies in Vietnamese or English, please contact either:

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A collaboration between:

- The Vietnam Red Cross Society
- The International Federation of Red Cross and Red Crescent Societies
- The United Nations Development Programme (Disaster Management Unit)
- The Central Committee for Storm and Flood Control
- The Ministry of Education and Training
- The Freeman Foundation, USA
- The American Red Cross Society
- The Luxembourg Government
- The teachers and children of Grade 4 and 5