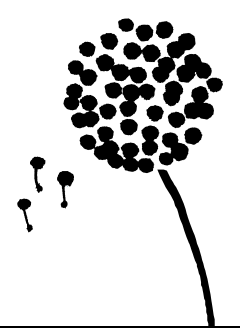


Preparing for disaster



TEARFUND

A PILLARS Guide

by Isabel Carter



Partnership in Local Language Resources



Preparing for disaster

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by Isabel Carter

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Preparing for disaster

A PILLARS Guide

Introduction to PILLARS Guides

These guides are designed for use in small group situations where one or more people are literate and confident enough to lead others in group discussion. They aim to provide material for discussion around a subject either in isolation or as part of a regular group meeting; for example of farmers, literacy trainees or Mothers Union members. Ideally just two or three pages should be used each time, allowing plenty of time for discussion of the issues raised and for carrying out some of the practical ideas suggested. No training is first necessary for the discussion leader.

PILLARS Guides aim to increase confidence among group members, so that they can successfully manage change within their own situation without the need for outside help. They try to build on existing knowledge and experiences among the members or within their community, so that different ideas can be tried out, adapted, and then either abandoned if not found useful, or adopted if found useful.

Objectives of this guide

- To increase awareness of the need to prepare for a possible disaster
- To reduce the impact of disasters by helping a community to work together more effectively, by considering their ability to respond to disaster
- To enable local facilities to respond adequately to any kind of crisis
- To educate local people in basic emergency procedures

Anticipated outcomes

- Effective and ongoing community organisation
- Awareness of the benefits of preparing for unexpected and far reaching situations which would have considerable impact on local communities
- Communities educated in a variety of self-help measures including emergency healthcare and maintaining emergency water supplies and sanitation
- Local organisations working effectively together at all levels
- An improved network of local communications
- Improved co-operation with local authorities

Glossary of difficult words

alarm	any kind of noise or signal that warns of danger
circulation	the movement of blood around the body, pumped by the heart
crisis	an unstable period of great trouble or danger
cyclone	a violent tropical storm with very strong winds and heavy rain. This term is used in Southeast Asia. See also <i>hurricane</i> and <i>typhoon</i>
disaster	an event, either natural or man-made, that causes great distress or destruction
drought	a long period with little or no rainfall
earthquake	strong shaking of the earth's surface caused by movement along geological fault lines
evacuation plan	a rapid and safe way to move every person out of danger to a place of safety
ferro-cement	cement, used in building structures, which is strengthened by adding a core of wire or wood
flood	water, usually from a river or sea, which overflows and covers land that is normally dry
hazard	an event or situation which could lead to danger, loss or injury
HIV	human immunodeficiency virus – the cause of AIDS
hurricane	a violent tropical storm with very strong winds and heavy rain. This term is used in the Atlantic and Caribbean areas. See also <i>cyclone</i> and <i>typhoon</i>
impact	long-term and sustainable change resulting from an activity
NGO	non governmental organisation
potassium permanganate	dark purple crystals which dissolve in water to form a liquid that can be used as bleach, disinfectant and antiseptic
risk	the possibility of danger, loss or injury from an event or situation
sanitation	practical methods for safely disposing of human waste in ways that do not harm public health
stabilise	to restore order and balance to a rapidly changing situation or state
trauma	a powerful shock or injury that may have lasting effects physically, emotionally or both
traumatised	suffering from a long-lasting state of <i>trauma</i> (see above)
typhoon	a violent tropical storm with very strong winds and heavy rain. This term is used in the China seas and west Pacific areas. See also <i>hurricane</i> and <i>cyclone</i>
unconscious	a state that appears like deep sleep when a person loses all awareness of their surroundings following an injury or illness

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Nothing ever happens here....

- For most people a disaster is something that always happens somewhere else, never in their own area. Most people see little point in preparing for a disaster that may never happen to them.
- Sadly, disasters come in many forms and no community is ever safe from disaster striking. Sometimes there is little, or no, warning. Usually it is the response of the local community within the first day or two that determines how many lives will be saved – long before government or outside experts arrive to give help and support. It is often possible to prevent a disaster becoming serious by taking action before disaster happens.
- Some areas are known to suffer from flooding, cyclones or drought. But other kinds of disasters, such as major travel accidents, fire, acts of terrorism, or war can strike anywhere. Remember – most individuals and communities have only one chance to cope with a disaster.



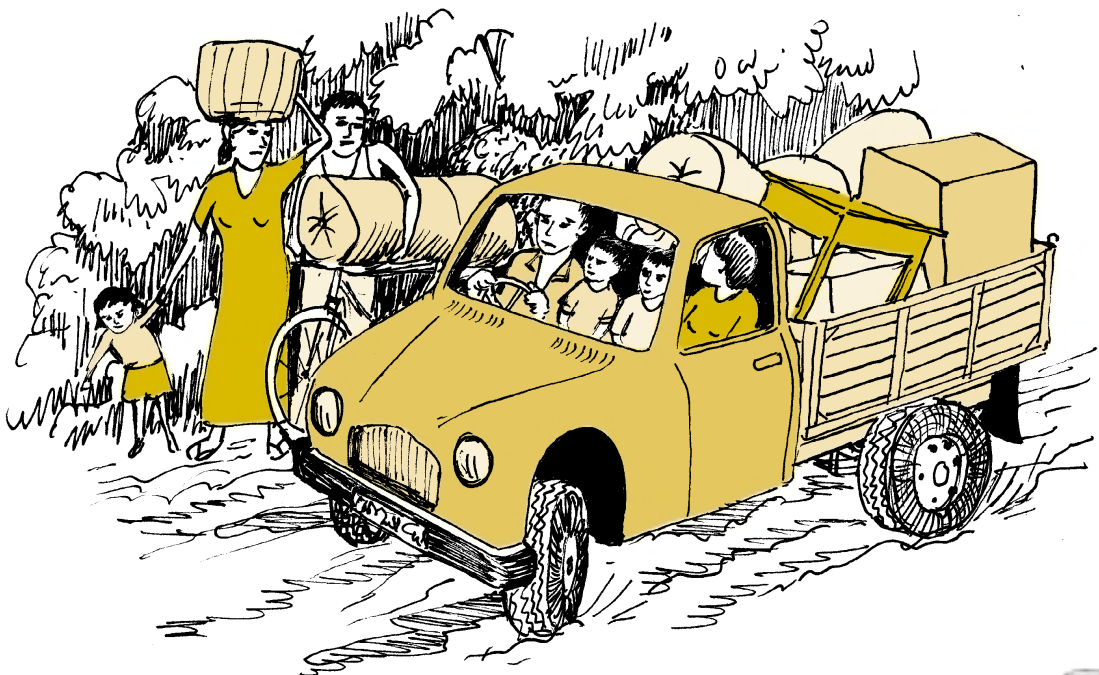
Discussion

D1

- Have you or your family ever had a major family crisis? Discuss your emotions, fears and the actions taken by members of the family.
- Can anyone remember any kind of disaster that has happened in our area? What was its impact?
- How did the community respond?
- Can anyone remember any situation that would have become a disaster if the right action had not been taken in time?
- How would your community respond if a disaster, such as a major road accident or a fire, involving many casualties, struck tomorrow?
- What kind of disaster do you fear most? Why is this? Is there anything that could be done to lessen the impact of this kind of disaster?

What makes a disaster?

- Though the problems that may lead to a disaster can happen anywhere, some people are able to respond quickly and protect themselves from the effects of the disaster. They may have enough money to move away, they may have well-built homes or enough money to replant their crops. It is often the poor that are most at risk of suffering when disaster strikes.
- However, money alone is not enough. Sometimes poor people survive better because they are more able to work together and help each other as a community.
- A disaster situation arises when people are unable to cope with a sudden and dangerous event. If they are able to cope, the event does not lead to a disaster.



Discussion

D2

- What do you consider to be a disaster?
- Can you think of a problem in your community where one part of the community was able to cope and another was not? What made the difference?
- Can anyone remember an occasion when their family was affected by a disaster that did not affect their neighbours? What made the difference?

What risks threaten our community?

- There are several different kinds of risk or hazard. Probably the most common are natural events such as floods, cyclones, earthquakes or droughts. Sometimes there is time to prepare; sometimes they may strike with no warning at all. Not all these events necessarily lead to a disaster situation. Indeed, sometimes they may even bring benefits. For example, flooding can improve soil fertility and cyclones may bring rainwater to very dry areas.
- Some risks are from problems caused by the activities of human beings. Drought, floods and landslides may be caused by cutting down too many trees. Crop failure may be the result of a government or local organisation encouraging an unsuitable crop or variety. Poor people may be forced to live in unsuitable or dangerous areas because there is no other land available to them.
- Some risks come through social problems such as terrorist action, war, refugee movements and racial tensions.
- Other risks may be more local and could include fires, serious road accidents, chemical leaks, high winds and landslides. Communities which have tourist attractions or which hold special festivals are also places where the unexpected could occur.



Discussion

D3

- What kind of hazard would be most likely to threaten our community? Are there any warning signs? Draw up a list.
- What circumstances make certain hazards common in our community? You might include: building with grass or palm leaves, dry grass in the bush that may lead to bush fires, too much rain, insects destroying a crop or people living on steep hillsides.
- How well equipped are the local authorities to cope with any of these events?
- How well equipped is our community to deal with any of these events?

Who is most at risk?

Certain groups of people are much more at risk from the impact of disaster.

- These include people who have problems in physically getting away from the disaster, such as the elderly, the disabled, pregnant women and women with young children.
- It includes people who will find it hard to recover from the impact of a disaster, such as the young or the poor.
- It includes people who for some reason have fewer resources. Maybe their farms are too small to produce extra food to store, they have no animals or a family member has died recently.
- Groups which are excluded from the community because of racial, tribal or caste differences may have no opportunity to share resources and support during and following a disaster.



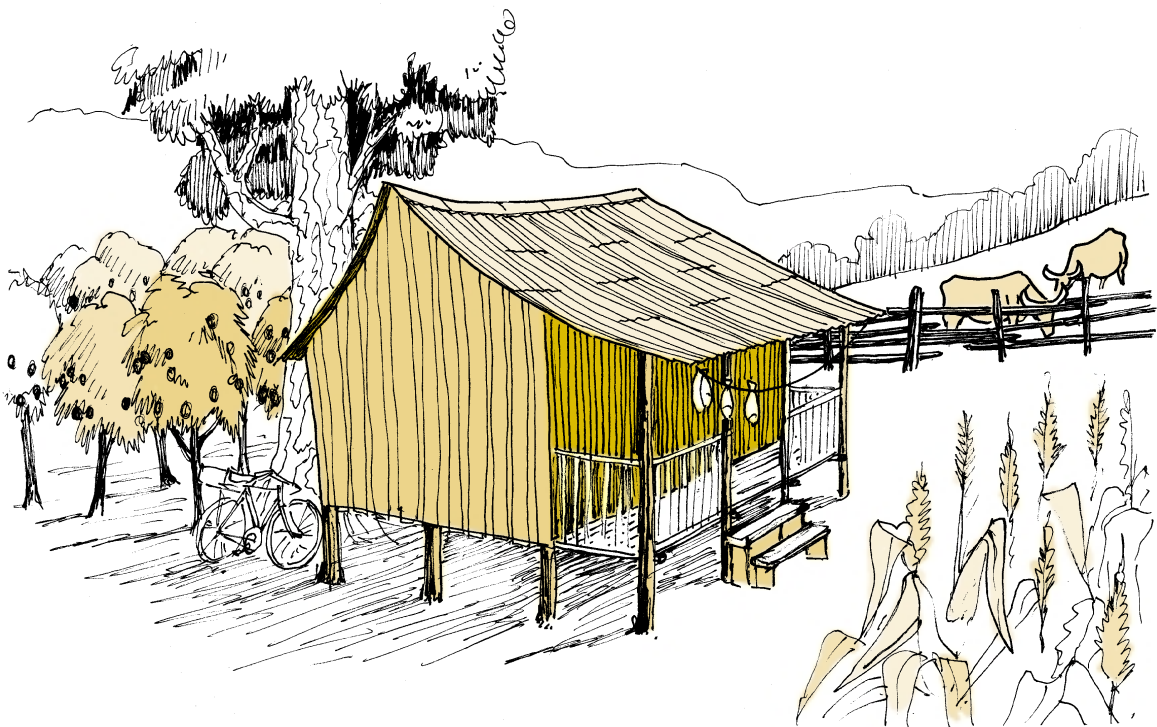
Discussion

D4

- Imagine that a large dam across a big river, some 100km upstream of our community, develops huge cracks. The authorities know that it is likely to burst within the next 24 hours. They warn all communities downstream to evacuate immediately using radio broadcasts and officials with loudspeakers. Discuss how people in your community would be affected.
- What would be the quickest and safest escape route to use?
- Consider the different types of people in our community. How will they be affected immediately following a disaster, and in the long term after several weeks or months?
- Who is most likely to suffer serious effects? Why?
- How could you plan to help the groups of people likely to suffer the most serious impact?
- What local organisations are there who might be able to help you in this?

What is most at risk?

- In a disaster, saving people's lives is always the first priority. But other things are also at risk. These may include all kinds of property, livestock, crops, food stores, fruit trees, water supplies, and resources used to earn money, such as tools, fishing equipment, transport or fuel supplies.
- Different people will have different personal priorities and it can be useful to discuss what these would be in a disaster. It may also be very useful to discuss what priorities the whole community might have in a disaster.



Discussion

D5

- Divide people into pairs and read this story aloud:

You wake up and realise your house is on fire. The entire roof is on fire and there is nothing you can do to save the house. There is no-one else in the house. You have just two or three minutes to take out with you the five things that are most important to you. What would you take out?

- Give people a few minutes to decide which five things they would take out first.
- Then ask each pair to decide which item they would take out first and why.
- Ask several pairs to share with the others what items they have chosen.
- Explain that they have made a priority list. From all their possessions, they *prioritised* the five most important. Then they decided on their top priority and gave the reasons for this.
- After people have shared their first priority, discuss whether this would benefit the whole community. Should people reconsider their priorities?
- Try repeating this exercise to consider community priorities. Here is another suggested situation:

You hear on the radio that a cyclone is bringing severe winds and that flooding will reach your area in one hour's time. Think about your community and decide which five actions you would take to save as many lives and as much property as possible. Which would be the top priority?

The sample chart below shows examples of what the priorities might be if a cyclone was forecast.

Priorities
Provide transport
Secure emergency shelter
Medical supplies
Water supplies
Secure documents
Secure personal possessions
Secure roofs

How is the community organised?

- Every community has a number of groups and a number of leaders, some official, some unofficial. Local government leaders and registered organisations may give reliable leadership and direction, but sometimes local people may not always have full confidence in these.
- Groups within your community may include self-help groups, co-operatives for marketing produce, religious groups, youth groups and extended family groups. Many of these groups may have experience that could prove useful in a disaster situation.
- Some people are natural leaders within your community, such as head teachers, elders, midwives or health workers. They have wisdom and respect. People are likely to turn to them when they are in difficulty or need advice. They may also be the people asked for advice during a disaster situation.



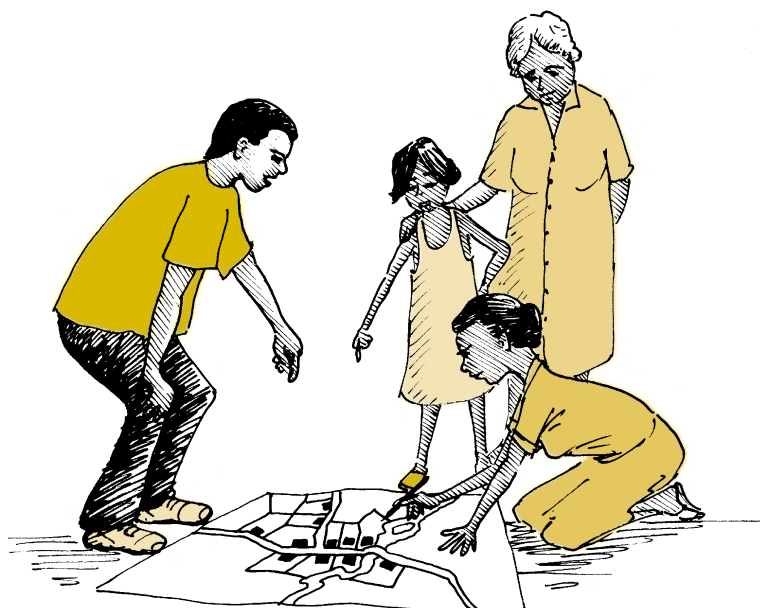
Discussion

D6

- List all the community leaders in your area, both government and non-government. In an emergency situation, when confusing and sometimes different directions are being given by those in authority, whose directions would be followed?
- What experience do these leaders have in organising people? What experience do they have in planning? How could their experience be widened to help prepare to cope with a disaster?
- How closely linked are these leaders to government officials? How can links between government officials, church groups, NGOs and community groups be strengthened and communications improved?
- How effective are church groups in training and preparing members for leadership? How can this be improved?

Community mapping

- Once people are aware of the need to make preparations for a possible disaster, it can be very useful for them to map their community. Maps allow people the opportunity to look at their whole community and consider things in different ways. Maps can help show how certain things may be linked; for example, poor housing on land that often floods, or wells built near the homes of wealthy people. Maps drawn by different groups, such as men, women or older people, may reveal some interesting differences.
- Maps can either be drawn on the ground, using sticks, leaves and stones to represent things or with large sheets of paper and pens. People should be encouraged to note natural features such as rivers, water sources, raised ground and large trees, as well as clinics, schools, churches, houses or roads. They should also note places where there may be a particular risk, eg: weak bridges, open wells, steep slopes at risk of landslides.
- Encourage the participants to relax and allow everyone to share their views within each group. Once each group has finished, provide time for all groups to present their maps and to allow discussion.



Discussion

D7

- Set aside a day to carry out community mapping. This exercise is best done with groups of between 10 and 20 people. Different ages, and men and women may have very different ideas. Either use mixed groups, or allow several different groupings of people to draw their own maps. For example, young people, married women, men and elders could all produce maps.
- What might be the positive results of carrying out community mapping?
- Why do different age groups and men and women mention different points on their maps? How can different observations be combined? Whose viewpoint and observations are most important?
- How should the findings be shared and used?
- Are there any things that only one group identifies? What are these? Why are some groups more likely to notice certain things?

Physical resources

In an emergency there is no time to prepare resources. Communities have to use what is immediately available. Emergency water supplies, health care, food and shelter are likely to be the priority needs.

After the community mapping, consider what natural resources could be improved:

- Little-used springs on higher ground that may have been replaced by piped water supplies or water tanks could be repaired and protected. Maybe there are large community buildings on higher ground, away from the centre of villages and towns, which could be strengthened for use as emergency shelters.
- Planting trees will have many benefits. They will provide a source of fuel and building supplies. They help stabilise soil so it is not easily washed away during flooding. They may provide shelter from storms or safety during flooding. If planted along roads, they may help as markers during flooding.



Discussion

D8

- Consider in turn the impact of different disasters: flooding, high winds, fire, crop failure, livestock epidemic, earthquake or war. For each one, spend time thinking of how people would respond and what would be needed.
- For poor communities there may be few resources available, but every community has some resources. Consider what resources are available to your community.
- Consider where people would turn to obtain water supplies if the normal supplies are not available. Clean water supplies will usually be the most urgent need.

Developing people's skills

- In a crisis many skills are needed, but there may be great confusion and chaos. It is important that there are enough people in the community with skills that may prove vital in an emergency. Older people may have valuable skills. People may also have training that they no longer use in their present situation.
- Useful skills could include keeping good records, organising people or work, building, medical first aid, experience in building water tanks or latrines, health training of all kinds, driving and vehicle repair, catering and managing money. In areas at risk of flooding, the skills of boatmen, lifesavers and people able to swim would prove valuable. Older people may know how to prepare and use herbal medicines and how to collect and use wild plants as food.



Discussion

D9

- What skills are most needed in the community? What barriers are there to obtaining training?
- How can people's knowledge and skill be shared with others?
- What skills can be developed? For example do all the people in the community who can swim, also know how to rescue others in the water? Who could teach life-saving skills?
- What practical steps could be taken to learn skills that are lacking in the community? For example, could several people attend a First Aid course? Could young people be encouraged to consider building or vehicle repair as a career?

Raising the alarm

In a disaster people are desperate for information, and incorrect rumours can create panic and cost lives. Reliable sources of information are essential. Radio stations, government officials or NGOs should be investigated *before* a disaster to discover who could supply accurate information. Plan how to share this vital information as quickly and accurately as possible.

- All communities use a variety of sounds to pass on messages. These can range from drums passing on news of deaths, to school bells and gongs beaten to tell churchgoers of an approaching service.
- Are there any sounds that are already used to call people together? Discuss the best way of attracting the attention of the whole community to pass on vital news that may help to save lives.



Discussion

D10

- What existing resources are there which already make a loud and unusual noise? Are there other little-used sources of noise, such as horns? Are there churches or organisations with megaphones?
- Make contact with radio stations that broadcast to your area. Who are the people who should be contacted for announcements to be made over the radio? What kind of information will they broadcast? Where can reliable information be obtained?
- In many communities messages move very fast by word of mouth. Discuss how this works in your community, and what channels can be used in times of need.
- In many places the church is very good at passing on information through its structure. How does this work? What can we learn from this? How can it be used for passing on alarm messages?
- One community in the Philippines ties ropes over rivers with flags and small bells attached. If the river level begins to rise, the water knocks the flags and bells so that the bells start ringing. Can you think of other similar ways of raising the alarm?
- Plan for registration centres so that people can quickly find out who is missing and where relatives can go to find news. Schools or churches could plan to act as such centres and appoint several respected people to keep accurate lists of families in their area. How could you make known the need for such registration?

Community buildings

In every community there are public buildings that provide important social and spiritual functions. These buildings should be made safer than other buildings, partly because so many people use them, but also because in a disaster they can be used as emergency shelters.

- Consider any large buildings, in or near your community, such as schools, churches, halls or offices that could be used for this purpose. Buildings that can be used as emergency shelters should be built on raised ground if flooding is a risk. They need secure roofs that would withstand cyclones.
- Community meetings could decide on a plan for improving such buildings. For example, maybe a block of classrooms is selected. Community members could work together to strengthen the roofs. A large water tank could be built. The school latrines could be extended. A secure cupboard or storeroom could be added in which emergency supplies could be stored.



Discussion

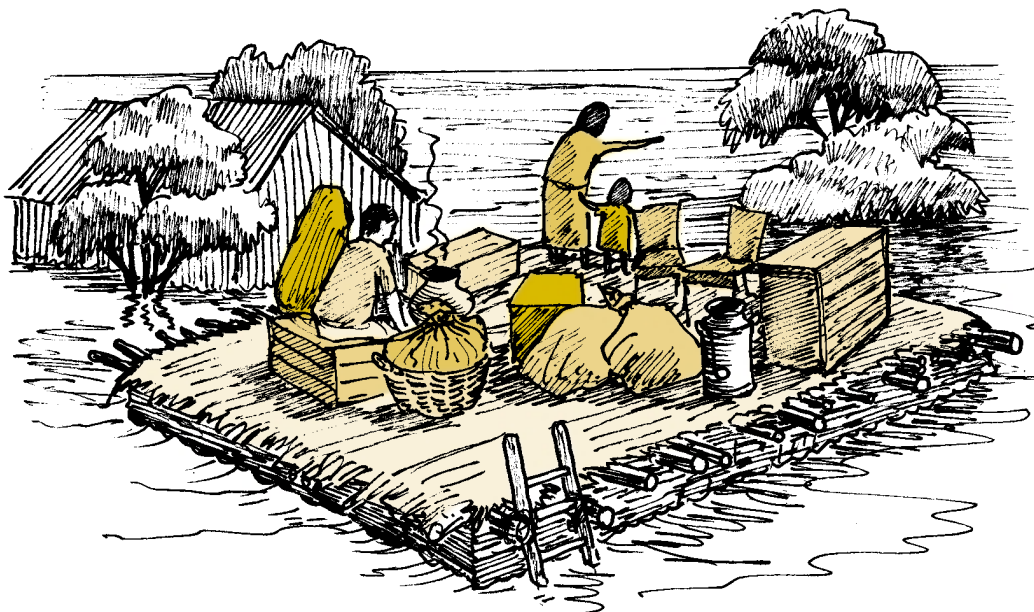
D11

- How can the safety of public buildings be improved? Are they safe from flooding, fire or strong winds? Can an experienced engineer inspect the buildings?
- Prioritise the essential needs for an emergency shelter in your own community, considering the most likely disaster situation.
- What kind of emergency supplies should be kept in a secure cupboard or storeroom? These could include things such as torches, candles, fuel, jerrycans, cooking pots, matches, plastic sheeting, medical supplies, food and water supplies, small radios and batteries. Which of these should always be available and which could be obtained in the hours before a natural disaster strikes (assuming several hours warning is given for floods or cyclones)?
- Who should hold the key of the secure cupboard or storeroom? Who should have routine access to a community water tank built for emergencies?
- Could you organise a search in each public building to discover any risks? Look for things such as steps in awkward places that people can fall down, exposed electrical cables or broken door latches. Also consider more detailed issues, such as raising electrical wires from floor level to window height in areas likely to be flooded.
- Will there be enough space? Will the special needs of women and babies be met?

Responding to floods

Some areas may experience regular flooding. Other areas may suffer unexpected flooding if, for example, a dam wall collapses, a water main pipe breaks or a cyclone strikes.

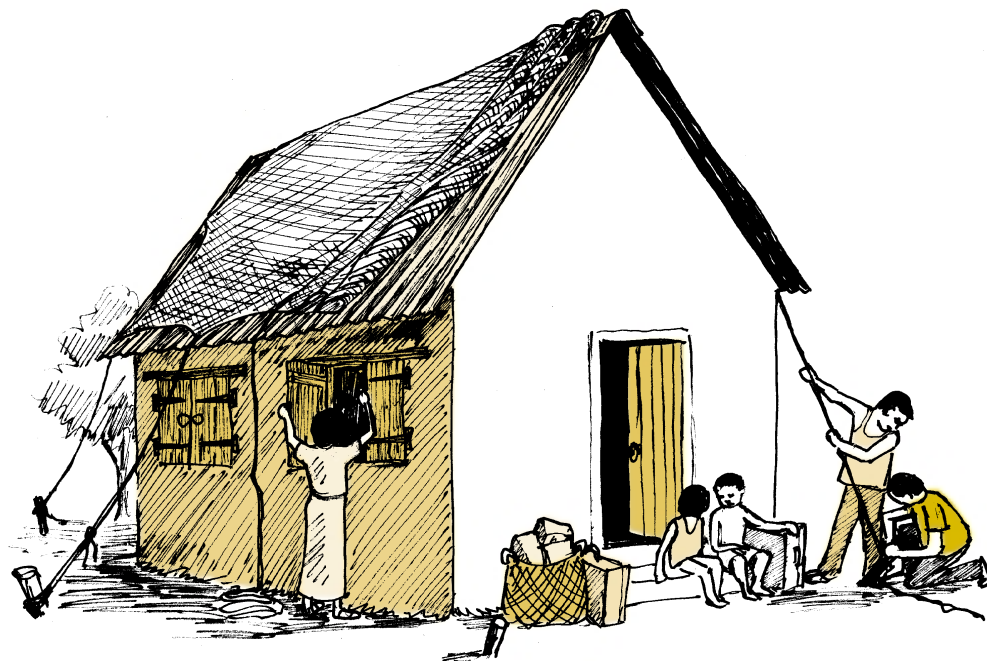
- People should be aware of easy escape routes to higher ground and know how to reach emergency shelters. Residents should try to obtain plastic sheeting and timber in order to protect their property.
- When a flood warning is given, people should put out fires and stoves and turn off all water, gas and electricity supplies. They should move their valuable papers, clothes and possessions onto a roof or to higher ground if possible, before leaving. Seed can be wrapped in plastic bags or sealed clay pots and buried. People should not try to swim to safety as they may be swept away. People should listen to radios for emergency instructions.
- Floodwaters are usually contaminated with sewage and the dead bodies of animals. After flooding, all exposed food should be thrown away to prevent the spread of disease.



- Some people choose to build in flood-prone areas because the land is fertile and they can irrigate their crops. Others are pushed into such areas because there is no other land available. They know that flooding is likely. Are there ways that such people could develop relationships with others on higher land in times of flooding. Can the church help in this?
- How can communities ensure that everybody is aware of how to reach high ground safely and that everyone knows where emergency shelters are located? What transport will be needed to move people unable to walk to safety?
- Who will be responsible to make sure that the weakest people in the community (the elderly, pregnant women, young children and people with disabilities) are helped to safety?
- Floodwaters can be very powerful and wash away roads and bridges. However, vehicles as well as people may be washed away in strong floodwaters. How can roads be found during times of flood? (One possible answer may be to plant trees along the edges of roads to help mark their position.)
- What materials could be used to build rafts or boats to help evacuate people?
- What can be done if some people, especially elderly people, refuse to leave their homes after a severe flood warning is given?

Coping with cyclones

- There is usually some warning of approaching cyclones. However, their speed, strength and direction often change. Residents in cyclone-prone areas should always be prepared.
- Preparations should include routinely removing all large overhanging branches from buildings and roads. Roofs should be well maintained and strengthened with more timbers to hold down roofing sheets. Corrugated iron sheets should be avoided as roofing materials in these areas as they are so dangerous if they break loose. All loose tiles should be replaced immediately. Drains should be kept clear to enable them to cope with very heavy rains. Window shutters can be a very helpful protection against damage.
- Immediately before a cyclone, rope down roofs to prevent damage. Fishing nets can also be used to secure possessions or roofs.
- Maintain supplies in emergency shelters and prepare an evacuation plan for people who need help to reach the shelters.



Discussion

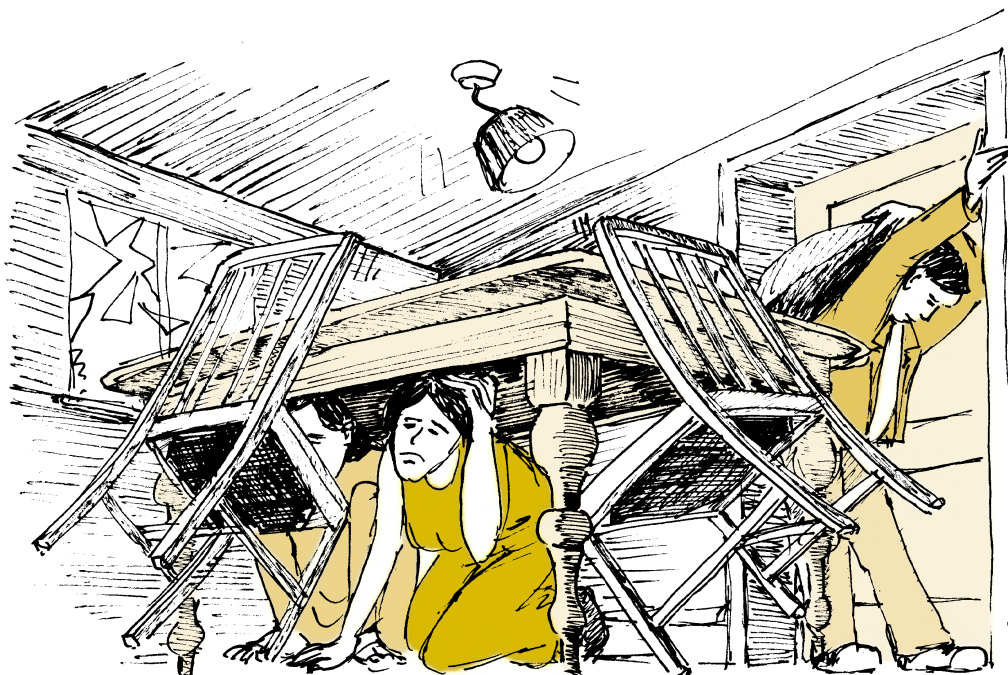
D13

- Discuss how warnings may arrive. Are they more likely to come by radio, TV or by visits from local government staff?
- How good are the emergency warning procedures in your area? Will people receive as much warning as possible to help save lives and property?
- Are there building experts who could give a talk on how to help people strengthen their homes against cyclone damage? What are the difficulties people will have in strengthening their homes?
- Are you aware of any agencies that might help with advice and funding to strengthen roofs and buildings?
- What could the church do to help the community prepare for a cyclone?

Responding to earthquakes

Certain areas of the world are known to be at risk from earthquakes. However, sometimes there may be hundreds of years between major earthquakes. Earthquakes usually arrive with no warning and no time at all to prepare.

- In areas known to be at risk of earthquakes, buildings should always be strengthened to prevent roofs and walls collapsing. Mud blocks must be avoided as these disintegrate and bury people inside. Make sure shelves and bookcases are firmly secured to walls.
- If an earthquake begins while you are inside a building, either stand in a strong doorway or get under a strong table. Stand well away from glass windows, picture frames and bookshelves. Do not rush to the exits. If you are outside when an earthquake begins, move away from buildings and trees. Do not return to help injured survivors until you are sure the earthquake is over.



Discussion

D14

- How can you find out if you live in an earthquake zone?
- If you know you live in an earthquake zone, ask the civic authorities about their building regulations. Hold public meetings to publicise these and expose any builders who are known to be breaking such regulations. It is better to expose poor builders and challenge them to improve their standards, than wait for hundreds to be killed in weak, poorly designed buildings.
- Discuss how you could arrange to invite local government officers, independent builders or NGOs to come and give training and courses on improved building methods. What are the problems poor people face in strengthening their homes?
- What ideas do you have for maintaining an awareness of the danger of earthquakes if the last major earthquake happened long before living memory?

Emergency stores

- If a community is able to establish and strengthen a building which can be used as an emergency shelter, then equipment and supplies which would be essential during a disaster should be stored there. In poor communities it will be very difficult to set aside resources, but over time, useful stores could be built up. Local authorities may also be able to provide some equipment.
- Useful stores could include ropes, ladders, shovels, matches, candles, lanterns and fuel, water containers, plastic sheeting, blankets and first aid equipment. If resources allow, then emergency food supplies could prove invaluable. These should be of nutritious food that will keep over long periods of time. Tinned and dried food is best.
- These items should be kept in a secure cupboard or storeroom. Useful community records and maps could also be kept here.



Discussion

D15

- Discuss the benefits of maintaining emergency stores. Who should take responsibility for establishing and maintaining this?
- What other essential items should be included in the store?
- If there is a day's warning of a cyclone or flood, what additional supplies should be obtained? Who should be responsible for this? Where would they obtain such supplies at a time when most people are more concerned with escaping or protecting their homes, families and possessions?
- What kind of food should be stored? What would be suitable meals that could easily be prepared from such ingredients?

Emergency water supplies

- Clean water supplies are much more important than food immediately after a disaster. Consider your community's present sources of water. Then consider the likely impact of flooding or cyclone damage. The only water supplies likely to be undamaged are protected springs and protected wells, particular if they are on raised ground. Unprotected wells on low-lying ground may fall in or become contaminated.
- Work together to protect these water sources. If there are springs, obtain help to cap and protect these. Build raised platforms and walls around protected wells. If existing sources are unlikely to survive, consider building ferro-cement water tanks by churches and schools and ensuring that their use is monitored so they are not empty immediately after a disaster.
- Obtain a store of water purifying tablets to use if water supplies do become contaminated.



Discussion

D16

- Why are clean water supplies more important than food after a disaster? Is our community prepared?
- Experts recommend a minimum amount of 15 litres of water per day per person to maintain health. Ideally there should be at least one water source for every 250 people. Will the present supplies be able to provide this?
- If there is any risk at all of contamination, use chlorine to disinfect drinking and cooking water. The recommended rate is 0.2–0.5mg per litre. Where could supplies of this be obtained and stored? Does anyone have experience in measuring and using chlorine?
- If people have lost their homes, how could you establish emergency areas for washing, especially for women, so they can wash in privacy and safety?

Healthcare in emergencies

- Following a major disaster, the health needs may be enormous. However, aside from injuries which require expert help, there are likely to be two major needs. The first is understanding and support to help people cope with trauma and the loss of loved ones. The second is to help people to identify relatives who have died and to enable them to carry out funerals in a manner which respects their culture.
- Though commonly believed, bodies are rarely a threat to public health following a disaster. It is much more important to allow people to honour their dead. Until this is completed, few people will want to consider the future.
- In an emergency all kinds of things need attention. Concentrate on the essential concerns. On arriving on the scene, first assess the situation. Work out what has happened and look for further dangers to the injured and yourself. Make the area safe.



Discussion

D17

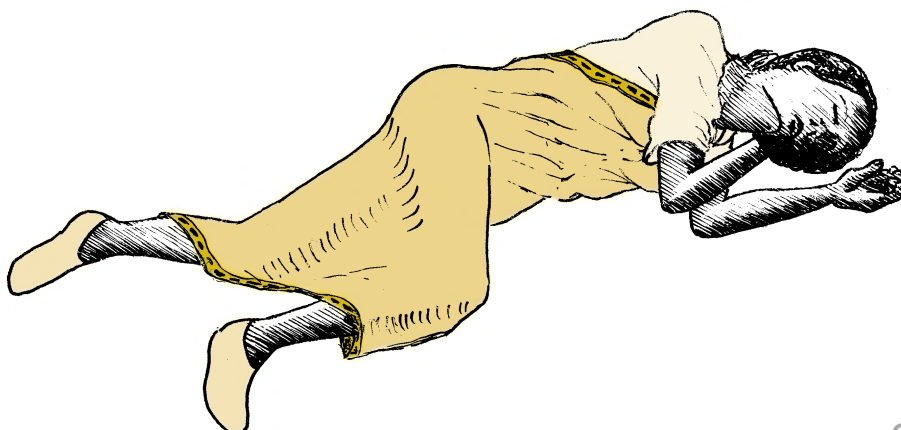
- What supplies of medical equipment should be stored in an emergency shelter? How often should these be checked and renewed? Who should do this? Who should be allowed to use these medicines?
- How many people in the community have First Aid knowledge? Could several members attend training courses so there are people with an understanding of how to help in emergencies?
- Though it is a difficult subject to talk about, discuss what might be required if, say, 50 people within the community were killed by a cyclone. What would be required to help people identify bodies and give them a dignified funeral?
- After any disaster, whether large or small, people are likely to be traumatised. Does the community have anyone who is trained either professionally or through traditional experience to help in this? Is this a need to be explored? Does the church have a role in this?

The ABC of First Aid

- After checking for danger, make sure that injured people are still breathing. If someone is badly injured, particularly if their neck or back may be damaged, move them as little as possible. In order of priority, check:

AIRWAY BREATHING CIRCULATION

- The **Airway** of an unconscious person may be narrowed or blocked. This makes breathing either difficult and noisy, or impossible if the tongue drops back and blocks the throat. Lift the chin by placing two fingers under the chin with the other hand on the forehead, tilting the head back.
- Check if a person is still **Breathing** by placing your ear near their nose and mouth, and listen. If they are still breathing, place in the recovery position. If they have stopped breathing, give mouth to mouth ventilation. Pinch the nostrils together, take a deep breath and blow into the mouth, firmly sealing your lips around the mouth so air is not lost. Do this twice and then check for breathing. Continue this, giving about ten breaths a minute until help arrives or breathing begins.
- Test **Circulation** of blood by checking if the heart is still beating. Place your finger tips to the side of the windpipe in the person's throat. If no heartbeat can be felt, use chest compression to try and keep the heart beating. If the person is also not breathing, give 15 compressions and then two breaths.



The
recovery
position



Discussion

D18

- If no outside help can be obtained for First Aid training, could the community organise this?
- How important is it to practise the ABC of First Aid long before any accident or disaster? These techniques should ideally be taught by someone with good First Aid experience. Consider how to encourage many people in your community to attend First Aid training. How could this be done?
- Why is it important to check for danger to yourself before helping someone who is injured?
- What are the dangers of mouth to mouth ventilation if a person is severely injured and bleeding? How can you protect yourself from the possible risk of HIV infection?
- Practise how to check for circulation. First practise on finding the correct place in your own throat. Then practise on other people until you are confident that you could do this in an emergency.
- The recovery position is the best position for an unconscious person as it allows them to breathe easily and prevents them from choking. Kneel by the person. Straighten their legs. Bend the arm nearest to you so it rests by their head. Bring the other arm across their chest and hold both hands in one of yours. With your other hand pull the furthest leg up at the knee and roll the person towards you. Tilt their head back to keep the airway open, using their hand to support their head. Leave them in this position until help arrives.
- Chest compression must not be given unless no heartbeat can be felt. Place your hand flat just above the point where the ribs meet the breastbone. (Find this place on your own chest.) Bring the other hand on top of it and lock your fingers together. With your arms straight, press down firmly on the breastbone, pushing it down quickly and firmly by 4–5cm. Release the pressure and repeat the compression at a rate of about 80 per minute. Practise the timing with a watch. It may help to say ‘push down, push down’ as this will give about the right timing. Practise using a large sack of rice or maize flour, as it is dangerous to use chest compression on a healthy person. Practise the movements until you are sure you will remember what to do in an emergency. It is not recommended to continue either mouth to mouth ventilation or chest compression for more than 30 minutes.

Dealing with injuries

After making the area safe and checking the ABC of unconscious people, only then begin to look at injuries. Decide which injuries need immediate attention.

- To control heavy bleeding, push clean pads of cotton onto the wound and hold firmly in place. If the injury is to an arm or leg, raise the arm or leg slightly.
- Simple splints may help prevent further damage to broken limbs. Never try and push bones back into place. Broken legs can either be tied together or place a smooth piece of wood between the legs as a simple splint. Use simple slings for arms. People with neck or back injuries should be secured onto doors before moving them to safety.
- If no medical help is available, keep serious injuries covered with clean coverings and prepare a place where people can rest until medical care arrives.
- Treat burns by soaking in clean, cool water (or any other clean fluid). Cover with clean cloth. Never try and pull off loose pieces of skin or clothing
- Potassium permanganate solution may help prevent infection of wounds and is easily stored in emergency stores. Cover exposed wounds with clean cloths to keep off flies and dirt.



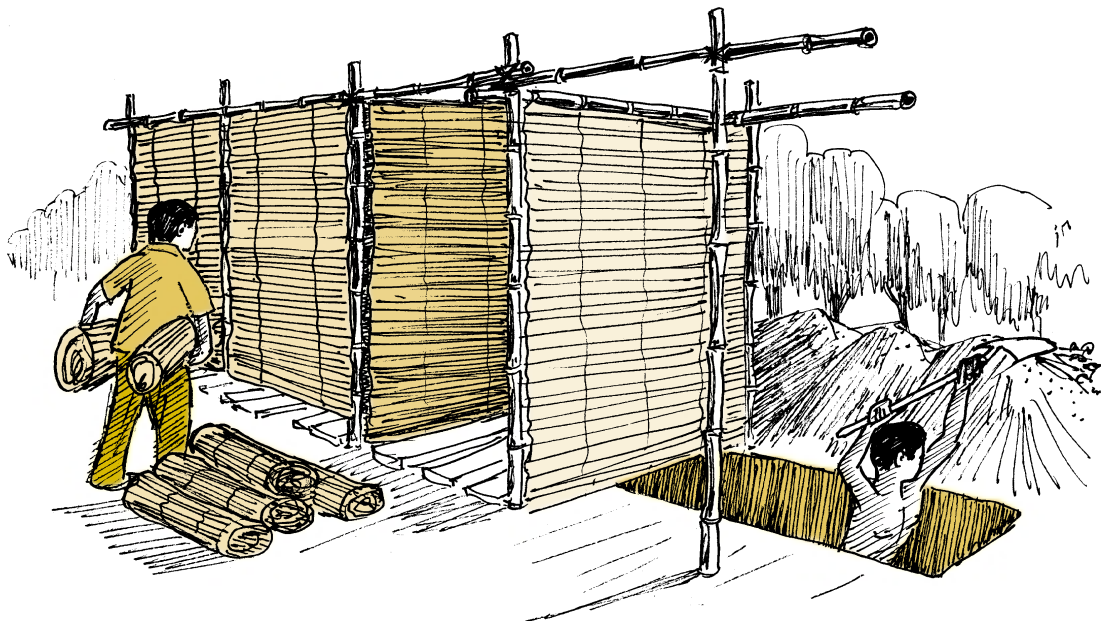
Discussion

D19

- Are there people with skills in setting bones in the community? Can they share their skills with others?
- Practise the skills of applying splints and slings for broken arms and legs on each other. Can you invite someone to help provide training in this? Make sure that bandages are not tied so tight that they damage circulation.
- Sterile dressings for serious burns and wounds should always be included in emergency stores. Discuss how you would make bandages and slings from clothing, if there are not enough available in the clinic or store. Consider how you could produce clean dressings for burns and wounds in a disaster.
- Have you used potassium permanganate? Are there supplies available in the local clinic and in the emergency store? Just a very small amount is needed to make a large amount of liquid that will help prevent infection. Too strong a mixture is dangerous. Learn how to measure and use this useful chemical.
- Discuss how you would respond in a culture where men and women are not allowed to touch each other unless they are family members.
- What would you do if you arrived at a disaster scene where 17 people were unconscious and 10 people were badly injured and screaming for help? Who would you help first?

Sanitation in emergencies

- Adequate sanitation is rarely considered by communities when preparing for disasters. However, without it, there is no doubt that many more people will suffer or die following a disaster, due to the spread of disease.
- Latrines should already be available near an emergency shelter. If not, they should be quickly dug. They must be at least 30 metres from the nearest water supply and deep enough to prevent contamination. Planks of wood can be used for the floor of a latrine and walls can be made of matting to allow privacy, particularly for women.
- Children's faeces are more dangerous in spreading disease than those of adults, so there must be facilities they are able to use. People also need to be able to wash their hands after using the latrines – with water and soap, if available, or sand or dust.



Discussion

D20

- Why should we build and use latrines?
- Are community members fully aware of the need for adequate sanitation at all times – not just following a disaster? A community that is fully aware and educated about the importance of good sanitation will be more likely to see the need for emergency sanitation following a disaster.
- What would be needed to encourage good hygiene – such as a place to wash hands and cleaning arrangements for latrines?
- Who would be responsible for organising and building latrines **before** a disaster? Where would be good places to build them?
- Children's faeces are known to carry a higher level of infectious parasites and diseases. Why should this be?
- How can children be encouraged to use emergency latrines?
- What are the likely difficulties in providing emergency latrines **after** a disaster?
- Ideally there should be no more than 20 people using each latrine. What problems may there be in ensuring the latrine is kept clean? How could these be avoided?

Working with local authorities

- Local authorities are normally responsible both for having emergency plans in place and for ensuring the safety of the community following any disaster. In most situations they have the influence and resources to play the most important role. Community groups should always seek to work with local government officials and never to replicate their work. For effective preparation for a possible disaster situation, there is a need to unite everybody and work together.
- Communities should seek to build good relationship with officials and understand their different responsibilities. Government officials may be able to provide financial help for establishing and strengthening emergency shelters and supplies. Informing them of community preparations may enable them to write positive reports to their seniors, which in turn may lead to more resources for training or preparations.
- Consider working with local authorities to celebrate annual festival days that commemorate past disasters or acts of heroism. These could be used to highlight how well prepared the community is to meet such events if they occur again.



Discussion

D21

- What are the different roles of community organisations and local authorities in disasters?
- Discuss ways in which links with government officials and between churches and community groups can be improved. What events could be planned that would bring people together?
- Are there any annual or season celebrations in your community that could be used as an opportunity to share ideas of being ready for problems or disasters? Some examples may be: harvest celebrations to encourage storage; Women's World Day to emphasise the needs of women. Independence Day could be a day to emphasise self-reliance and being ready.
- How can busy government officials be encouraged to incorporate plans to prepare for disaster into their work without adding to their workload?

Maintaining awareness

- If community leaders have successfully worked together to plan their response to a possible disaster, it is important to share these ideas widely. It is good for leaders to be prepared, but also important for all community members to be aware of how they should respond to difficult situations.
- Consider how to motivate people to consider the effects of a disaster and their response. You could prepare role plays, share ideas and information with pastors or produce puppet shows or songs. Posters prepared with local artists may help. Contact the local radio station with ideas they could use in broadcasting.
- Once initial awareness has been raised, this needs to be maintained over many years.



Discussion

D22

- Where do people in the community get information from? What sources of information do they trust? How do they prefer to receive information?
- Discuss good ways of getting people's attention when presenting a talk, role-play or puppet show?
- What contacts do people have with the local newspaper or radio? What might be the best way to approach them?
- How could useful information be easily shared with religious leaders and other key figures? The Bible is a very helpful tool. Refer to the studies at the end of this book for ideas on using the Bible.
- What helps people to remember information?

Bible studies

These Bible studies are designed to use in small groups. They may provide a useful introduction to a meeting where different topics from the Guide are being discussed. Choose a study that will be linked to the topic you plan to study or that is relevant to your situation. During the studies, encourage people to think about what they read, to discuss the meaning and the implications of what they learn and, finally, to pray together about what they have learnt.

BIBLE STUDY 1

Ruth: new life in poverty

Read Ruth 1. A famine in Judah caused Naomi and her family to migrate to Moab where her husband and sons both died, leaving Naomi and her daughters-in-law in poverty.

- Discuss the response of Ruth and Orpah to Naomi's insistence that they remain in their own land. What would your response be if faced with leaving your own country in such a situation?

Read Deuteronomy 24:19-22 and Ruth 2. Naomi and Ruth returned to Judah after hearing that food was available again, even though Naomi had lost her land rights when her husband and sons died. However, Jewish law permitted the poor to gather leftover grains at harvest time. Ruth found support as she gathered leftover grains on land that turned out to belong to one of Naomi's relatives.

- What led Ruth to the fields of Boaz?
- Why did Boaz respond in such a caring way?
- What provision do our laws and customs make for the poor to obtain food?
- What is the role of our traditional practices in caring for those in special need?
- Are these still relevant in our modern world?
- How do these practices need to change with the modern world while still retaining their value?

BIBLE STUDY 2

Ruth: restoring the victims of famine

Read Leviticus 25:25-28 and Ruth 3 and 4. Under Jewish custom there were several ways in which the poor were given opportunities to rebuild their lives. One was the custom of gleaning (see Study 1), another was the Jubilee principal of forgiving debt and restoring property (Leviticus 25:8-22). Another custom was that if someone became poor and lost their property, their nearest family member should redeem the land and return it to them.

- Why do you think Boaz agreed to help redeem Naomi's land?

Discuss the traditional ways in which your society allows people who have become poor to rebuild their lives.

- Boaz's actions meant that Naomi would have descendants to maintain her family line. How important is this?
- How did God bless the lives of Ruth and Boaz?

BIBLE STUDY 3

Nehemiah: inspiration

Read Nehemiah 1 and 2:1-10. The Babylonian army had destroyed the city of Jerusalem, including its wall, and the people had either fled to Egypt or been forced to move to Babylon. Some years later people began to return but were not welcomed by the new Babylonian rulers. They lacked leadership and had no vision for the future.

- Nehemiah accepts his people's responsibility for the disasters that came upon them. Should we also accept responsibility for some disasters? If so, what kind?
- What causes Nehemiah to take such a bold step?
- What did Nehemiah ask from the King?

BIBLE STUDY 4

Nehemiah: careful planning

Read Nehemiah 2:11-20.

- What does Nehemiah do first?
- How does he deal with opposition?

Chapter 3 goes into the detail of how different families took responsibility for rebuilding sections of the wall. Read this through and see if you can work out how many different families were involved.

- What are the benefits of delegating work in this way?

Read Nehemiah 4. Even when our work is directed by God, we may not remain free from danger or opposition.

- How does Nehemiah react to the threat of violence?

Nehemiah faced many other difficulties from corruption and attempts to kill him. However, he persisted and was eventually successful, as we read in Chapter 6:15-16.

BIBLE STUDY 5

Nehemiah: restoring order

Once the rebuilding work was complete, Nehemiah's work was far from finished. A number of other responsibilities remained to restore society.

Read Nehemiah 7:1-3.

- What did Nehemiah look for in choosing good officials?
- What are the advantages and disadvantages in choosing to work with family members?
- Not all societies are the same. What is appropriate in your society?

Read Nehemiah 7:4-73a (but don't try to read verses 6-65 aloud!).

- In a disaster records are often lost. Why is it important to restore good records?
- What were the immediate benefits of registering all the families who had returned from exile?

Read Nehemiah 8:1-12.

- How did Nehemiah make sure that the people both heard and understood the words of God?
- Do you also rejoice when God's word is made clear to you?

The people stayed to listen to God's law for seven days (8:18-19). This is still remembered by the Jews and known as the Feast of Tabernacles. Then they confessed their sins and renewed their covenant with God (Chapters 9 and 10). People were then ready to move back into Jerusalem (11:1-2) and leadership roles among the Levites, the priestly tribe, were allocated.

Finally Nehemiah organised the dedication of the wall.

Read Nehemiah 12:27-31 and 38-43.

- Nehemiah could have returned home after finishing the building work. Why did he stay?
- Why is it important to take time to celebrate God's goodness and faithfulness?

BIBLE STUDY 6

Habakkuk: joy in the face of disaster

The book of Habakkuk has just three chapters. Because of the note at the end of the book, it is thought that Habakkuk was a temple musician and he certainly wrote in poetic language. Chapters 1 and 2 describe a conversation between the prophet and God about the future of the nation of Judah.

Read Habakkuk 3:1-2. Habakkuk pleads with God for the sake of his people – not for anything good they have done (or not done) but only because of God's character and mercy.

- What effect does this have on people?
- Should we always pray in this way during difficult situations?

Verses 3-15 describe in poetic language how God has shown his wrath in previous times.

Read verses 3:16. When we know that difficulties are coming, we will always be fearful.

- How does his faith enable Habakkuk to wait? Would this be our reaction to approaching disaster?

Read verses 17-19. The prophet looked back on the great things God had done and was filled with joy. He was determined to remain joyful in the Lord since even when all possessions have gone, God remains. When we meet with great difficulties in life, Habakkuk's words may bring encouragement. Our faith in Christ prepares us for every event life may throw at us. Habakkuk relied on God and not on human strength. In the end God will indeed bring his judgment upon the wicked.

- Discuss how you respond to Habakkuk's positive view in the time of disaster. What can we learn from him?

BIBLE STUDY 7

Paul: encouragement during crisis

Paul was imprisoned for the sake of his beliefs. He knew that he had done nothing to break any laws and after several years he appealed for his case to be taken before the Emperor Caesar in Rome. Eventually Paul and some other prisoners were taken by ship to Rome.

Read Acts 27:1-2 and 9-12.

- Paul was correct in seeing that disaster lay ahead. Why was he able to see this more clearly than the ship's captain?

This passage is a good example of how disaster could have been prevented through being prepared. What would have happened if the centurion had listened to Paul rather than the master? Discuss reasons why he listened to the master rather than Paul? Discuss some situations where disaster has come because good advice has been ignored in favour of an easier option.

Read Acts 27:13-26.

- How much warning did the ship's crew have of the storm?
- How did the crew respond to the danger they were in?
- How did Paul respond to the danger they faced?

Read verses 33-44.

- Despite the fact that their lives were all in danger, Paul remains calm and practical. How did he share his faith with those on board?
- What was the eventual outcome of Paul's witness and close relationship with God?

BIBLE STUDY 8

The need to prepare for the future

Proverbs talks a lot about wisdom, and how providing for the future is a godly characteristic.

Read Proverbs 6:6-8. The ant is given as an example of how work can prevent disaster in the future.

- How can we learn from the example of the ant, and encourage others in the community to contribute to the necessary work that can prevent disaster?

Read Proverbs 21:20.

It is considered wise to have stores ready for times of need, and foolish to use up all you have unnecessarily.

- How does this verse help us understand the need to be ready for difficult times? What examples can you think of in your situation where this verse is applicable?

Read Proverbs 31:21. This passage tells us about the godly wife. She makes provision for times of need. She does not fear the cold season because she has prepared herself for it.

- What example would we give from our own culture of how a good wife is prepared for the future? Discuss this more widely as a principle for being prepared within the community.
- Are there other passages that you can think of in the Bible where being ready is praised?

You might like to consider Genesis 41:35-36, Matthew 25:4.

Preparing for disaster

A PILLARS Guide

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