Section 2:

Risk and Capacity Assessment: Community-based Considerations

Section 2 comprises eight practical learning activities that aim at developing participants' understanding of different approaches to risk assessment in at-risk communities. Participants experience and practice a number of different processes for gathering and analysing data, including visual mapping, participatory rural appraisal and questionnaire administration. There are a host of techniques for assessing risk. These activities focus on those most suitable for use at community level. They aim to improve participants' learning skills, particularly those which assess risks and capacities at individual, household and community levels.

1. How do we construct hazard, risk and capacity maps? 93
2. How is community-based research relevant to risk assessment? 99
3. How do we construct vulnerability and capacity assessments? 119
4. What resources are available for reducing risk? 127
5. How does gender impact on vulnerability and capacity? 131
6. How do we assess household food security? 139
7. How do we target households most at risk? 153
8. Why do we need to understand perceptions of risk? 181
How do we construct hazard, risk and capacity maps?

**Purpose**

This activity assists participants in generating information about specific hazards, vulnerabilities and capacities in at-risk Southern African communities.

Mapping is a useful tool for visually presenting information as a basis for risk assessment.

**Procedure**

This activity asks participants to draw maps of familiar areas and communities, and to identify known risks and capacities.

**Time:**

1½ - 2 hours
Process

Introduction: Area Mapping

1. Introduce the activity by outlining the purpose and procedure.

2. Ask participants to work in 'area groups', i.e. people from the same country/geographic area should work together.

3. Hand out big sheets of flipchart paper and coloured pens and ask groups to establish themselves around a surface such as a table, or floor area.

Participant Action

1. Give the following instruction:
   Draw a map of a particular area that you are familiar with within your country. The map should be as detailed as possible. Indicate the following on the maps:
   - hazards
   - vulnerabilities
   - capacities and resources.
   (You have 40 minutes to complete this task.)

2. Suggest that participants may want to use symbols to indicate hazards, vulnerabilities and capacities. Remind them to develop a key (or legend) which explains the symbols.

3. Move around the groups to monitor progress. Check that participants do not only focus on physical features of their area. Emphasise the importance of including human elements.
7. Ask groups to display their maps on the walls.

8. Request that a representative from each group presents and explains the maps to other participants.

Review and Discussion

1. In plenary, discuss common features and differences as revealed on the maps.

2. List identified hazards on flipchart and mark those that are typical for your area and the Southern African region as a whole.

3. Discuss how vulnerabilities and capacities relate to given hazards and identify elements most at risk.

4. Focus on the sources of information participants drew on in order to develop their maps. Ask questions such as the following:
   - Where did you get the data for your maps from?
   - How do you know your information is accurate?
   - What additional information would you find useful, and where would you find such information?
   - How are the different types of information linked to different sources?
   - Which sources of information are particularly useful for hazard, vulnerability and capacity assessment? Why? How?

5. Ask participants whether they have gained new insights as a result of the presentations, questions and discussion. Point out how discussions generate information and how people are a crucial source of useful data.

6. Encourage participants to apply their new information and insights to their maps by adding additional data. (Allow approx. 10 minutes for the review of maps)
Introduction: Community Mapping

1. Point out that the area maps show the general pattern of risks and capacities; the information thus gathered is useful for planning policy or large-scale initiatives. However, in order to target the elements most at risk, more specific and detailed information is necessary. The next activity will therefore ask participants to hone in on their area, and focus on a specific community.

Participant Action

1. Give the following instructions:

- participants will work in their area groups and, together, draw a new map:
- one person will act as the informant; s/he will draw on her/his knowledge of a familiar community in order to give information in response to questions:
- the other person(s) will question her/him:

(You have 20 minutes for this task.)
2. Monitor the progress and assist where necessary.

3. Ask groups to display their maps on the walls.

4. Request that a representative from each group presents and explains their community maps to the other participants.

Review and Discussion

1. Compare the area and community maps with each other: discuss common features and differences.

2. Ask participants whether the hazards identified on the area maps affect all communities the same?
   - What factors would participants need to consider in order to assess the potential impact of the hazard on various communities?
   - What were the different indicators of vulnerability on the area and community maps?

3. Ask participants how the community maps improved their understanding of the risks faced by communities.

4. Point out that the next stage of assessments would have to be at the household level. This would generate information about the vulnerabilities of specific groups of people, such as women and children.

5. Ask participants to list the following:
   What type of things would you look for in order to conduct a risk and capacity assessment at the household level?

   Answers may include the following:
   - access to water
   - access to livestock
   - access to land
   - source of fuel
   - family remittances
   - health status
   - dependent members of households

6. Point out that this information would be very specific and could not be generated in a classroom situation, as the outcome would be too generalised. Refer participants to ‘PRA’ processes, such as ‘wealth ranking’.
7. Facilitate a review of the activity. Explore what participants learnt from this activity.
   ? What did they find surprising?
   ? What was new?
   ? In what way did the activity improve their understanding of their areas and the region?
   ? How did it improve their understanding of the risks faced by vulnerable communities?

8. Summarise by drawing general conclusions about the hazard and vulnerability profile of their areas and the region.

**Hint**
Discuss what other kinds of maps you could develop: e.g., maps specifically focusing on the risks of women and children at the individual, household and community levels.

**Learners' Responses**

Review and Evaluation

Participants responded very positively to this activity. Their comments may guide your line of questioning when reviewing the process:

- Surprise at our own capacity to produce knowledge and information that is useful for assessing and planning: we don't have to rely on 'experts' to assess risks and vulnerabilities.
- No external expert can plan in a new environment: “You have to live in a kraal to really know the resources and vulnerabilities.”
- No development work can be planned in isolation from the sources, and people who live in an area have knowledge of underlying factors which must be considered.
- Visualising elements brings them out into the open.
- Planning should be built on existing resources: itemising (in drawings) what there is, gives us a picture of elements we might have overlooked.
- There are different kinds of information, and some at the household and community level is crucial, but you can only access it if you ask and work with the people at that level.
- Mapping is a useful way of learning about a new area.
How can community-based research lead to risk assessment?¹

Purpose

This session is a basic introduction to the what, why and how of Participatory Rural Appraisal procedures.

This introduction should ideally be presented by someone who has experience with PRA in the field. The session does not aim at training but information-giving; all it can attempt to do is give a descriptive overview of the approach as an alternative, truly community-based research and planning process, and thereby whet participants' appetites for participating in training in the field.

Procedure

Much of the session is a question-and-answer information giving process; facilitators may decide to include brief exercises based on a ‘timeline’, or a venn diagram, using participants as informants.

Time

♦ 2 hours

Materials

♦ visual illustrations (sample: see resources)
♦ information on PRA processes (see resources)
♦ reading: extract from “PRA report in Tete” (see resources)
Process

Introduction

1. Introduce the session by outlining the purpose and procedure.

2. Begin with story-telling: outline a case scenario of a community in need of aid and development assistance.

Sample Story

In August 1994, several hundred refugees returned from neighbouring Zambia and Malawi to Ndzadzo, Tete province, Mozambique. They had been away for 2-3 years and they brought little with them: some cooking utensils and tools and the lucky ones a bicycle or meagre supplies of grain. They returned to a countryside where nature had taken over, eradicating any signs of previous cultivation. They settled next to the road, on the land allocated, and began to rebuild their lives. All the villagers were malnourished and many sick; life was one of extreme poverty, and it was clear that these returning refugees needed assistance - but what was needed most urgently?

3. Ask participants how they would go about assessing key vulnerabilities and capacities related to the risks faced by a community such as the one in the sample.

4. Point out that conventional processes such as surveys and questionnaire-based interviews, administered by international or regional aid agencies, would have one thing in common: the information generated would reflect the bias of the surveyors rather than the perspective of affected villagers.

Explain that Participatory Rural Appraisal (PRA) is a process in which community members themselves gather and analyse the information necessary to make planning decisions. Point out that this information would reflect what is meaningful and useful for community members: in determining risk, their perceptions, not ours, determine priorities.

Example

A survey of the living conditions of a poor community, without sanitation might suggest that the community may face an increased risk of diarrhoea. A risk reduction plan could therefore target sanitation and health education.

However, a PRA revealed the following perceptions and priorities of risk: while the villagers of Ndzadzo were acutely aware of the need for sanitation they pointed out that at this stage it was not a priority as there was no overcrowding. Instead their most
urgent need was food and water. They explained how insufficient supplies and poor quality of water and food caused a lot of diarrhoea. Worse: children suffered from chronic chest infections because of inadequate shelter. In particular those returnees who had arrived last were at risk, as they had not been able to mud the walls of their houses due to lack of water.

It became evident that the most urgent demand was for water - rather than toilets or health education.

5. Describe some of the specific features of community-based assessments such as participatory rural appraisal:

- PRA begins with the question ‘Whose knowledge counts?'; the process acknowledges that poor people are capable and creative and need to be active partners in development;

- PRA is a response to the dissatisfaction with aid and development interventions that are based on the perspective of outsiders rather than vulnerable communities themselves, and that often create dependencies rather than developing existing capacities;

- PRA was developed in the South, in the field, amongst at-risk communities, and it was spread South — South;
— PRA necessitates a shift in attitudes and behaviour towards listening, standing back, being respectful and requesting to be taught, and open to learning;

— PRA activities fall into two groups: those primarily aimed at producing information, and those primarily aimed at assessing information through comparisons, ranking, etc;

— PRA aims at action; data are generated and analysed for understanding, and used as the basis for development planning.

6. Explain that a PRA can generate information that is sensitive to the specific risks and capacities of a community. If we aim at community-based disaster reduction it is crucial that we base collaboration on shared understanding with vulnerable communities.

Give examples to illustrate your point.

**Examples**

* The timeline revealed that the area is prone to the hazard of drought, and each of the seven previous droughts has its own name describing the particular coping strategy used by the community to deal with the drought.

* The community map illustrated how water sources were scarce thus contributing to the vulnerability of household members to disease.

* The seasonality diagram showed the times of the year when different wild crops such as wild fruit, roots and insects are harvested.

* The activity clocks allowed a comparison of men’s and women’s duties and lead to an analysis of gendered vulnerability.

* Children’s drawings were a source of information about the mental health status: the severe trauma suffered as a result of civil violence and war and the ongoing risk due to landmines.

They also provided a key to understanding children’s hopes and dreams for an improved life.

**Participant Action**

1. Ask participants to get into three discussion groups, and distribute copies of the seasonality diagram, children’s drawing and community map.
2. Give the following instruction:

As a group, choose one of the data sheets.

1. Describe the data presented:
   What do you learn about the community?

2. Identify the risks and capacities:
   What are the vulnerabilities? What are resources?

3. Analyse them in terms of priorities:
   Which risks/capacities seem most prominent? How/why?

You have 20 minutes to complete the task.

3. Monitor the process and assist where necessary.

Review and Discussion

1. Facilitate report backs from the group activity; list important points on flipchart.

2. Briefly, outline the process that lead to the production of the data sheets. Describe how a seasonality diagram and a mapping exercise may be initiated and run, using available resources and being sensitive to considerations of literacy. (see resources)

3. Initiate a discussion on the following question:
   How can we use the information generated in order to plan risk reduction programmes?

4. Sum up the activity by giving an example in order to illustrate how key findings from the assessment process can lead to risk reduction plans.

   Example: the case of Ndzadzo:

   Older members of the community had a clear understanding of the importance of drought tolerant seed cultivation, and all villagers expressed their desire to actively cultivate their fields, rather than remain passive recipients of food aid. Based on these capacities a sustainable community development programme which would reduce drought related risks could include: distribution of drought tolerant seed such as sorghum in time for the planting season, linked to the establishment of a community seed-bank.
1. There is a wealth of reading and reference material on RRA / PRA / PALM procedures; a facilitator who has no previous experience with PRAs but wishes to conduct this session would be well advised to read numerous reports on PRA procedures conducted with vulnerable communities in order to be able to present an informed picture of how this approach can generate useful and representative information and project plans. A useful reference for reports and manuals is the International Institute for Environment and Development (IIED) 3 Endsleigh Street, London, WCIH ODD, UK.
## Seasonality Diagram

<table>
<thead>
<tr>
<th>Month</th>
<th>Rain Period</th>
<th>Slack Period</th>
<th>Harvest Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aug</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sep</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activities**: Traditional ceremonies, girls' initiation, etc.

**Types of Crops**: Maize, sorghum, millet, cassava, etc.

**Types of Cereals**: Wheat, rice, millet, etc.

**Types of Beans**: Kidney beans, cowpeas, etc.

**Types of Sugar**: Cane, jaggery, etc.
Children's Drawing
Information on PRA Processes

Mapping
Participatory mapping is simply asking community members to draw an area, showing key features and landmarks as perceived by the participants.

- Decide what kind of a map should be drawn (e.g., showing physical/geographic features, households where disabled people live, available community resources).
- Speak to community members: say you would like to learn more about the community, and particularly the aspect you have chosen. Ask them to identify a suitable area (e.g., a large flat ground suitable for drawing outlines in the sand) for conducting the mapping exercise.
- Explain to everyone present what the purpose of this exercise is.
- Sit back, relax and observe what happens. Don’t interrupt or interfere: be patient!
- Ensure that the map is copied as a permanent record (on paper); if applicable, record the names of the main participants who facilitated and managed the process.

Seasonal Diagramming
This is a calendar showing the main activities performed during the course of a year by different members of a community.

- Decide what kind of a diagram should be drawn (e.g., rainfall, labour demand, diseases, crops harvested or wild fruits gathered).
- Speak to community members who have knowledge of the issue being investigated, and who would like to share their knowledge. Depending on the aspect chosen (e.g., wild fruit gathering) you may wish to work only with a group of women.
- Explain what the purpose of the exercise is, and what you would like them to do, i.e., show how certain things change throughout the year.
- Draw up a 12-18 month calendar, but let participants choose where in the year they want to start.
- Encourage participants to use available materials—such as sticks or stones or leaves—to show when in the year there are more or less rainstorms/people working/crops harvested.
- If the exercise is done on the ground produce a paper copy as a permanent record.

Children’s Drawings
Children do not need much instruction in order to begin drawing—they enjoy the process and they will spontaneously produce what is important to them.

- Children usually assemble near adults’ gatherings: this may be a good time to initiate drawings. Speak to them: say you would like to learn more about their lives.
- Identify a suitable place, preferably with a reasonably hard surface.
- Provide sheets of flipchart and thick marking pens or crayons.
- Stand back, relax—don’t interfere.
- If there are numerous occasions when children draw you may want to encourage equal participation by girls, and different age groups—this will lead to a greater variety in perspective.
- Review the drawing with the children; ask for explanations if necessary.
Participatory Rural Appraisal (PRA) and How it Relates to Disaster Management

Today we are acutely aware that community participation is key in the success of development programmes targeted at vulnerable communities. We have also come to understand that community health and environmental conservation strategies can only be sustainable if they are planned and implemented with the full participation of the people they are intended to benefit. Today, we would never question the argument which stresses that community involvement is a pre-condition for successful and lasting development.

But what about community involvement in disasters? Is a disaster not defined as an event which outstrips the capacity of a community to cope with it? What comes to mind? Images of fire engines, food relief trucks, supplementary feeding and emergency medical teams rushing to the aid of the affected? Communities overwhelmed? Let’s just think about this for a while. Let’s go back to the great Southern African drought of 1991/92, or the floods in Cape Town in June 1994, and Cyclone Nadya which struck Mozambique’s northern coastline in March the same year.

What about the hundreds of thousands of internally displaced and refugee Mozambicans who returned to villages destroyed after nearly two decades of hostilities? Were the communities affected by these events merely passive recipients of international and government aid? Have they become so dependent on outside help that they are completely disinterested in taking measures themselves which could help them be better prepared? Is their educational level considered to be so poor that such communities could never grasp the concepts of disaster prevention, mitigation and preparedness?

In this paper, we intend to show how Participatory Rural Appraisal can be one useful tool in assessing the hazards, vulnerabilities and capacities of disaster-prone communities based on a field experience with refugee returnees in Tete province, Mozambique. We hope to show that it is a valuable method for both empowering disaster prone communities to reduce their risk to known threats, and to improve programme planning by outside agencies, for instance, non-governmental organisations. Beforehand though, let’s go over some basic terms commonly used. Disaster management is often presented - or interpreted in three rather different ways. First, some people view it mainly as disaster preparedness, or a readiness to respond in a timely way to a known threat. Often, this includes contingency planning as well as having essential relief supplies (i.e. tents, blankets, cooking sets, jerry cans, essential health kits, etc.) prepositioned for a rapid response.

Second, some equate it with emergency management or the actual response once a crisis has occurred, particularly the actions taken to minimise loss of life and property (most often seen in rapid onset disasters).

Southern Africa Disaster Management Training Programme
A third interpretation more commonly referred to today is disaster reduction. This is rather an embracing term for all measures which reduce the human, property, material and related losses caused by disasters. It gives particular emphasis to the importance of disaster prevention, mitigation and preparedness, and the need to incorporate these into ongoing development programmes and strategies.

There are other terms that are frequently used in disaster management:

**Hazard:**

This is an event or occurrence that has the potential for causing injury to life, or damage to property or the environment on which a community depends for its social and economic existence. Some examples of relevant hazards in Southern Africa include drought, civil unrest/conflict and epidemic dysentery.

**Vulnerability:**

This is usually viewed as a set of prevailing conditions or elements which adversely affects an individual, a household or community’s ability to cope with a threatening event or process. For example, in Southern Africa, where many villagers live in semi-arid zones, drought is a recurrent threat. In some communities, agricultural extension workers provide support and training in drought tolerant seed cultivation. Others, which are isolated far from district service centres, may be excluded from both the technical support and the availability of drought tolerant seed. They are more vulnerable to the effects of drought.

**Capacity:**

These are the qualities which increase the ability of an individual or community to cope with a threatening event or process. Those drought prone communities who have an open attitude to cultivating small grains perhaps have a greater capacity to cope with repeated rainfall failure. Similarly, those communities who have the social/organisational capacity to run a revolving seed bank can also cope better.

**Risk:**

Understanding this term is critical to reducing the effects of natural and other threats. Theoretically, a risk = hazard + vulnerability + elements at risk. It is the anticipated losses (lives lost, numbers injured, property damage and disruption of economic activity) from the impact of a given hazard on a given element over a specific period of time.

Let’s take flood-risk as an example. In an urban area prone to flooding, some houses have been constructed in a low-lying area close to the river bank. These are made of concrete block and have basements. Other houses made of corrugated iron, cardboard and thatch have been constructed in a dry river bed. When heavy rains fall up-stream, this hazard does not affect the houses or their occupants equally - although they are
affected by the same rain fall rate. If flooding occurs, the water may wash through the basements of the concrete buildings, but leave the structures reasonably intact. But, in the river bed, the fragile dwellings are completely destroyed. It is the economic vulnerability of the riverbed dwellers that has forced them to live in this dangerous site. Moreover, their property is structurally more vulnerable than the concrete buildings of their neighbours. It is the vulnerability that has increased their risk, not the hazard, alone.

A key objective in disaster management, is to reduce risks. This can be done in many ways. For instance, in the flood example above, the risk might be reduced by civil engineering measures to control river flow rate up-stream during the rainy season. These steps can reduce the hazard. However, expanding employment opportunities for the riverbed dwellers, or relocating them to structurally sound accommodations outside the river bed would lower their vulnerability to a seasonal threat. Either strategy reduces the flood risk.

One important dimension to risk is understanding how people’s perceptions of risk and their priorities vary. For instance, urban visitors to a rural community without sanitation might perceive that the community faces an increased risk of say, diarrhoeal diseases (due to lack of latrines or toilets). “Yes”, the community might agree, “diarrhoea is a risk - but it is not our priority as there is more hunger here than diarrhoea”. In determining risk, we must understand what the community perceives and prioritises as risks, from its perspective, not ours.

Participatory Rural Appraisal is a key assessment tool to help choose disaster reduction strategies that are meaningful and useful for vulnerable communities. It is one method which enables us to set shared priorities with a community, and choose strategies which build on existing community strengths.

To illustrate the role PRA can play in disaster reduction, we will refer to a PRA conducted in rural Mozambique in 1994. Three days were spent working with several communities, followed by a review of the information gathered. Listed below, is an example of how the methods we used generated information for programme planning that is risk sensitive (specifically, drought sensitive).

(Methods shown in *italics*, interpretation shown by *underlining*)

- From the *time line*, we learned the area is prone to the **hazard of drought**
- From the *time line*, we also learned that each drought has a specific name depicting a particular **coping strategy** (capacity) used by the community to deal with drought (the hazard).
- The *time trend* helped us to understand the rain patterns during a good harvest year, compared with rain patterns during a bad harvest year. This also helped us to understand the hazard’s impact on crop production.
- From the *time trend*, we also gained an understanding of when the work in the field is at a high or at a low (key for planning community meetings or other gatherings that would take time away from cultivation).
— From the seasonality mapping, the community showed us the times of the year they collect wild foods such as fruits, nuts, roots etc. (capacity).

— The transect walk gave a better understanding of the map done by the community and an opportunity to ask questions. In addition, it provided further information in the community’s vulnerabilities and capacities - such as a tinsmith making cooking pots.

— From the community mapping, we learned where the water sources were located, allowing us to better understand the drought related vulnerability faced by the villagers.

— The needs matrix provided an opportunity for us to understand the priority needs identified by the community - food, water and medicine.

Other examples of capacities and vulnerabilities were identified.

From PRA to Disaster Reduction Planning

With this information, we can already begin our programme planning - which ideally, should be carried out jointly with the community. From a disaster management perspective, some of the key findings that should be incorporated into the programme planning are listed below:

— This area is drought prone.

— Hunger/food insecurity is perceived as the most important risk facing the community.

— Lack of safe and accessible water as well as essential medicines are perceived as key vulnerabilities by the community.

— Older members of the community have a strong knowledge of and openness to using drought tolerant crops (capacities in attitude and skills).

— Older members of the community have a strong knowledge about the availability and use of wild foods (another capacity).

— The community members indicated which months they would be fully committed to preparing and cultivating their fields, highlighting another capacity to protect household food security, which any outside intervention should not undermine.

— Community members identified that limited access to essential medicines was a vulnerability, but could not associate this with any particular disease(s). This in fact reflects at least one other vulnerability as well as a capacity.

The second vulnerability is knowledge/skill based, in that they have not had access to health education which links disease to particular preventative or even simple curative interventions (at least biomedically, although there may be a host of traditional methods they are familiar with). At the same time, there is a strong expressed interest related to health matters a real capacity to explore, and build on, in the future.

From these findings, we could begin to develop a programme which would reduce the
community’s vulnerability, by reducing the impact of recurrent drought. For example, let’s build on two of the four capacities identified above - the awareness among older members of the community of the importance of drought tolerant seed cultivation and secondly, the clear commitment by the community to actively cultivate their fields (not interested in remaining passive recipients of food aid).

A sustainable community development programme which would reduce the drought related vulnerability of the community might have the three following components:

Start up distribution of drought tolerant seed (e.g. sorghum) as well as maize and groundnut seed, linked to a community managed seed bank. This could also be supported by skills training of young people in local cultivation, involving the older members of the community, keeping in mind that most of the youth have spent their formative years in refugee camps, where food was delivered by relief agencies, and not cultivated by the household.

**PRA as a Method for Planning Risk Reduction**

PRA, as an approach to assess risks as well as vulnerabilities and capacities, is a valuable method in disaster reduction planning at community level. When applied in Tete Province in Mozambique, some of the tools used included time line, time trend, needs matrix, transect walks, community mapping and seasonality mapping. We will now show how the information collected through these methods helps an outsider gain a clearer understanding of drought-related vulnerability for this returnee population.

From the time line, events that had occurred in the community were tracked over many years. The hazard of drought was a recurrent event in the community’s past. However from both the time line and the seasonality mapping exercises, it became clear that the community had coped with this known hazard in the past.

As an example, in 1973 during the Kansale drought, the community survived by eating a particular type of wild fruit, hence the name given to this drought. At this time, the community was also cultivating drought-tolerant crops such as sorghum. So, yes, the community was drought affected, but fully able to manage without external assistance.

Today, however, the situation has changed. The community is in the process of re-establishing itself after several years in refugee camps in neighbouring countries. As part of a repatriation/rehabilitation programme, a number of outside organisations have developed programmes to put these communities back on their feet. However, it appears that many of these programmes were carried out without a complete picture of the area’s risk profile (especially the fact that it is drought-prone). Moreover, there appeared to be little understanding of the past capacities to deal with this threat, and how these needed to be supported/strengthened at least temporarily, as the returnee communities re-established themselves.

As a result, the rehabilitation programmes although well intended, have not been as effective as they might have been in reducing the vulnerability of these repatriating communities. On one hand, the returnees did receive seeds. However these were non
drought tolerant maize seeds and were delivered late for planting. Therefore, although the villagers planted the maize, the crop failed because of prevailing drought conditions. Concurrently, the community has been supported with external food aid. However, this help is planned to end in accordance with a predetermined time frame set for returnee assistance, that never factored in the drought profile of this area.

For members of this community, drought as a hazard has not changed. But the risk had actually increased, as they are no longer able to cope with its consequences as they did in the past due to the considerably diminished capacities identified in the course of the PRA.

From a disaster reduction perspective, PRA is one tool which can be used to assess key vulnerabilities and capacities, as these relate to the risks faced by disaster prone communities. Compared to other assessment methods, PRA is particularly powerful, as it:

- actively involves the community
- empowers the community to identify the risks and priorities, as well as capacities to reduce these risks.
- provides a picture of the community's perceptions of the risks it faces
- allows both community insiders and outsiders to jointly identify risk reduction measures - is both time and cost effective

In this example, PRA provided a wealth of information, directly relevant to the risks affecting the returnee communities, and the capacities which could be strengthened to reduce these. This type of information is critical if outside agencies are to develop programmes which lower both disaster risk and community vulnerability for the long term. Southern Africa is a region with growing numbers of households at-risk due to socio-economic, environmental and climatic forces. However, over the past two years; PRA has become a practical tool which growing numbers of NGOs now use for project planning at community level. In fields as diverse as environmental conservation, home-based care for AIDS patients and community seed bank management, PRA is increasingly viewed as a method which enables NGOs and their clients to jointly plan programmes which make inroads into community vulnerability. The Southern Africa Regional Delegation of the International Federation of Red Cross and Red Crescent Societies is one of many humanitarian agencies which actively promotes the use of PRA for community assessment, and has advocated its use in community-based disaster mitigation planning.
How do we conduct vulnerability and capacity assessments?

Purpose

This activity will develop participants’ ability to critically explore vulnerabilities within familiar communities. The activity and ensuing discussion will lead to a deeper understanding of some of the problems with conducting vulnerability and capacity assessments at a distance from the communities concerned.

Procedure

Participants complete worksheets that lead to the construction of profiles of familiar communities.

Time

- 1½ hours

Materials

- pens and paper
- worksheets for each participant (see resources)
Process

Introduction
1. Outline the purpose and process of this activity.

Participant Action
1. Hand each participant a copy of the worksheet. Give the following instruction:

   TASK 1:
   — Please complete the worksheet, working individually.
   — You will have 20 minutes for this task

   TASK 2:
   — Move into small groups (of 3-4)
   — In groups, give 5 minute presentations of your work
   — Answer questions of clarification.
   Prepare for a plenary discussion.

   You have 40 minutes for these tasks.

2. Monitor the process of participants' individual progress and presentations in groups. Assist if necessary. Ensure that time limits are observed.
Review and Discussion

1. In plenary, initiate a review of both the process and the results of the vulnerability/capacity study. Ask participants, “What were the main problems you faced in managing the task?”

2. Point out the problems with conducting a vulnerability assessment away from the community it is based on, and without using a participatory process. Ask questions such as the following:

   ? What sources of information did you draw on in order to construct the profile?
   ? What information did you lack?
   ? How did you deal with the lack of data?
   ? What assumptions did you make? What did you base your assumptions on?

3. Encourage participants to report their findings to each other, by asking questions such as the following:

   ? What methods did you use to verify your data?
   ? What were the main signs of vulnerability?
   ? What assessment tools did you use?
   ? What did you learn about vulnerabilities and capacities in disaster-prone communities?
   ? It is often said that women, children and the elderly are the most vulnerable. Did the findings of your assessment concur with this?
   ? What are the main causes of vulnerability?

4. Record the main points of the report-backs / discussion on flipchart.

5. Ask participants what they learnt from this activity, with regard to

   (a) the process of conducting vulnerability / capacity assessments
   (b) some general common problems of Southern African communities.
Exploring Vulnerabilities

1. Name your community:

2. Briefly describe the setting - focus on any details that are important to understanding the present situation of this community (geographic, historical, socio-political, demographic, etc).

3. Name the major hazards the community is confronted with.

4. (a) Describe the vulnerabilities (environmental, social, health, organisational, etc) of the community at risk. (Be specific!)
(b) What are the indicators of vulnerability?

5. What resources and capacities do members of the community use in order to cope with the hazard(s)? (Be specific with regard to particular members / sectors of the community.)

6. From your perspective, given the vulnerabilities and capacities outlined under (4) and (5), who is most at risk from the major hazard(s)? Please explain.
What resources are available for reducing risk?

**Purpose**

This activity aims to help participants identify resources available for short-term risk reduction both at the individual and at community level.

**Procedure**

In this activity participants use themselves and their own community as a reference point. They brainstorm resources available for reducing risk, categorise them, and discuss them in terms of value, access and control.

**Time**

◆ 1 hour
Process

Introduction

1. Outline the purpose and procedure of the activity.

2. Ask participants to do a brief buzz with the person sitting next to them, on the following: what does the term ‘resources’ suggest to you?

3. In plenary, clarify the term and build a common understanding.

Suggested Definition

A resource is something that a person, household, community or country has and that it can use to protect or increase its well-being and wealth. It also denotes a power or ability to do a particular thing.

4. Explain the following:

In risk reduction, finding out what resources exist allows us to build on what’s available. However, community members often consider their particular skills worthless, either because they consider them ‘natural’ rather than ‘learned’, or because they know that in industrial societies such skills have little value.

Sample Story

You may want to think of an example from your experience to illustrate this point. I often tell the following story:

Once in a rural development workshop for at-risk women, I asked an elderly woman what skills she had. She said ‘none’. From a previous conversation I knew that she was a broom-maker, and so I pointed out that she did have a skill: she knew how to make brooms. ‘Oh’, she responded, but that’s not a skill, I was born with that’. Only once she discovered that nobody else in the group shared her skill did she acknowledge that, yes, indeed, her ability was a resource that she could use to generate income, and thus reduce her vulnerability.

Participant Action

1. Initiate a brainstorm around ‘resources we have’.

Explain that participants should use themselves (individually and as a group) as a reference.

Ask for two participants to record what is said, on flipchart; remind them of the rules of a brainstorm: everything anyone says must be listed; at this stage there is no elimination of any suggestion however outrageous it may sound.
2. Ask participants to begin the brainstorm; allow about 5 minutes, or until you have a long list of different suggestions.

3. Ask participants for categories that would allow you to classify the resources; eg. physical (such as ‘strength’, or ‘health’), mental (such as ‘patience’, or ‘compassion’), ability (such as ‘writing’, or ‘knitting’) infra-structural (such as ‘electricity’, or ‘water’) etc.

4. Collectively, classify the resources listed during the brainstorm according to the categories that have been agreed upon in (3).

Review and Discussion

1. Review the list:
   - Are there any obvious omissions? For example, is ‘time’ included in the list?
   - Are there any surprises? What makes those items surprising?
   - Are there any disputes about the items on the list?

2. Discuss the list in terms of questions such as the following:
   - Which of the resources are personal ones? Which are community ones?
   - Are certain resources particular to special individuals / groups of people in a community?
   - Who controls access to and management of community resources?
   - Why do some people not have access to those resources?
   - How could even access be arranged?
   - How are the resources valued? Which ones have ‘status’, and on what considerations is the status based?
   - How are the resources listed used in our daily lives for food security?
   - Are there any resources that we do not draw on? Why? How could they be utilised?
   - How would you build on available resources in order to decrease vulnerability?

3. Part of a risk reduction exercise is a process of identifying and assessing available resources. Discuss and outline how participants could use this process in the communities with which they work.

Point out the need for finding the right word for ‘resource’, in a community’s language.

**Hint**

This activity could be followed by a wealth ranking exercise; in this way participants would increase their awareness of how communities and societies place different values on resources available to them.

Southern Africa Disaster Management Training Programme