Risks, needs and capacity assessments

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Introduction



This section looks at three types of assessment which are done at different points in the disaster cycle. They are necessary in preparing for and responding to a disaster.

RISK ASSESSMENT (PRE-DISASTER) This determines the hazards in the local area and identifies who and what are most vulnerable to those hazards.

NEEDS ASSESSMENT (AFTER DISASTER) This identifies the needs of the people affected by the disaster, who will require different levels of assistance according to their need.

CAPACITY ASSESSMENT (BEFORE AND AFTER DISASTER) This finds out the skills and resources in a church (and its surrounding community). These resources help it to prepare for and respond to a disaster.

Risk assessment (pre-disaster)

Risk mapping in rural areas

Local people already know more than any outsider about their community and the people living there. However, even with this knowledge, there is always more to discover. The mapping process described below will help in this discovery and will identify both the risks and the resources present in the community.

Benefits

Mapping the risks in a community or area can bring a number of benefits:

- It will help identify the geographical features (such as rivers or unstable hillsides) which could become hazards after heavy rain or wind.
- It will identify the buildings, bridges, markets etc which are most at risk from hazards.
- It will highlight the risks to people, their living places and their livelihoods.
- It will provide authorities and local organisations with information for decision making and planning.
- It can show the areas affected by any previous disasters.
- It can help the community identify the resources it has to face disaster, such as areas of high land, forest and alternative water sources.

The map can be used initially to show hazards and risks, then to show resources.



STAGE 1 Create a map of the area

Organise a meeting and invite members of the church, other community members, local authorities and organisations to attend. Explain the purpose of producing a risk map.

Ask the group to choose someone to draw a large map of their local area, using big sheets of paper and pens. Alternatively, the map could be drawn on clear ground with sticks, leaves, ash



and stones, or using chalk on a board or the wall of a building. Make sure this type of map is copied safely onto paper for future reference. The map should show:

- natural resources rivers, forests, grazing land, water sources
- physical features buildings, roads, bridges, churches, mosques, schools, clinics, markets etc
- any government offices or the headquarters of community groups
- the homes of key people, such as health workers and leaders.

The group should be split into smaller groups according to gender and age. Each group can draw their own map. The different results can be very revealing. Allow each group an opportunity to explain their map, and encourage discussion. Use all the information to make a final detailed map.

Stage 1: Community map in a rural location



STAGE 2 Map the risks

Once the basic map is finished, people can consider the different hazards and the risks they generate in specific areas. Begin by making a list of the disaster types which are known to occur in your area, for example, storms, earthquakes, fires, landslides, floods or conflict.

For the types of disaster which could happen in your community, ask the following six questions:

- Which areas would be most at risk?
- Which buildings or structures would be most at risk?
- Which people in particular areas would be most at risk?
- What impact would there be on livelihoods, crops and animals?
- What impact would there be on water and food supplies?
- What impact would there be on communications (roads, bridges, telephones)?

After discussing all these questions, shade in buildings, areas, or homes on the map, using colours to indicate levels of risk. For example, you could use red for high-risk, yellow for medium-risk and green for low-risk areas.

This is an important activity. It raises the community's awareness of potential risks, and can also be used to generate ideas about ways in which those risks could be reduced.



STAGE 3 Map community resources

This step involves identifying the things which will help the community to prepare for, cope with and recover from a disaster.

Look at the map and identify large buildings, such as a church, school, mosque, office building or grain store that could be used as a community shelter should disaster strike. Churches and mosques may be considered holy places, but they are often the only strong building available as a temporary place of safety. Discuss this among the church leaders and decide whether or not to allow the church building to be used for temporary shelter in a time of disaster.

Consider also the skills available in the community. Skilled people might include nurses, builders, drivers and electricians. Community groups and local organisations are also important for organising a response. Show on the map where they meet.

In addition, highlight on the map the high land and the natural resources (water sources, forest etc) which will aid survival. Consider additional resources, such as vehicles that could be hired to collect provisions or move people to safe areas.







From risk assessment to risk reduction

When the map is completed, it is a good idea for church and community leaders, as well as local authority and organisational representatives, to visit the areas noted as high or medium risk and see what changes could be made to reduce the risks associated with different types of disaster.

Consider ways of strengthening or improving any strong buildings. Are there basic facilities, such as water supply and toilets? Could emergency supplies – for example, candles, matches, torches, chlorine tablets, plastic sheeting, cooking pots, firewood and medical supplies – be stored in a corner of the building or in cupboards or boxes? Could community records be kept here?

A community response plan should also be worked out, allocating responsibilities – such as communications, managing water supplies or evacuating vulnerable people – to appropriate people. This plan should be updated every year.

The maps should be kept safe for future reference.

See Chapter 2, pages 37–68 for more details on how to plan a disaster response and how to select and manage volunteers.

The church prepares for annual floods in north-east India

Tearfund partner NEICORD worked with three local church associations and communities along the Brahmaputra River to help vulnerable communities cope more effectively with annual flooding. They used small, scattered and isolated church communities to influence this process.

The key steps were to:

- · create a risk map of the worst-affected areas
- identify local churches which could respond and strengthen local methods of coping with annual flooding
- recruit a core team of volunteers from the different churches to raise awareness and develop preparedness plans
- distribute flood relief through the network of local churches, committees and volunteers
- introduce mitigation measures, including raised handpumps and wells which would not get contaminated by floodwater
- organise food-for-work schemes to improve embankments, clear drainage channels and plant teak and coconut trees.

Risk mapping in urban areas

STAGE 1 Create a map of the area

The process of mapping a community in an urban location is similar to the one described for rural locations. The map should show key places in the community and infrastructure, which is likely to be more developed than in the countryside. These can include houses, shops, schools and market places. It's also important to distinguish between the different types of housing, such as slums which are temporary and vulnerable as opposed to more permanent and planned housing areas.

Here is an example of a community risk map made in an urban area:



Stage 1: Community map in an urban location

STAGE 2 Map the risks

The next stage is to mark on the map the hazards which members of the community have identified, and the areas which are at risk of damage. Slum communities are often located on land near rivers, which can easily flood. Houses are built close together, often with access through narrow alleys: this creates huge risks from fire, which spreads rapidly. Sometimes houses are built up steep hillsides which are vulnerable to landslides.

This mapping process may provide an opportunity to invite local government officials, who may contribute from their own experience. It may also help them to understand more clearly the risks that urban populations face.

Areas may be designated as high, medium or low risk, as for the rural map.



Stage 2: Urban community risk map

STAGE 3 Map community resources

Mark on the map all the resources in the community that are available to help it prepare for and respond to a local disaster. These should include not only human resources and skills but also physical and financial resources. They should include formal support, such as medical facilities and police, as well as informal support, such as local traders who have vehicles and warehouses. Some towns may not have all the facilities and services shown, but they are more common than in rural places.

See also the tables on pages 86–88 for the list of community resources that might be available to help in preparing for and responding to a disaster.



Stage 3: Urban community resource map

Needs assessment

Following a disaster, your church may be the first group to respond. You will need a small team of people who can do a simple assessment of needs, skills and resources. This will help you to know the type of help needed and the quantity of goods or materials required. Any request for help to an outside source will need this information.

To make sure the needs assessment is done fairly and as accurately as possible, apply the following principles:

- Consult the people affected and involve them in the assessment.
- Ensure the most vulnerable and marginalised groups are included.
- Cross-check information where possible.
- Avoid favouritism or bias towards any specific groups.
- Expect the unexpected! Needs may not be the ones you expect to find.



Gathering information

STEP 1 Plan the assessment

- Read the checklists in this section and adapt them if necessary.
- Agree on the ways of collecting information (interviews, group discussion, observations, discussion with other agencies).



 Assemble a small team. There should be a mix of male and female, and someone who can write down all the findings.

STEP 2 Meet groups affected by the disaster

- Try to meet as many groups affected by the disaster as possible, including the most vulnerable (women, children, elderly people, etc) and marginalised groups (eg ethnic minorities).
- Try to find out their needs with regard to food, shelter, water, sanitation and emotional support. Use the checklist below; make sure data for men and women is recorded separately.

STEP 3 Get additional information from local officials

- If appropriate, visit local officials and find out about government relief stocks and plans for distribution (food, water, shelter materials).
- These officials should also have health data and information on medical facilities.
- Officials may also know which NGOs are working in which villages, and what resources they have available.



Basic needs assessment checklist to use following a disaster

This checklist is used in Step 2 during the interviews and discussions with affected groups. It will help you to find out their priority needs after a disaster. You may also need to design and use a household survey form.

1. What is the total estimated number of people affected by this director?	Families	
	Children under five	
	Saster:	Boys 6-14 years
		Girls 6-14 years
		Male adults
		Female adults
2. Approx	ximately how many	Children under five
people	e have died?	Boys 6-14 years
		Girls 6-14 years
		Male adults
		Female adults
3. How many people are injured?	Children under five	
		Boys 6-14 years
		Girls 6-14 years
		Male adults
		Female adults
4. Who a	are the most vulnerable	a)
people affected by this disaster (eg elderly, disabled, long-term sick, pregnant mothers, etc), and approximately how many people fall into each category?	b)	
	c)	
	d)	
	e)	
	f)	
5. What caused	are the common injuries d by the disaster?	
6. What and ill result	other health problems nesses are there as a of the disaster?	
7. Damage to homes: How many have been		a) partly damaged by the disaster?
		b) totally destroyed by the disaster?

8. Availability of food:	How many families have no remaining stocks of food?
	Is there food in the local market at affordable prices?
9. How many families have lost cooking utensils?	
10.How many families cannot get fuel for cooking food?	
11. What are people doing for sanitation (ie are any toilets available after the disaster)?	
12. How many families cannot get sufficient clean water?	
13. How far away is the nearest source of clean water?	
14. How many families do not have containers for collecting and storing water?	
15. Is there any risk of another disaster in the near future (eg aftershock or further flooding)?	
16. Are there any groups who are cut off from assistance?	
17. What assistance is coming from government or any NGO source or other churches?	
 18. Concerning livelihoods: a) What were the main livelihoods of the affected people (eg farmers, fishermen, etc) before the disaster? 	
b) What was the impact of the disaster on these livelihoods?	
19. What health facilities are available to the affected people?	
20. How has the disaster affected the education system?	

Step 4. Cross-check information

- Organise a meeting of your assessors to share all the findings and cross-check for inconsistencies.
- If there are inconsistencies, seek additional information from new or existing sources before finalising the needs assessment.



Step 5. Plan a response

- As a group, prioritise the main needs.
- Identify the resources available to meet these needs (from church, government, NGOs).
- Decide who will be responsible for different parts of the response.
- Decide where and when the response will start, and the order of different activities.

More information about planning a response can be found in Chapter 2: 'Organising ourselves', pages 37–68.





Prioritising the needs

Next, make a list of the main needs you have discovered, and the ways by which people are trying to meet those needs. You could use a table like this:

Need identified	Priority ranking	Local resources available or in use	External resources still needed
No food in households; very high prices in market.	1	Few bananas available; some wild roots and fruit; a few people have vegetables.	Rice and lentils.
Lack of utensils to cook or eat food.	2	A few shared cooking pots; banana leaves as plates.	Sets of cooking pots, plates, cups.
Handpump contaminated; clean water is 5km away.	3	People using flood water for bathing; some families catch rainwater using plastic.	Local handpump needs to be cleaned and repaired.

Once the main needs have been listed, have a discussion with the community or a small group of community leaders to work out which needs are the highest priority. Remember to listen to the women as well as the men, because they may have different priorities. The final step is to make a plan to meet those priority needs (see Chapter 2, pages 54–59).

Capacity assessment

The following checklists will help you to identify the resources you have in your church and community to prepare for and respond to a disaster. These checklists look at the skills and experience you might need, as well as the physical resources that could be used, such as buildings, vehicles and equipment.

Ideally, the checklists would be considered in church and community meetings before a disaster. However, if this is not done, the lists can be used in addition to the needs assessment process after the disaster event.

See also the resource mapping on pages 74 and 79 of this chapter.

Resources assessment (for the church and community)

Resources useful during or after disaster	Location and ownership
Buildings Church main meeting place: - seating capacity - sleeping capacity - storage capacity (food, non-food items) - toilets available - water available - any other church buildings	
Transport - handcarts - donkey or ox-cart - bicycle or rickshaw - canoes, ferries or fishing boats - motorbikes - pick-up trucks and cars	
Health centres – basic medical facilities – minor surgery facilities – number of beds for in-patients	
 Schools primary school (how many people could live and sleep temporarily?) secondary school/college (how many could live and sleep temporarily?) capacity to store food and other supplies kitchen facilities to prepare food access to water supply access to toilets 	

Resources useful during or after disaster	Location and ownership
Other strong buildings - cyclone shelters - grain stores - community halls - office buildings - others	
 Communication access to domestic radio access to television mobile phones and signal coverage social methods of communication, eg village meetings, church meetings, other faith groups church bells other local methods 	
Water supply – access to clean water points – capacity to store water safely – capacity to distribute water – capacity to filter or sterilise water	
 Clothing additional clothing for children and for more vulnerable adults capacity to provide warm clothing and blankets in cold locations capacity to provide waterproof protection 	
 Transport and communication accessible roads to affected area access to grass airstrips access to tarmac airstrips access to river jetties or landing points access to river crossing points, either bridges, ferries or shallow water 	

Skills assessment (for the church and community)

Useful skills during or after a disaster	Names of church and community members
Medical – First Aid – doctors/nurses – midwives	
Rescue - use of ropes/ladders - lifting, carrying people - boatmen/fishermen	
 Construction carpentry (building with wood) masonry (building with bricks or blocks) water supply (plumbing, tube-well mechanic, water tank construction) roofing (using tin sheets, tiles or thatch) sanitation (building toilets) 	
 Logistics ability to manage and store supplies ability to manage distribution of food ability to manage non-food items (NFIs, such as utensils, blankets, soap and sanitary items, water cans) supply of fuel for cooking ability to drive or to borrow vehicles 	
Cooking preparation of basic food, as preferred by community special food for infants , elderly or sick people 	
Counselling and emotional support - counselling skills - bereavement and trauma counselling - prayer team	
Education - school teachers, Sunday school teachers - adult education, literacy workers	

Use of church and community buildings in emergencies

Buildings are an important resource available to many churches.

Before using your church building as a place of refuge or storage, make sure the building is safe and able to withstand winds, floods or earthquake. Also, make sure the leaders of the church agree to the use of church buildings in this way. There may be some disruption of other church activities. Some churches do not want to use their building for emergency purposes, but in times of disaster there may be very few alternatives.

The section below highlights a number of ways church buildings can be used and adapted in response to an emergency. We suggest several uses for buildings, and some key points to consider for each possible use.



Emergency treatment and health centre

- access to clean water
- facilities to sterilise (boil) and clean instruments
- access to an adequate number of toilets
- separate areas for treating sick people and for maternity cases.

Temporary emergency shelter

- an agreed number of people who can be safely accommodated
- separate accommodation for males and females
- basic bedding (eg mats and blankets)
- additional toilets
- access to clean water
- facilities to prepare and cook food
- designated area outside for livestock.

Emergency food and supplies store

- dry storage area
- food bags stored off the ground (on pallets or blocks)
- food bags protected from pests
- a stock control system to record bags coming in and going out
- security arrangements, day and night.

Planning and preparation

Some suggestions for planning a response are given in Chapter 2, pages 54–59, with suggested charts and templates. It is important to allocate tasks to specific people and to establish a clear time-frame.

The role of the pastor is not necessarily to lead all these activities but to identify the right people to take on the various tasks.

In areas where disasters are common, the community should put together the lists of skills and resources on the previous pages before the disaster, so that it is ready to respond at short notice.







BIBLE STUDY Assessing the city Nehemiah 2–4

Background

The Babylonian army had besieged and destroyed the city of Jerusalem, including the walls, and the population of Jerusalem was displaced, largely to Babylon.



Nehemiah was a Jewish captive in Babylon, working as a trusted servant of King Artaxerxes. In Chapter 1 he feels very sad when news reaches him about the condition of Jerusalem. Its walls and gates are still in ruins. He prays fervently and begins to plan his return to the city to rebuild it.

Key points

- Nehemiah gets permission and assistance from the king, who is not a believer in God. This highlights the importance of working with secular authorities and the potential to access additional resources (2:4-9).
- Nehemiah makes an assessment of damage to the walls, so the project is based on a clear understanding of the problem. Good assessment data is needed before a church and the community embark on a disaster response project (2:11-16).
- Nehemiah illustrates well an orderly approach to reconstruction, as each step is clearly laid out with plans and reviewed regularly (2:11-18). From the start, he experienced opposition, and people mocked and ridiculed him for what he was trying to do (2:19-20). He developed ways of countering and resisting this, depending on God.

Questions

- 1 How does Nehemiah get permission to go back to Jerusalem? How much importance does he give to prayer? (2:1-6)
- 2 How does he obtain the resources he needs to start his building project? What are the advantages and disadvantages of working with the government authorities? (2:7-9)

- **3** What does he do when he arrives at the city? Why does he wait three days before inspecting the walls? Why does he go at night with just a small group of people? (2:11-16)
- **4** The building work is carefully planned. What are some of the points in Nehemiah's plan? (3:1-32, 4:16-18) How much time and effort do we give to praying and planning before we start a project?
- **5** Does everyone support what Nehemiah is doing? (4:3, 7-9) Why do some people oppose his building work? What sort of opposition might we expect as a church?

Review of this chapter

- Why is it important to do a risk assessment?
- How can the church and community be involved in doing a risk assessment?
- How can a risk map be used to prepare for and respond to disasters?
- What are the main ways of gathering information for a needs assessment following a disaster?
- What are some of the skills, possessed by church members, that could be useful after a disaster?
- How will you make sure that the particular needs and skills of women will be included in the assessment?
- What are the main ways the church building can be used in preparing for and responding to a disaster?



Next steps

Here are some practical things you could do if living in a disaster area:

- Do the Bible study as a church. What are the key issues you learn from this?
- Do a risk map. What are the issues this raises?
- Do a capacity assessment. What steps need to be taken now to increase the church and community's capacity to respond?

CHAPTER 3: RISKS, NEEDS AND CAPACITY ASSESSMENTS

