Characteristics of a Disaster-Resilient Community

A GUIDANCE NOTE

Version 2 November 2009

John Twigg

An electronic version of this guidance note can be downloaded from

www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13

(Aon Benfield UCL Hazard Research Centre website)

A new, dedicated website may be set up in future.

This web page also contains the first edition of the guidance note (in English, Spanish, French and Indonesian), case studies, presentations and other documents relating to community resilience.

Copies of the guidance note and other documents can also be obtained from the author, Dr John Twigg, at University College London (j.twigg@ucl.ac.uk), to whom questions and feedback can also be sent.

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FOREWORD

Welcome to the *Characteristics of a Disaster Resilient Community!* We hope that you will be excited at the opportunity to engage with this resource, and learn to embrace the breadth and depth of the *Characteristics.* As the founding group of agencies we have enjoyed, as well as been overwhelmed by, the wealth of insight that the *Characteristics* can provide. Every agency has found them to provide a new sense of motivation for staff and partners alike, which ultimately has benefited the people we serve.

The development of the *Characteristics of a Disaster-Resilient Community* was commissioned by a group of six agencies – ActionAid, Christian Aid, Plan UK, Practical Action and Tearfund, together with the British Red Cross/International Federation of Red Cross and Red Crescent Societies. In recent years, this Interagency Group has received funding from the UK Department for International Development (DFID) for disaster risk reduction (DRR) initiatives, and to support the promotion of the Hyogo Framework for Action (HFA), particularly at local level. However, when discussing how to monitor the success of the implementation of the HFA, it became apparent that there was no framework for understanding its impact at the grassroots.

The DFID-funded Interagency Group discussed the opportunity with John Twigg to define what a disaster-resilient community actually looks like; and how indicators could be developed from this. Subsequently, John Twigg and a support team were employed on a consultancy basis to identify basic characteristics of community resilience that could complement national and international-level indicator work led by UN agencies.

The first stage of this initiative resulted in a comprehensive multi-hazard/multi-context set of characteristics, which was published, with explanatory text, as *Characteristics of a Disaster-Resilient Community: A Guidance Note*, in August 2007. This was widely publicized among DRR agencies. The next stage was to field-test the *Characteristics* resource. Multiple agencies were invited to pilot the *Characteristics* in their work and give feedback on the results. They were encouraged to use the resource in whatever way was appropriate – for instance, to define future project design, to develop step-by-step indicators or measure work already carried out – and to adapt it to their own needs and operating contexts.

Over the past two years the take-up of the *Characteristics* has been considerable. All the members of the Interagency Group have made particularly extensive use of it, but many other organizations around the world have been quick to see its potential and have become excited by the possibilities the resource offers them. They are keen to apply it to their DRR work and to share the approach, as the following comment demonstrates:

> ***"Finally, an observation: field staff usually look slightly overwhelmed by the document in the first moment (me too, by the way). Once they get to it and understand its potential uses, a fairly common consequence is a sudden burst of motivation for further action. That was especially clear during a recent field research in Malawi .... I have heard field staff, local partners – usually small organizations with little specialized staff – extension officers and community leaders telling us things like 'we see disasters differently, now', 'we opened our eyes', 'we know what to do, now' and similar expressions. I even witnessed a district government officer spontaneously criticizing his own activities and proposing changes ... "*** [1]

This second edition of the *Characteristics* draws on the feedback from the field testing. The basic framework is unchanged but there is much more practical guidance on methods of applying and adapting the resource, with examples and case studies. We are particularly keen that the *Characteristics* is seen as a resource for Climate Change Adaptation, recognizing that disaster shocks caused by climate variability are being felt by an increasing number of communities across the world, with particularly prevalent impact on developing countries.

Finally, as a group of agencies, we make no apologies about being passionate that community-based DRR is fundamental to reducing risk and the impact of disasters. We also have to express our concern that no binding targets or commitments have been set by governments for governments through the Hyogo process. As a result we want to offer this contribution to the DRR community as a step towards measuring the success of the Hyogo Actions, and strongly encourage you to join other initiatives in your own locations which will contribute towards holding the HFA to account.

Ultimately, the *Characteristics* are about supporting communities to ensure that when any hazard impacts, they have the skills, resources and confidence to reduce the impact, manage the response and ensure a swift recovery. This can be achieved if governments, NGOs, academics and communities work in partnership together.

Oenone Chadburn

Head of the Disaster Management Unit
Tearfund

On behalf of the Interagency Group
(ActionAid, British Red Cross, Christian Aid,
Practical Action, Plan UK and Tearfund)
December 2009

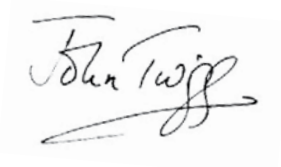
[1] Feedback from José Luis Penya, Christian Aid.

ABBREVIATIONS AND ACRONYMS

ADPC	Asian Disaster Preparedness Center
CBDM	community-based disaster management
CBDRM	community-based disaster risk management
CBO	community-based organization
CCA	climate change adaptation
CSO	civil society organization
DFID	Department for International Development
DP	disaster preparedness
DRM	disaster risk management
DRR	disaster risk reduction
EW	early warning
EWS	early warning system
HFA	Hyogo Framework for Action
IFRC	International Federation of Red Cross and Red Crescent Societies
M&E	monitoring and evaluation
NGO	non-governmental organization
PTSD	post-traumatic stress disorder
UN	United Nations
UN ISDR	UN International Strategy for Disaster Reduction
UN OCHA	UN Office for Coordination of Humanitarian Affairs
VCA	vulnerability and capacity assessment/analysis

AUTHOR'S ACKNOWLEDGEMENTS

The feedback from the field testing of the first edition of the *Characteristics* has been almost overwhelming. Members of the Interagency Group (ActionAid, British Red Cross, Christian Aid, Plan UK, Practical Action and Tearfund) which commissioned this work have contributed hugely with their comments and case studies: the following pages reveal the extent of my debt to them and their partners. This has been supplemented by extensive feedback from many more organizations, international, national and more local. Most was spontaneous, not in response to direct requests from me, often from people I did not know and sometimes from organizations I had not heard of. It is further evidence of the massive demand for a resource of this kind, which has been apparent since the start of the *Characteristics* project. My thanks go to everyone involved, to DFID for its support to the Interagency Group, and particularly to Oenone Chadburn at Tearfund and Nick Hall at Plan UK for their sympathetic management of this project.



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NEXT STEPS FOR THE *CHARACTERISTICS*

The *Characteristics of a Disaster-Resilient Community* is just one contribution to a much bigger and long-term process of building community resilience worldwide. We hope it will continue to contribute to this process and that those of you who use it will help us to ensure that it remains relevant.

When you read this document, you will become aware of how many organizations have used the *Characteristics* resource already and of the variety of ways in which they have applied it. In time, we hope it will be taken up by many more organizations which are active in disaster risk reduction, climate change adaptation and other aspects of sustainable development.

We would like the *Characteristics* project to be a vehicle for learning and sharing information about community resilience – understanding it, analysing it, implementing projects at the grass roots and lobbying for change at higher levels. We will continue to collect and share lessons about how the *Characteristics* resource has been applied, its contribution to resilience building and how it can be adapted to make it more useful.

User involvement is essential here. Please send us feedback on your experiences with the *Characteristics*, as well as ideas for modifications or new applications; and do ask for advice, too, if you need it.

New information will be posted on the 'Characteristics of a Disaster-Resilient Community' web page: **www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13 (Aon Benfield UCL Hazard Research Centre website).** A new dedicated website may be set up in future.

Feedback, ideas and questions can be sent to John Twigg at University College London
j.twigg@ucl.ac.uk

SECTION 1: INTRODUCTION

1.1 WHAT THIS GUIDANCE NOTE CONTAINS

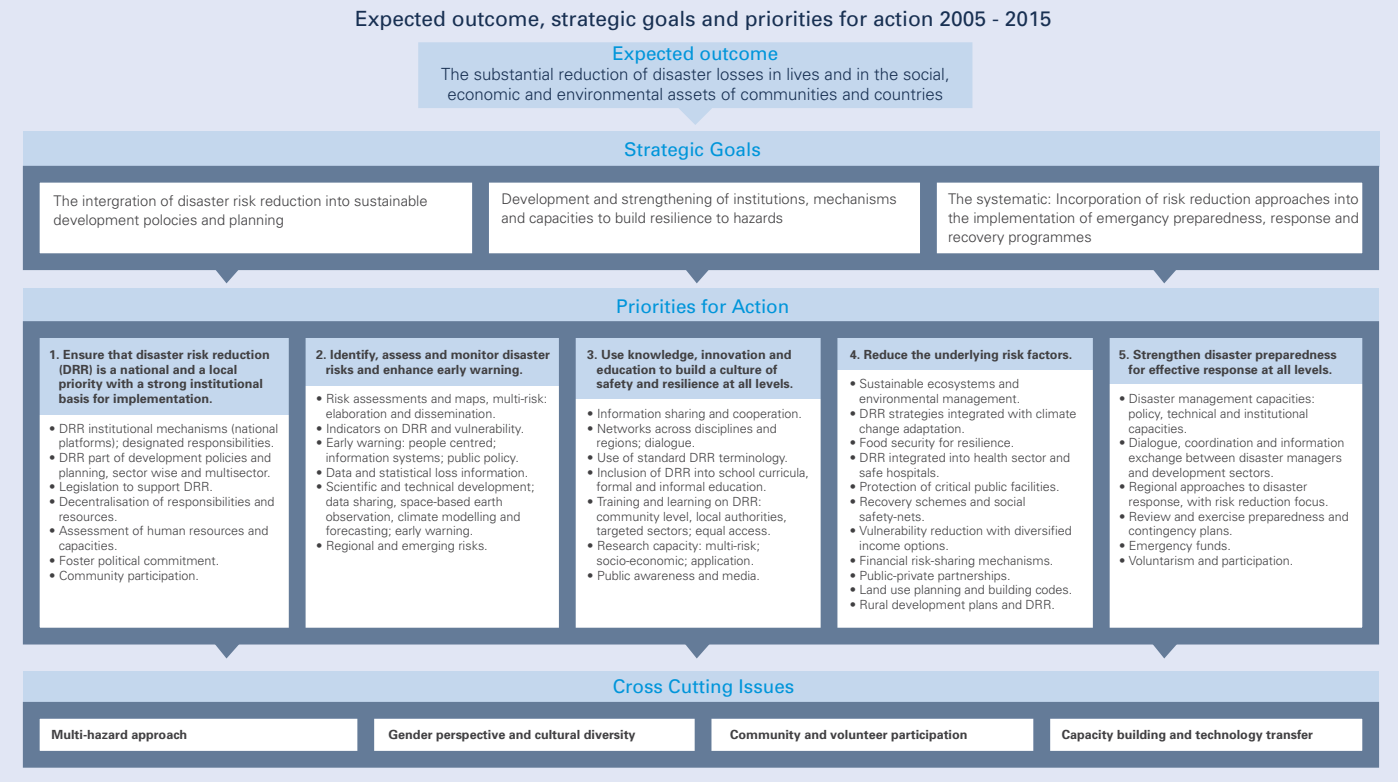
Characteristics of a Disaster-Resilient Community is a guidance note for government and civil society organizations working on disaster risk reduction (DRR) and climate change adaptation (CCA) initiatives at community level in partnership with vulnerable communities.

It shows what a 'disaster-resilient community' might consist of, by setting out the many different elements of resilience. It also provides some ideas about how to progress towards resilience.

The *Characteristics* consists of a series of tables (see Section 6) setting out the characteristics of a disaster-resilient community, supported by guidance on how to use them (Section 4).

The tables are explained in more detail below (Section 3). They are organized under five thematic headings, representing the main areas of DRR intervention, based on a framework developed by the UN International Strategy for Disaster Reduction (UN ISDR): the Hyogo Framework for Action 2005-2015 (HFA). This scheme has been followed because the HFA is generally accepted by UN and other international agencies, most national governments and many NGOs. The HFA sets out three strategic goals and outlines five priorities for action which cover the main areas of DRR. It also suggests important areas for intervention within each theme: see Fig. 1 (*The Hyogo Framework for Action*).

Fig. 1: The Hyogo Framework For Action



The *Characteristics* project is only one of several recent and ongoing initiatives in this field. As the importance of DRR is now widely recognized, many organizations have been developing indicators of achievement. Box 1 (Other DRR indicator initiatives) identifies some of the main international efforts, focusing particularly on national-level indicators. You may find it helpful to look at some of these initiatives and their outputs.

This is the second edition of the *Characteristics*. It is based on desk research, discussions with experts and feedback from an extended period of field testing of the pilot edition by a number of agencies. But we are still learning about its value and ways of applying it, and would welcome further feedback from users. [2]

1.2 USING THE *CHARACTERISTICS*: AN OVERVIEW

This document includes extensive guidance on ways of applying the *Characteristics* to your work (see Section 4), but it is important to make a few introductory observations here.

First, and most importantly, **the *Characteristics* guidance note is a resource, not a manual.** It is designed to support processes of community mobilization and partnership for DRR. Users can select relevant information and ideas from it to support their field work, according to their needs and priorities. This choice should be the result of careful thinking by communities and the organizations working with them, and of discussions between them.

It must also be emphasized that **the 'disaster-resilient community' presented here is an ideal,** for in reality no community can be free of risk. The tables present characteristics of this ideal state, not project indicators in the conventional sense. But by combining various elements of resilience identified here, DRR projects can greatly increase communities' capacities to withstand hazard events.

Another important point to make is that the characteristics set out here are general ones for all contexts, whereas **every project, location and community is unique.** Those who use this guidance note will probably focus on those elements of resilience that are most appropriate to the conditions they are working in or to the kind of work that they do.

[2] Contact the author, John Twigg, University College London (j.twigg@ucl.ac.uk).

SECTION 2: KEY CONCEPTS

Three concepts are central to this guidance note: **disaster risk reduction, resilience and community.** It is important to think about what these mean before using the tables.

2.1 DISASTER RISK REDUCTION

Disaster risk reduction (DRR) is a relatively new concept. There are different definitions of the term in the technical literature but it is generally understood to mean the broad development and application of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society.[3]

DRR is a systematic approach to identifying, assessing and reducing the risks of disaster. It aims to reduce socio-economic vulnerabilities to disaster as well as dealing with the environmental and other hazards that trigger them. It is the responsibility of development and relief agencies alike and it should be an integral part of the way such organizations do their work, not an add-on or one-off action. DRR is very wide-ranging and there is potential and need for DRR initiatives in just about every sector of development and humanitarian work.

No single group or organization can address every aspect of DRR. DRR thinking sees disasters as complex problems demanding a collective response from different disciplinary and institutional groups – in other words, partnerships. This is an important consideration, because individual organizations will have to decide where to focus their own efforts and how to work with partners to ensure that other important aspects of resilience are addressed (see Section 4.4.1 for ideas on how to use the *Characteristics* to identify partnership needs and opportunities).

Note that the *Characteristics* tables are intended as a resource for a range of organizations working at local and community level, collectively or individually. Certain elements of resilience may be more relevant to some organizations and contexts than others.

2.2 RESILIENCE AND THE RESILIENT COMMUNITY

Many attempts have been made to define 'resilience', in both DRR and CCA contexts. The variety of academic definitions and concepts can be confusing. For operational purposes it is more useful to work with broad definitions and commonly understood characteristics. Using this approach, system or community resilience can be understood as the capacity to:

- anticipate, minimize and absorb potential stresses or destructive forces through adaptation or resistance
- manage or maintain certain basic functions and structures during disastrous events
- recover or 'bounce back' after an event

'Resilience' is generally seen as a broader concept than 'capacity' because it goes beyond the specific behaviour, strategies and measures for risk reduction and management that are normally understood as capacities. However, it is difficult to separate the concepts clearly. In everyday usage, 'capacity' and 'coping capacity' often mean the same as 'resilience'.

A focus on resilience means putting greater emphasis on what communities can do for themselves and how to strengthen their capacities, rather than concentrating on their vulnerability to disaster or environmental shocks and stresses, or their needs in an emergency.

The terms 'resilience' and 'vulnerability' can be seen as opposite sides of the same coin, but both are relative. One has to ask what individuals, communities and systems are vulnerable or resilient to, and to what extent.

Like vulnerability, resilience is complex and multi-faceted. Different features or layers of resilience are needed to deal with different kinds and severities of risk, shock, stress or environmental change.

No community can ever be completely safe from natural and man-made hazards. It may be helpful to think of a disaster-resilient or disaster-resistant community as 'the safest possible community that we have the knowledge to design and

[3] The term 'disaster reduction' is often used to mean much the same thing. 'Disaster risk management' is also sometimes used in this way, although it is normally applied specifically to the operational dimensions of DRR. Some agencies are beginning to use 'risk reduction' as an umbrella term to help integrate disaster and development work.

build in a natural hazard context', [4] minimizing its vulnerability by maximizing the application of DRR measures. DRR is therefore the collection of actions, or processes, undertaken towards achieving resilience.

2.3 COMMUNITY

In conventional emergency management, communities are viewed in spatial terms: groups of people living in the same area or close to the same risks. This overlooks other significant dimensions of 'community' which are to do with common interests, values, activities and structures.

Communities are complex and often not united. There will be differences in wealth, social status and labour activity between people living in the same area and there may be more serious divisions within the community. Individuals can be members of several communities at the same time, linked to each by different factors such as location, occupation, economic status, gender, religion or recreational interests. Communities are dynamic: people may join together for common goals and separate again once these have been achieved.

These factors make it difficult to identify clearly the 'community' one is working with. From a hazards perspective, the spatial dimension is essential in identifying communities at risk. However, this must be linked to an understanding of the socio-economic differentiations, linkages and dynamics within the area at risk, not only to identify vulnerable groups but also to understand the diverse factors that contribute to vulnerability. Community businesses, services and infrastructure must also be taken into account.

Communities do not exist in isolation. The level of a community's resilience is also influenced by capacities outside, in particular by emergency management services but also by other social and administrative services, public infrastructure and a web of socio-economic and political linkages with the wider world. Nearly all communities are dependent on external duty bearers and service providers to a greater or lesser extent, even if some remain extremely marginalized. The Enabling Environment sections in the tables try to capture some of these influences (see Section 3.4).

SECTION 3: THE *CHARACTERISTICS* TABLES: AN EXPLANATION

At the core of the *Characteristics* is a set of tables that aim to give a comprehensive picture of the disaster-resilient community (see Section 6). The tables are quite complex, but they have been arranged under different levels and issues in order to make them easier to understand and use.

This section explains how the tables are organized and gives a few suggestions about how the resource might be used.[5] Section 4 discusses different applications of the *Characteristics* more fully, with examples from the field testing.

3.1 THEMATIC AREAS

The tables are divided into five main areas relating to resilience and DRR: these are called Thematic Areas. They are based on those in the Hyogo Framework for Action (see Section 1.1 above) and are intended to cover all aspects of resilience. The five Thematic Areas are as follows.

1. Governance
2. Risk Assessment
3. Knowledge and Education
4. Risk Management and Vulnerability Reduction
5. Disaster Preparedness and Response

[4] Geis DE 2000, 'By Design: the Disaster Resistant and Quality-of-Life Community'. *Natural Hazards Review* 1(3): 151-160 (quote at p.152).

[5] The *Characteristics* tables have not been changed from the first edition, with two minor exceptions. One relates to climate change adaptation (CCA; see Section 4.1.2). The other is a slight rewording of Component of Resilience 2 in Thematic Area 2. The reason for not making more changes is the great success the *Characteristics* has already achieved. The resource has been taken up enthusiastically and adopted widely by many agencies across the world in its current form. It made little sense to undermine all that work of orientation, training and application by making radical changes to its structure. Users are, however, encouraged to modify, select and make whatever other changes are necessary to make the *Characteristics* suit their own individual needs (see Section 4.3 for guidance on this).

The Thematic Areas are very broad, as you will see from the tables (particularly Thematic Area 4: Risk Management and Vulnerability Reduction). Each is therefore divided into three sub-sections, which are discussed below:

- Components of Resilience
- Characteristics of a Disaster-Resilient Community
- Characteristics of an Enabling Environment

3.2 COMPONENTS OF RESILIENCE

Each Thematic Area is subdivided into a set of its main Components of Resilience. These are still quite broad sub-themes but they start the process of breaking disaster resilience down into more precise and understandable sets of activities.

Because the scope of each Thematic Area varies, the number and range of Components of Resilience differs from one Thematic Area to another. The table below lists the Components of Resilience for each Thematic Area.

Thematic Areas		Components of Resilience
1	Governance	• Policy, planning, priorities and political commitment • Legal and regulatory systems • Integration with development policies and planning • Integration with emergency response and recovery • Institutional mechanisms, capacities and structures; allocation of responsibilities • Partnerships • Accountability and community participation
2	Risk Assessment	• Hazards/risk data and assessment • Vulnerability/capacity and impact data and assessment • Scientific and technical capacities and innovation
3	Knowledge and Education	• Public awareness, knowledge and skills • Information management and sharing • Education and training • Cultures, attitudes, motivation • Learning and research
4	Risk Management and Vulnerability Reduction	• Environmental and natural resource management • Health and well being • Sustainable livelihoods • Social protection • Financial instruments • Physical protection; structural and technical measures • Planning régimes
5	Disaster Preparedness and Response	• Organizational capacities and coordination • Early warning systems • Preparedness and contingency planning • Emergency resources and infrastructure • Emergency response and recovery • Participation, voluntarism, accountability

Section 4 suggests ways of using the Components in different types of application, linked to other parts of the *Characteristics* framework.

Thematic Area 1 (Governance) is really a cross-cutting theme underlying the other Thematic Areas. Planning, regulation, integration, institutional systems, partnerships and accountability are relevant to everyone, because they are issues likely to affect any initiative in DRR, development or relief. Users are therefore advised to refer to these governance aspects whichever Thematic Areas or Components of Resilience they are focusing on.

You may wish to add or emphasize other issues that are particularly important to your work or that you feel the *Characteristics* framework does not cover adequately. You could do this by adding new Components of Resilience or altering existing ones. Alternatively, you could introduce them as cross-cutting issues if they are applicable to more than one Thematic Area. Section 4.3 gives further advice on this.

3.3 CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY

For each Component of Resilience, the tables provide a set of Characteristics of a Disaster-Resilient Community. These are much more detailed and specific, and they bring users closer to reality on the ground. Again, the number of Characteristics varies according to the nature of the Component, but overall there are many more Characteristics (167 in total across the five Thematic Areas, compared to 28 Components of Resilience).

Here is an example of one Component of Resilience with its related Characteristics of a Disaster-Resilient Community:

Thematic Area 2: Risk Assessment	Characteristics of a Disaster-Resilient Community
Component of Resilience 1: Hazards/risk data and assessment	• Community hazard/risk assessments carried out which provide comprehensive picture of all major hazards and risks facing community (and potential risks). • Hazard/risk assessment is participatory process including representatives of all sections of community and sources of expertise. • Assessment findings shared, discussed, understood and agreed among all stakeholders, and feed into community disaster planning. • Findings made available to all interested parties (within and outside community, locally and at higher levels) and feed into their disaster planning. • Ongoing monitoring of hazards and risks and updating of assessments. • Skills and capacity to carry out community hazard and risk assessments maintained through support and training.

It is this part of the tables that is used the most at field level. Most of the discussion about applications in Section 4 relates to this section of the framework.

It may not always be clear exactly whom a given Characteristic of a Disaster-Resilience Community may apply to – and hence, who should take appropriate action. For instance, a Characteristic such as 'shared vision of a prepared and resilient community' raises the question: who is supposed to share in this vision? All of the Characteristics are intended to be applicable to communities and their members, but some could also apply to groups and organizations working in the community, such as local NGOs and local government agencies or extension workers. For the most part, these external agencies and their capacities have been placed within the Enabling Environment part of the framework (Section 3.4). Since the boundaries between communities and the Enabling Environment cannot always be drawn exactly, and external agencies have an important role to play in community welfare and development, this matter may require discussion and decision in the field.

A further point to note here is that some Characteristics are composites – for example: '[hazard/risk] Assessment findings shared, discussed, understood and agreed among all stakeholders, and feed into community disaster planning' (Thematic Area 2, Characteristic 1.3). This contains two main elements: (1) sharing, discussion, understanding and

agreement about assessment findings among all stakeholders; (2) assessment findings feed into community disaster planning. The first main element can also be split into four more elements: sharing, discussion, understanding and agreement. One reason for aggregating Characteristics in this way is to make this guidance note easier to use: the tables would be extremely long otherwise. But this has only been done where the different Characteristics are strongly linked to one another. In practice, and depending on what purpose they are using the tables for, organizations may wish to disaggregate some of the Characteristics.

3.4 CHARACTERISTICS OF AN ENABLING ENVIRONMENT

In this guidance note, the focus is on communities and local organizations (although individual and household resilience is incorporated in the tables to some extent). However, **the framework acknowledges the importance of wider institutional, policy and socio-economic factors** in supporting community-level resilience.

The tables identify the main elements of this Enabling Environment in relation to each Component of Resilience. They are more detailed than the Components but less detailed then the Characteristics of a Disaster-Resilient Community. Many are taken from the national-level DRR indicator frameworks developed by UN ISDR and UN OCHA (see Box 1: Other DRR indicator initiatives).

The following table illustrates how the Enabling Environment relates to one Component of Resilience. Note that it includes local- and national-level characteristics. Elsewhere in the tables, international dimensions of the Enabling Environment are sometimes included.

Thematic Area 1: Governance	Characteristics of an Enabling Environment
Component of Resilience 1: DRR policy, planning, priorities and political commitment	• Political consensus on importance of DRR. • DRR a policy priority at all levels of government. • National DRR policy, strategy and implementation plan, with clear vision, priorities, targets and benchmarks. • Local government DRR policies, strategies and implementation plans in place. • Official (national and local) policy and strategy of support to CBDRM. • Local-level official understanding of and support for community vision.

People who work on community resilience need to be conscious of the Enabling Environment and the effect it may have on their work, but they **are not expected to analyse it in detail.** An individual project will probably undertake a quick, subjective assessment of the Enabling Environment. However, an organization working on a number of community projects in a particular country – e.g. a national or international NGO – may wish to carry out a more thorough assessment to inform its work or to support advocacy.

Many features of the ideal Enabling Environment will be missing in many cases. In some situations the lack of key components of support may be so great that it creates what may be called a 'disabling' environment for local-level initiatives (for example, see the comments on conflict in Section 4.1.2). Users of the *Characteristics* guidance note will therefore have to base their plans on realistic assessments of the type and level of external support they can expect.

The Enabling Environment is not separate from community-level work and should not be viewed in isolation. This is particularly relevant to partnership building (Section 4.4.1) and advocacy (Section 4.4.4). Where community action and the Enabling Environment are considered together, this can provide useful insights into the interaction between different actors and levels of intervention, the project's influence on decision makers and the potential for sustainability and scaling up.

In practice, there is not a clear boundary between the community and the Enabling Environment, as there is likely to be a web of relationships and connections between community and external actors. Operational agencies working among communities may themselves be part of the Enabling Environment, if they come from outside a community or are part of a bigger organization, network or movement. Their own organizational cultures, ways of working and the nature of their partnerships with local and extra-local organizations are influential factors in resilience

building. It has been suggested that ways should be found to engage local and higher-level government agencies in application of the *Characteristics*, in order to break down boundaries and stimulate mainstreaming.

3.5 CHALLENGES

3.5.1. Limitations of a framework approach.

The *Characteristics* document is intended to provide a comprehensive framework for resilience and DRR. To make this usable, the framework is structured (following the Hyogo Framework of Action) into Thematic Areas, Components of Resilience, and Characteristics of a Disaster-Resilient Community; in addition, the framework covers the Enabling Environment.

Without a structure of this kind it would be impossible to find one's way through the many diverse characteristics of resilience. But, like all frameworks, this imposes somewhat artificial distinctions between different aspects of the subject. There is actually much more connection and overlap, and many individual Characteristics of a Disaster-Resilient Community could appear under more than one Thematic Area or Component of Resilience.[6] There is a danger – as there is with any framework – that one will over-separate the different elements and overlook the linkages between them. **These connections across the different themes and components must be kept in mind.**

Activities to promote resilience do not take place independently, either. For example, planning is mostly located in the Governance Thematic Area of the *Characteristics*, but in practice it is carried out together with other activities, such as risk assessments. Similarly, the *Characteristics* have separate Components of Resilience for hazard/risk assessment and vulnerability/capacity assessment (in Thematic Area 2), but these are often combined operationally. Section 4.2 discusses how the framework's elements can be modified to reflect practice better.

3.5.2 Limitations of the Hyogo Framework for Action

The Hyogo Framework is generally accepted by international agencies, governments and many NGOs – it is the only DRR framework agreed internationally – so it makes sense to align the *Characteristics* with its five Priorities for Action in order to draw relevant comparisons and present analysis to policy makers and other practitioners.

However, this is not always a comfortable match, particularly in the case of Priority 4 (Reduce the Underlying Risk Factors), which in the *Characteristics* becomes Thematic Area 4 (Risk Management and Vulnerability Reduction). This Thematic Area covers a very wide range of important issues, which do not necessarily fit together easily under the same heading. The seven Components of Resilience in this Thematic Area are:

- **Environmental and natural resource management**
- **Health and well being**
- **Sustainable livelihoods**
- **Social protection**
- **Financial instruments**
- **Physical protection; structural and technical measures**
- **Planning régimes**

Some aspects are closely related to disaster events: for example, the structural and technical measures needed to provide physical protection against hazards. Others are related to the longer-term, deep-rooted causes of vulnerability, which may bring more fundamental and large-scale economic and social factors into the picture. Grouping all these issues under the same general heading may be confusing, with a risk of some important questions being overlooked as a result. It also creates an imbalance across the Thematic Areas, with this being very broad and others being quite narrowly focused.

All of these are valid points. We therefore advise users to **take particular care with Thematic Area 4, making sure that the different Components of Resilience are understood properly and investigated thoroughly.** Where possible, disaster

[6] Wherever possible, individual Characteristics have been put in just one place within the framework. This is not ideal, given the holistic nature of resilience – and not all users are happy about this – but repeating the individual Characteristics across the framework would make the document too long and confusing.

and development professionals should be involved, as should experts in other aspects covered under this heading (e.g. financial experts for work with financial instruments, engineers and architects for the built environment).

3.5.3 Attitudinal aspects of resilience

Some people believe the *Characteristics* should say more about attitudinal and behavioural aspects of resilience. Factors such as beliefs, intentions, confidence and trust are often studied as influences on individuals' disaster-related behaviour, but it is harder to assess these at a community or institutional level. Attitudinal and behavioural aspects are more implicit in the *Characteristics* than explicit, but they are not absent. For example, in Thematic Area 1 (Governance) there are Characteristics relating to vision, consensus, long-term thinking, volunteerism, commitment and enthusiasm. Users should be mindful of this issue when assessing resilience and making plans.

SECTION 4: HOW TO USE THE *CHARACTERISTICS*

4.1. OVERVIEW AND CONTEXTS

4.1.1 Overview

The *Characteristics* can be used at various stages of project cycle management (e.g. for baseline studies, project design and evaluation), linked to other tools used in DRR projects and research (e.g. vulnerability and capacity analysis), for capacity building and advocacy, and for strategic planning.

This section discusses some of these ways of applying the *Characteristics*, drawing on the lessons collected during the field testing. It is not a comprehensive critique or user manual but provides case study examples, addresses some of the questions that have been asked and challenges that have been identified, and makes practical suggestions about how to deal with these.

It is recommended that you spend some time looking at the basic structure and content of the various tables (in Section 6) to familiarize yourself with them before reading this section.

4.1.2 Contexts

The *Characteristics* can be applied in any local context where DRR is planned or under way. As has been pointed out, every project, location and community is unique. Planning and interventions should reflect this. Much of what follows in Section 4 is about different ways of using the *Characteristics* to fit these local contexts. However, the following specific contexts of application require some comment.

(a) Climate change adaptation

> ***"DRR can deal with current climate variability and be the first line defence against climate change, being therefore an essential part of adaptation. Conversely, for DRR to be successful, it needs to take account of the shifting risks associated with climate change and ensure that measures do not increase vulnerability to climate change in the medium to long-term."*** [7]

DRR and Climate Change Adaptation (CCA) are not the same: DRR addresses a much wider range of hazards than those relating to climate, whilst CCA's scope extends to issues beyond DRR, such as loss of biodiversity and changes

[7] Mitchell T, van Aalst M, 2008, 'Convergence of Disaster Risk Reduction and Climate Change Adaptation: A Review for DFID' (unpublished report) p.1. http://humanitarian-space.dk/fileadmin/templates/billeder/dokumenter/Event_Climate/Convergence_of_DRR_and_CCA.pdf

to ecosystems. Nevertheless, there is a considerable overlap between them: both focus on managing risks and reducing vulnerabilities, in the context of sustainable development. Their agendas have also evolved separately and integration between them is still limited. Most development and humanitarian organizations are still seeking effective integration, conceptually as well as operationally.[8] Box 2 (Integrating DRR and CCA) illustrates how some of the Interagency Group members are currently thinking about this issue: note that this is still very much work in progress.

In field work it is not necessarily helpful to make distinctions between shocks and stresses caused by hazards, climate change or other forms of environmental degradation: what is important is to understand the nature of the threat and its causes, and to plan an appropriate response.

The *Characteristics* was not designed specifically with climate change in mind and does not contain detailed guidance on CCA. On the few occasions where the document does refer specifically to climate change or CCA, this is done to make users aware of the need for linkages and integration between DRR and CCA policies and strategies.

However, it is assumed that DRR initiatives will need to manage the threats and shocks that climate change generates and it is therefore implied throughout the document that many of the suggested Components of Resilience and Characteristics of a Disaster-Resilient Community are applicable to CCA. As Maarten van Aalst, of the Red Cross/Red Crescent Climate Centre, observed at a recent workshop on the *Characteristics*, 'Adaptation is not a separate activity, but should mean integrating climate change in all relevant elements of the [*Characteristics*] framework'. It is, therefore, important for users to keep CCA issues in mind at all times when working with the *Characteristics*, and not to assume that climate change is only relevant at the points where it is mentioned in the document. [9]

(b) After disaster

The ideal state of resilience outlined in the *Characteristics* is far removed from the condition of a community that has just suffered a disaster. There may be a need for a similar, or related, resource identifying those Characteristics specifically associated with community recovery following a disaster (e.g. access to a clean, reliable water supply) as a first step towards greater resilience. This might be created by selecting a relatively small set of key or minimum Characteristics (see Section 4.3.3), although this would need to be a careful, deliberative process.

For example, an initiative of the Myanmar Red Cross, IFRC and Danish Red Cross to develop a monitoring and evaluation framework for relief and recovery following Cyclone Nargis includes development of community 'resilience profiles': a composite set of indicators for different sectors (e.g. water and sanitation, shelter) that illustrates the resilience level of a community or household at different points in time. Each profile represents a minimum resilience 'package' for the particular sector and point in time following a disaster. This approach also has something in common with the various 'milestones' initiatives described in Section 4.3.5.

(c) Conflict

The *Characteristics* are written with so-called 'natural' disasters in mind and with the expectation of a community-based disaster management approach, assuming a degree of consensus within communities. In situations of underlying instability or conflict, this may be difficult to achieve. Moreover, conflict often undermines community resilience, for instance, by breaking down social cohesion, destroying productive assets and local infrastructure, denying access to natural resources such as water sources and grazing areas, and forcing families to flee their homes. Alterations to the way in which the *Characteristics* is used in such contexts will surely be needed – exactly what is difficult to say, since to date there is no field experience of applying the *Characteristics* in such contexts. (See also Section 3.4 on the Enabling Environment.)

[8] For a fuller explanation of these issues, see Venton P, La Trobe S, 2008, *Linking climate change adaptation and disaster risk reduction* (Teddington: Tearfund) www.tearfund.org/webdocs/Website/Campaigning/CCA_and_DRR_web.pdf

[9] In the first edition of the *Characteristics*, CCA was mentioned under environmental and natural resource management in Component 1 of Thematic Area 4 (Risk Management and Vulnerability Reduction). Even though CCA is clearly not restricted to this issue, it was suggested that users might be misled into thinking this was the main priority area for CCA-DRR integration and that they might overlook others. The reference has been taken out in the current edition.

4.2. INTRODUCING THE *CHARACTERISTICS*; BUILDING USER CAPACITY

4.2.1 Target audiences and user groups

The *Characteristics* is designed principally for government and civil society organizations working on DRR and CCA initiatives at community level, in partnership with the communities. The main users of the resource during the field testing phase were international and national NGOs and their local partners around the world but it has also been used by scientists and technologists developing their own resilience models and guidance, by researchers to design analytical frameworks, and to teach university students about disaster risk reduction. Take-up by governments has been slow, but several national government disaster management offices have shown interest and the *Characteristics* has been deployed by both NGOs and researchers to facilitate discussions with local government officials about capacities and interventions.

4.2.2 Ways of introducing the *Characteristics* to users

(a) Basic principles

How do you start using the *Characteristics of a Disaster-Resilient Community* in your work? The answer is that it is up to you, the user, to decide (the guidance given here is intended to help you make these decisions).

The *Characteristics* is not a model for every situation. It is a resource, not a checklist to be ticked off. It should stimulate and facilitate discussion. It must be adapted to the context in which it is being used and the needs and capacities of those who use it.

In every context, it is essential to investigate the *Characteristics*' usefulness and relevance to the organization using it, its partners and vulnerable communities. This includes looking at how well it fits an individual organization's approach, systems and management structures.

There was general agreement during the field testing about the **need for facilitation** in introducing the *Characteristics* to potential users. Although the basic principles can be explained easily, the document itself is quite long and complex, the language can appear abstract and conceptual, and the tables are detailed. Guidance is helpful, especially from experienced DRR practitioners who have spent some time studying the *Characteristics* and using it in the field; but it is just as important to give the users time and opportunity to prepare by reading, thinking about and discussing it.

Introducing the *Characteristics* might involve formal training, but in practice it is more usual to run planning workshops and group activities in which a range of participatory methods can be used to discuss, validate and modify what is contained in the resource. Often this is just a one-off exercise, but it is better to see it as part of a longer-term process of acquiring and using this and other tools for DRR planning, implementation and assessment.

Remember that **resilience-building should be seen as a continuing process of learning and practice.** The *Characteristics* does not advise on how to carry out such processes; it is just one of the many resources which may be useful for doing so: see Box 1 (Other DRR indicator initiatives) and Box 3 (Creating successful resilience processes).

It is essential that vulnerable people are given a chance to explore and validate the *Characteristics*. This must be a participatory process. Until now, the *Characteristics* has been applied mostly from the top down. It should also be adopted from the grassroots upwards – not only by communities but also local organizations. This creates ownership of the resource that increases the chances of it being applied successfully. (For one suggestion about ways of getting communities involved, see Box 4: Engaging with young people.) Such approaches also require facilitators who are experienced in community-based approaches.

(b) Approaches to induction and training

It is difficult to present all of the *Characteristics* in a single induction or training exercise, unless considerable time can be allocated to this (ideally as a longer process, including refresher or more advanced sessions as users become more experienced in applying the resource). Brief one-off exercises may be of limited value, unless participants are already very knowledgeable about DRR and have had time to familiarize themselves with the *Characteristics.* Spending time with 'front line' staff to talk through the *Characteristics* pays off in generating greater understanding and commitment.

There are several ways of introducing the *Characteristics*.

- One could start by looking at the overall framework and its broad elements: the Thematic Areas, Components of Resilience and Enabling Environment. This could stimulate a semi-conceptual discussion about the nature, range and goals of DRR.
- Group exercises could focus on specific Components of Resilience and their Characteristics, allowing participants to engage with the resource and debate its application to real-life situations, for example to creating baselines, setting priorities, or evaluating progress.
- An alternative is to begin with what people already know – that is, real situations and projects, working backwards to see how existing actions and achievements fit into the *Characteristics* framework. This might lead to a discussion about strengths and weaknesses, and gaps in coverage. Case Study 1 (Helping DRR practitioners to define resilience in the context of rural Bangladesh) is a detailed description of such an approach, by Tearfund. Case Study 2 (Introducing the *Characteristics* to partner NGO field staff in Nepal) is a further illustration, from Practical Action's DRR and livelihoods work.

The way in which the *Characteristics* is introduced must be matched to the potential users' existing knowledge and capacities: there is no standard approach for all situations. There have been cases where organizations did not have a sufficient level of understanding of DRR issues and terminology to use the *Characteristics* easily, or where participants and facilitators had different understandings of these things that had to be resolved first.

(c) Achieving organizational take-up

During the field testing phase, most applications of the *Characteristics* were to specific projects, with indirect benefits in terms of acquisition of skills and knowledge relating to the *Characteristics* and DRR as a whole. There is still relatively little evidence of how the *Characteristics* may be taken up at an organizational level, but there are a few examples from the field testing of ways in which the *Characteristics* might be used to build up the capacity of project or organizational teams.

Case Study 3 (Using the *Characteristics* to assess capacity skills and gaps) is one example. Another comes from Oxfam GB, which as part of a 'global meeting' in December 2007 for its staff working on DRR sought to familiarize participants with the *Characteristics*. After a general discussion about the document and its broad coverage of DRR, participants were split into groups, one for each Thematic Area. Each group picked one Component of Resilience from its Thematic Area, looked at the individual Characteristics of a Disaster-Resilient Community within that Component, selected one of these Characteristics and discussed how to turn that characteristic into an indicator and how to measure it. This exercise allowed participants to get to grips with the *Characteristics* resource and to debate ways of adapting it to their operational programming cycle, as well as generating feedback about its applicability in general.

(d) Translation

The first edition of the *Characteristics* has been translated into French, Spanish and Indonesian. We hope that this edition will also become available in many languages. In the field, agencies are already translating parts of the document, or key terms and concepts, into local languages. This can be difficult, especially where there is no word in the local language for the English term: for example, one organization working in Nepal found it difficult to translate 'resilience' into Nepali. The difficulty may be greater where there are different understandings or interpretations of a particular term or concept.

There is no simple solution to this problem. What mattters is to get the process right – in this case, spending time discussing terms and associated concepts and agreeing on their meaning and translation. Good facilitation can help here.

(e) Positive attitudes

Finally, we should note one unexpected, but very important, outcome from the field testing: **the psychological value of the *Characteristics* in creating a positive attitude amongst users.** This was the result of the *Characteristics* being solution-focused, rather than problem-driven. The feedback from a Tearfund workshop to introduce the *Characteristics* to DRR practitioners in Bangladesh[10] was typical: participants

> ***"saw the positive value of the Characteristics. Previously, they knew what they wanted to prevent in a disaster-prone village, but this was turned around so that they could see what they wanted to achieve"***

The psychological and motivational dimension of this approach to building resilience deserves further study.

[10] Described in Case Study 1: Helping DRR practitioners to define resilience in the context of rural Bangladesh.

4.3 SELECTING, MODIFYING, 'CUSTOMIZING'

4.3.1 Why the *Characteristics* should be modified

Users need to engage fully with the *Characteristics* resource, debating its usefulness and, where appropriate, adapting it to suit their needs. This might involve selecting particular Components of Resilience and Characteristics of a Disaster Resilient Community, adapting and rewriting them, adding new ones, or even arranging the framework differently. Such 'customizing' is to be encouraged, because it makes the *Characteristics* more relevant to the particular needs and capacities of communities, the hazard (and other) threats those communities face, the type of DRR work implementing organizations are expert in and their capacities to deliver, and the wider operational and policy environment. It is important not to adopt individual Characteristics without questioning their accuracy and relevance to a given situation. In rapidly-changing contexts, this questioning should be repeated to ensure that the original or rewritten Characteristics remain relevant.

Nobody is expected to use every single one of the Characteristics of a Disaster-Resilient Community in their work. Even if they did, the *Characteristics* – though intended to be as comprehensive as possible – cannot cover every dimension of resilience, every sector or every vulnerable group in society.[11] Probably every user will have their own views about how well the *Characteristics* reflects their own work.

4.3.2 Possible approaches

The process of modifying or selecting relevant Characteristics should take the factors above into account to reach clear decisions about priorities, recognizing that this may involve some compromises (there is more about priorities in Section 4.3.4). This process should be open.

Characteristics will be most useful (and most used) when they are selected by, or at least with, those who need to use them. This means participatory processes of discussion and validation at local level.

Several organizations have 'customized' the *Characteristics*, in various ways. Box 5 (Adapting the *Characteristics* to local contexts) is an example of this from the Philippines, in which a local NGO translated generic Characteristics of a Disaster-Resilient Community and Enabling Environment from the guidance note into versions that matched the local context of its work more specifically.

Plan International has been exploring ways of making the *Characteristics* reflect its core child rights and child protection concerns more fully. One approach has been to develop a set of core indicators drawing on the *Characteristics* framework but specific to Plan's focus on child-centred DRR processes (see Case Study 4: Customizing the *Characteristics* for child-centred risk reduction). Another was to draw up an extra Thematic Area (still in draft form) for a child-centred and gendered disaster-resilient community, with its own Components of Resilience, Characteristics of a Disaster-Resilient Community and Enabling Environment (see Box 6: Creation of new Thematic Areas).

The *Characteristics* document has been designed with DRR primarily in mind, but **DRR is an integral part of sustainable development. Many of the resilience components and characteristics set out in this resource are applicable in other development contexts.**

It may therefore be useful to share and discuss the *Characteristics* across an organization, seeking to connect it to other conceptual and indicator frameworks that the organization uses and to other issues with which it is concerned. Such connections will probably take the form of cross-fertilization or borrowing of ideas rather than more formal integration of conceptual and evaluative systems, but users should feel free to re-interpret and re-package the *Characteristics* in any way that is appropriate to their needs, including turning it into simpler language.

4.3.3 Key Characteristics

Some organizations have taken the process of customization a step further by developing generic lists of key Characteristics – 'key' in relation to DRR priorities, the particular area of DRR on which an individual project is focused or the type of work that the agency does.

Tearfund is one organization that has developed sets of key characteristics and has found this useful in its global DRR and food security work (see Box 7: Tearfund's 'top 20' Characteristics).

[11] For instance, some users have suggested that sustainable resource management and social capital do not fit well into the framework.

Other organizations talk in terms of identifying 'core' or 'minimum' indicators and Characteristics, recognising the immense challenges involved in making progress in all aspects of resilience, especially where this involves altering underlying patterns of development. (For other similar thinking on these lines, see Box 8: ADPC's key indicators of community resilience). This would have to be a deliberative and inclusive process, related to the particular context of the DRR initiative, and it might be difficult to reach consensus about this. Remember too that DRR is itself a constant process of improvement: nobody should be satisfied with minimum standards.

Some agencies may wish to do something of this kind, which can be a valuable exercise if it stimulates discussion and informed decision making about the nature of resilience, priority areas of action for resilience-building or DRR in general (a question that practitioners are constantly debating), and the organization's own DRR priorities. Again, it is essential to get the process right. If selection of 'key' Characteristics is necessary (and it should not be assumed that it is), it should be participatory and deliberative, not imposed from the top. The exercise must not be a one-off; there should be regular reviews. **Disaster resilience is not static: contexts and people's needs and capacities may change.** If the select list of Characteristics remains fixed, project managers may simply forget about other aspects of resilience that might be significant.

4.3.4 Setting priorities

For many agencies, the breadth of DRR and the diversity of potential DRR initiatives present problems in making choices about where and how to intervene. The *Characteristics* does not differentiate between different types of DRR in terms of their significance. However, operational agencies have to choose priorities because they cannot address all aspects of resilience at once.

The role of the *Characteristics* here is to help users visualize the widest possible range of options, from which they can make their own choices. It is up to the group or organization itself to set its priorities for intervention and this will depend on a number of factors including needs, contexts and operational capacities.

When deciding on interventions, it is also helpful to look for connections between the different Thematic Areas. An activity in one Thematic Area may have more impact if it is reinforced by addressing Components of Resilience from another. For example, disaster preparedness activities (Thematic Area 5) will be more effective if planning is based on risk and vulnerability assessment (Thematic Area 2) and there are high levels of community participation and accountability (Thematic Area 1).[12] Similarly, hazard-vulnerability-risk assessment (Thematic Area 2) is often seen as a priority at the start of a project, to identify the main threats to a community and guide planning of DRR activities. But wider resilience strengths, weaknesses and gaps must also be identified before operational choices can be made.

4.3.5 Milestones

> ***"The Characteristics would benefit from a simple weighting process to account for different country/community starting positions and to recognize 'distance travelled' in some way "***[13]

The set of Characteristics of a Disaster-Resilient Community represents a goal: the highest level of resilience that is realistically attainable. Additional milestones are needed to measure improvements and progress towards the goal.

However, there are challenges in using these tables of Characteristics to assess levels of progress from an existing state of resilience towards an ideal state of safety.

Some Characteristics may be used as conventional output or process indicators (see Section 4.4.2) but they cannot be applied as standard measures to the specific requirements of individual projects. Project partners will have to agree how to measure their own progress in each case. In doing so they will focus on those Characteristics of a Disaster-Resilient Community that they have chosen to work on, working out a process for moving from the current state towards the end state in each case, and agreeing indicators for different stages of progress along the way.

A 'milestones' model may be useful for understanding progress towards resilience in a particular district or community. This would probably be most useful as a multi-stakeholder exercise looking at the work of all groups and organizations involved in DRR in that location.

[12] It has been suggested that community-level risk assessment is the key starting point for effective DRR at grass-roots level because it creates partnerships and involvement, and facilitates dialogue with government.

[13] Dr Maureen Fordham, in report to Plan UK

As yet, there is no common agreement on different stages of progress in DRR; work on milestones and benchmarking is still quite experimental. **In the Characteristics, a five-level scale is suggested, with each level marking a distinct stage in the development of DRR.** This is a simple scale and should be easy to use.[14] It is designed to give a broad view of the state of resilience. It could be used to review progress towards resilience across all five Thematic Areas, or in individual Thematic Areas. It may also be applicable to selected Components of Resilience, but not necessarily to all of them.

Level 1	Little awareness of the issue(s) or motivation to address them. Actions limited to crisis response.
Level 2	Awareness of the issue(s) and willingness to address them. Capacity to act (knowledge and skills, human, material and other resources) remains limited. Interventions tend to be one-off, piecemeal and short-term.
Level 3	Development and implementation of solutions. Capacity to act is improved and substantial. Interventions are more numerous and long-term.
Level 4	Coherence and integration. Interventions are extensive, covering all main aspects of the problem, and they are linked within a coherent long-term strategy.
Level 5	A 'culture of safety' exists among all stakeholders, where DRR is embedded in all relevant policy, planning, practice, attitudes and behaviour.

It is assumed that groups and organizations using this tool for self-assessment will already have advanced beyond Level 1.

Level 5 approximates to the ideal disaster-resilient community. The 'culture of safety' notion referred to here, which has been advanced by the UN system and others, goes beyond carrying out local DRR activities because it implies widespread and deep-rooted behavioural change.[15]

Assessment of progress using this model would involve looking at the range of DRR or resilience issues being addressed, the number, type and range of Characteristics being achieved or worked towards, and – importantly – the level of coherence and co-ordination of efforts. Application of this or similar methods would help to keep the overall picture in sight and would encourage greater coherence of activities and linkages between the different groups and organizations involved.

Assessments could be rapid or more intensive but complex analytical processes should be avoided. Some early users of the *Characteristics* were concerned that they would have to work with all 167 Characteristics of a Disaster-Resilient Community to build up a complete picture of milestone progress towards resilience. Clearly this is unrealistic for field projects (although it may have some value in research). A more practical approach might be to make general assessments based on qualitative judgements at the higher levels (Thematic Areas, Components of Resilience), perhaps drawing on a few key Characteristics of a Disaster-Resilient Community if appropriate. These assessments would have to be participatory. The aim should be to achieve a consensus.

The milestones could be used as baselines at the start of a project to assess the level of achievement at that moment in time (see Section 4.4.2). Repeat assessments would indicate the extent of progress in DRR. However, it must be emphasized that many of these changes will only come about in the long term, especially where communities and supporting agencies have limited capacity and resources, and where there are competing priorities.

Some users have also warned against assuming a simple linear model of progress towards resilience: in societies experiencing rapid environmental, socio-economic or political change, features of resilience that were previously achieved may be lost. This suggests the need for regular review of the overall state of resilience in a community.

[14] Similar attainment scales are used elsewhere in DRR assessment: for example, UN ISDR's DRR indicators (UN ISDR 2008) and Tearfund's method for assessing DRR mainstreaming in development organizations (LaTrobe and Davis 2005). See Section 5 (Further reading).

[15] Behavioural change is difficult to measure, but there are methods for doing this, such as outcome mapping – see www.outcomemapping.ca

4.4 APPLYING THE *CHARACTERISTICS* TO DISASTER RISK REDUCTION ACTIVITIES

4.4.1 Strategic planning and partnerships

(a) Strategic planning

Although used mostly in project work, the *Characteristics* can also support higher-level planning. There is little experience of this to date, but Christian Aid's use of the resource to develop an integrated DRR and CCA regional strategy in Central America is an interesting model approach (see Case Study 5: Strategic planning using the *Characteristics*).

(b) Scoping

The *Characteristics*, particularly the Components of Resilience, could be used in a basic 'mapping' or 'scoping' exercise to identify:

- which main areas of resilience or DRR the agency concerned, and/or other agencies, are currently addressing in a particular community or district
- where the current emphasis is in their interventions
- any major gaps in coverage or missing links between DRR components

The findings of such a review could contribute to discussions about the focus of future work. A scoping or mapping exercise may be particularly helpful in multi-stakeholder settings. It can indicate gaps in agencies' collective coverage and highlight potential for new or stronger collaboration on specific issues.

It is extremely unlikely that a single organization will be working in all of the relevant areas. It is not advisable that it should, since specific technical expertise is required in many cases. Where an organization's own expertise lies in one particular field (e.g. disaster preparedness, livelihood support, education), it will often want to build on its existing strengths. But a mapping or scoping exercise will enable it to consider if it should be involved in other relevant aspects of DRR and resilience to support its current work or increase its impact (and in partnerships with other agencies to achieve this).

For example:

- An organization with expertise in hazard and risk assessment or vulnerability analysis (which comes under Thematic Area 2: Risk Assessment) might want to make sure that the results of its work are being shared and applied effectively. This might cause it to think about becoming involved in public information work (an aspect of Thematic Area 3: Knowledge and Education) and early warning systems (Thematic Area 5: Disaster Preparedness and Response).
- An organization focusing on technologies for DRR such as safe buildings and flood and landslide control measures (part of Thematic Area 4: Risk Management and Vulnerability Reduction) would probably need to be involved in discussions about building codes, land-use regulations and other legislative provisions (Thematic Area 1: Governance) that might affect its initiatives, as well as in providing technical training to community members (Thematic Area 3: Knowledge and Education).

(c) Partnership needs and opportunities

The *Characteristics* guidance note supports investigation of DRR partnership issues in several ways.

Conceptually, two features of the framework are particularly relevant.

1. Partnership elements run throughout Thematic Area 1 (Governance): these are issues such as integration of activities, shared visions, consensus, negotiation, participation, collective action, representation, inclusion, accountability, volunteerism and trust. Governance is also a theme that underpins the other Thematic Areas and Components of Resilience.
2. Through the Enabling Environment part of the framework, the *Characteristics* acknowledges the importance of wider institutional, policy and socio-economic factors in supporting community-level resilience.

In applications, there are several ways in which the *Characteristics* could be used to identify, assess and stimulate partnership opportunities. One is the initial mapping or scoping exercise outlined above.

A number of project reviews and evaluations have used the *Characteristics* as a framework or 'lens' for looking at governance and partnership dimensions of DRR. Typically, these set the current situation against the ideal state set out in the *Characteristics* and identify areas for future work, such as the need for closer integration between project activities and local governance structures. Other reviews and baseline studies have considered those elements of the Enabling Environment that are relevant to the project's aims and activities.

Some reviews guided by the *Characteristics* tables have identified expanded partnerships among those projects' achievements. For example, a review of an ActionAid DRR education programme in Bangladesh referred to a wider interactive consultation process with multiple stakeholders and communities in three disaster-prone districts, with the result that people, community leaders, school teachers and local-level disaster and education managers were better informed about disaster risks and their role in managing them. Local government had also been engaged in developing and implementing the project's action plan. This is not to say that the *Characteristics* guidance, by itself, stimulated those agencies to engage more fully in DRR partnerships, but application of the *Characteristics* helped to throw light on this aspect of DRR.

Researchers have also been quick to apply the *Characteristics* to questions of partnership. In Honduras, a study of accountability and non-discrimination in flood risk management drew on the Governance Thematic Area and the Enabling Environment (together with other material) in framing its research questions.[16] The *Characteristics* was used by Christian Aid to guide questions used in semi-structured interviews and group discussions in a community-level study in La Reforma, Honduras, that explored factors affecting the community's ability to increase its influence on local government. This identified the importance of strategic alliances between the community and other actors (particularly other flood-affected communities) as a driver of DRR, which led to achieving changes in their relationships with municipal authorities.

Feedback suggests that user **agencies are not making the most of the *Characteristics*' potential for assessing and developing multi-stakeholder DRR partnerships.** It is not clear why this is so, but, whatever the reason, this problem needs to be addressed if we are to see sustainable community-based DRR applied on a large scale.

4.4.2 Project cycle management

(a) Baseline studies

By referring to the *Characteristics*, projects can ensure that their baselines are sufficiently coherent and wide-ranging to cover all relevant issues. Looking at the individual Components of Resilience and Characteristics of a Disaster-Resilient Community, they can identify specific features and indicators to guide data collection. Data from baseline surveys of DRR activity can also be matched against the *Characteristics* framework and its different elements to identify the extent of resilience that already exists in a community.

Some agencies may find it helpful to give weightings or rankings to the mapping, in the form of numerical scores. This is related to the question of 'milestones' of progress towards resilience (see Section 4.3.5) but any scoring system can be devised. For example, one suggestion from the field testing is that baselines could mark individual Characteristics according to a simple scale: (1) met, (2) partly met, (3) not met. The scale could be used to generate crude scores that would help in deciding a project's priorities (e.g. to focus interventions on a particular aspect of resilience, or to work in one community instead of another). Subsequent surveys using the same scoring system would be able to assess progress since the baseline. Whatever system is used, the numerical scores would have to be debated and agreed, often on the basis of qualitative data and value judgements. The findings could be presented visually, for example in the form of spider diagrams.

(b) Vulnerability and capacity analysis

Vulnerability is a broad term and the concept is understood and explained in many different ways among academics and practitioners. **DRR practitioners must be clear about how they understand 'vulnerability' and how it is applied to their work.**

Vulnerability and capacity analysis (VCA) should be wide-ranging, allowing all dimensions to be identified, but often in practice so much information is collected, on so many different issues, and of such diversity (including variations in quality), that it is difficult to shape a coherent analysis. Some users speak of the *Characteristics* allowing them to 'sharpen' their analysis of vulnerability, both by identifying areas of inquiry before a VCA is carried out and in providing a framework with which the data can be organized and interpreted. The *Characteristics* can also be applied as

[16] Newborne P 2008, *Accountability and Non-discrimination in Flood Risk Management: Investigating the potential of a rights-based approach. Honduras case study* (London: Overseas Development Institute/Christian Aid).

an organizing and interpreting framework to risk or vulnerability assessments carried out previously. Box 9 ('Mapping' vulnerabilities and capacities using the *Characteristics* framework) is an example.

Participatory VCA methods and frameworks are designed to support the processes by which communities identify and assess their situation. Usually only the broad areas of enquiry are laid down in advance. Indicators are not pre-defined because this could lead to incomplete or distorted findings. This is recognized to be good practice, but it is still useful for field workers to have an idea of the range and types of vulnerability/resilience that the VCA might reveal in order to focus or widen the scope of the enquiry, as appropriate. The *Characteristics* can assist them here. For instance, an ActionAid DIPECHO-funded project to strengthen community resilience to floods, earthquakes and landslides in Northern Afghanistan used the *Characteristics* as part of a Participatory Vulnerability Analysis orientation and training, to identify different types of ever-present vulnerability in the communities where the project was being implemented.

The 'vulnerable groups' referred to in the *Characteristics* are not a single social group, because many groups are vulnerable – the poor, women, children, older people, ethnic and religious groups and people with disabilities, for example – and they are vulnerable to external shocks in different ways and to different extents. **It is assumed that good project work will disaggregate the different groups and their vulnerabilities.** However, organizations working with particular groups in society may find that individual Characteristics of a Disaster-Resilient Community need to be rewritten to reflect the situation and needs of those groups.

Formal VCA guidance should also highlight this point. The *Characteristics* (Thematic Area 2, Component of Resilience 2) does not go into detail about how to carry out VCAs, but it does note that VCAs should provide a 'comprehensive picture' of vulnerabilities and capacities and that VCA should be a 'participatory process including representatives of all vulnerable groups' (Characteristics 2.1, 2.2).

Gender issues are still often downplayed or overlooked in VCAs and DRR projects. Some frameworks for assessment add gender as a specific cross-cutting issue requiring separate consideration. This was done in the 2008-9 'Views from the Frontline' study carried out by the Global Network of Civil Society Organizations for Disaster Reduction.[17] There is no specific gender element in the *Characteristics*, but it is implicit across the framework: for example, in Characteristics relating to participation, accountability, indigenous knowledge, cultures and attitudes, well being and social protection. This is another illustration of the need for organizations working with the *Characteristics* to avoid the 'checklist' approach and instead use the resource as a starting point for identifying and discussing relevant issues.

Another comment made during the field testing was that the *Characteristics* makes what is really an artificial distinction between hazard/risk data and assessment on the one hand, and vulnerability/capacity and impact data and assessment on the other: see Thematic Area 2 (Risk Assessment), Components of Resilience 1 and 2 (Hazards/Risk Data and Assessment, Vulnerability/Capacity and Impact Data and Assessment). In practice, there are often overlaps between these different types of assessment and there are many ways of conducting them which may be more or less inclusive of the various dimensions of risk and vulnerability. The separation in the *Characteristics* is not intended to make these distinct and separate exercises but to ensure that all relevant aspects of hazard, risk and human vulnerability are considered together in DRR and resilience planning.

(c) Project design: selecting indicators

> ***"While we conceptually or sometimes intuitively understand vulnerability and resilience, the devil is always in the details, and in this instance, the devil is measurement."[18]***

The Characteristics set out in the tables are not conventional project indicators. They characterize an ideal state of resilience in quite general terms, whereas individual projects will need their own specific and more detailed indicators of ongoing achievement at the appropriate stages, decision points and adjustments in the project cycle.[19] **Characteristics should be seen as signposts for indicator development**, describing attributes or elements that contribute to the resilience of communities. They then have to be translated into measurable indicators. It is important to recognize this.

The relationship between Characteristics and conventional indicators is not fixed:

- Some Characteristics are equivalent to the *impact* or *outcome* indicators used in project evaluation because they represent an end state resulting from DRR interventions.

[17] *Clouds but little rain ... Views from the Frontline: A local perspective of progress towards implementation of the Hyogo Framework for Action* (Teddington: Global Network of Civil Society Organizations for Disaster Reduction, 2009) www.globalnetwork-dr.org

[18] Cutter S *et al.* 2008, *Community and Regional Resilience: Perspectives from Hazards, Disasters and Emergency Management* (Community and Regional Resilience Initiative) p.7

- Others are closer to *output* indicators because they indicate completed DRR activities or measures that have been put in place in order to achieve resilience impact/outcomes.
- A few are equivalent to *process* indicators that measure the implementation of project activities as a project proceeds.

Organizations and projects may choose to rearrange some of the Characteristics in this way for project design and logical frameworks, and more general M&E.

Box 10 (Turning Characteristics into indicators) is a based on Oxfam GB guidance to help project staff in developing measurable indicators.

Many agencies have used the *Characteristics* to inform project design and the selection of indicators for logical and results-based frameworks. Typically, individual Characteristics are selected and modified to become indicators. Sometimes, more general indicators developed by a project are refined by relating them to specific Characteristics.

This should be a thoughtful process of decision making, in which, first, the Characteristics are reviewed to identify and select potentially relevant indicators, and then those selected are amended where necessary to provide the precise indicators required by the project. Often this requires extensive discussion by project stakeholders. During the field testing reference to the *Characteristics* helped to identify gaps and weaknesses in project design, as well as encouraging projects to focus on realistic, achievable targets.

In practice, the process may involve some quantification so that measurable project targets can be set (e.g. the number of certain kinds of training course to be held during the project period and the number of participants, the dates when VCAs or risk assessments are to be carried out or updated, the number of rainwater harvesting structures to be built). (See also Box 11: Characteristics/indicators: quantitative or qualitative?)

Indicator selection and revision can take place at other times during the project cycle, if existing indicators are inadequate to capture what the project is doing, or unforeseen issues emerge during implementation that the project needs to address.

The process is not so straightforward where projects are seeking gains at different levels – for instance at household, group/community and local government levels. The *Characteristics* resource is aimed at community-level analysis. Some elements may be relevant to other levels but selection and adaptation of Characteristics will be more complicated.

(d) Reviews and evaluations

One of the main uses of the *Characteristics* has been in project reviews and evaluations. Feedback here has been particularly positive. The *Characteristics* is used mostly to frame the project review process, in one of two ways (the first being more common).

In the first approach, reviewers/evaluators select relevant Characteristics of a Disaster-Resilient Community as indicators of activity or achievement in the particular areas of DRR that the project addresses. This can provide fuller or clearer criteria against which to evaluate progress, even where the Characteristics themselves are descriptive.

For example, in a Tearfund mid-term evaluation of projects in India, one of the project's existing indicators of success was: 80% of target communities with well functioning committees and volunteer teams. Three relevant Characteristics were introduced to the evaluation to help assess this:

- 'committed, effective and accountable community leadership of DRR planning and implementation' (Thematic Area 1, Characteristic 1.5);
- 'community capacity to provide effective and timely emergency response services: e.g. search and rescue, first aid/ medical assistance, needs and damage assessment, relief distribution, emergency shelter, psychosocial support, road clearance' (Thematic Area 5, Characteristic 5.1);
- 'high level of community volunteerism in all aspects of preparedness, response and recovery, representative of all sections of community' (Thematic Area 5, Characteristic 6.4).

Whilst it is clearly better to use the *Characteristics* for indicator selection at the project design stage, to ensure consistency throughout the project cycle, this does not mean that they cannot be introduced at a later stage – in fact, most evaluation/review applications to date have been retrospective. It is not essential to wait until scheduled formal

[19] The UN ISDR and UN OCHA guidance on DRR indicators explain indicators and indicator selection in detail (UN ISDR 2008; UN ISDR/ UN OCHA 2008. ADPC's guidelines on community-based disaster risk management contain helpful information on developing DRR indicators at community level (ADPC 2006). See Section 5 (Further reading).

evaluations to take a new look at a project through the *Characteristics* 'lens': this could be done at any time during the project as part of ongoing monitoring.

However, monitoring and evaluation can become difficult where indicators and indicator hierarchies are altered as the project progresses. Moreover, donors expect reports against the original indicators. Changing indicators or adding new ones may also confuse project workers, partners and communities, so any changes need to be thought out carefully. During the piloting of the *Characteristics*, several agencies encountered the problem of how to apply them to current projects with established indicator frameworks (in the form of logical or results-based frameworks). The solution to this problem seems to be to **use the *Characteristics* not to replace existing indicators but to refine them by making them clearer, more explicit or more detailed**. There is not much experience of this, as yet, but the example from Christian Aid in Case Study 6 (Using the *Characteristics* for reviews and evaluations) shows how it might work.

The second approach looks at the project from the other direction. It 'maps' all of the project's activities and accomplishments against the *Characteristics* framework, seeking not only a measure of success but also an understanding of gaps and limitations in its DRR coverage. This can be done as a one-off exercise or as an add-on to a current or recent evaluation or review.

Such an approach can be very helpful in giving a systematic overview of what is being done and what is needed, and the exercise can be carried out quite quickly. It can also stimulate discussion about priorities and rates of progress. For example, when Oxfam applied the *Characteristics* 'lens' to the findings of a review of its River Basin Programme in Gaibandha, Bangladesh, it was done in order to open space for discussion with the organization's country and regional team on strengths, weaknesses, threats and opportunities relating to the programme.

However, those who use the *Characteristics* in this way should be aware that it can be demoralizing for those concerned because it is extremely unlikely that an individual project or programme is addressing all the key components of resilience. Some local staff and partners may even find it threatening if it appears to expose extensive gaps in their DRR coverage, or in their evidence base, and as a result may adopt a defensive attitude. Applications of this kind need to be handled sensitively – it may be better to carry out the exercise as a team review, where issues can be debated and resolved, rather than leaving it to the judgements of external reviewers. Sometimes it will be more appropriate to apply the method to reviewing the activities of all agencies working in a particular community or district, instead of to a single agency.

In M&E, as in other applications, the *Characteristics* can and should be customized to fit different needs and contexts. Every project is different. There will have to be a process of selection to allow a focus on those Components of Resilience and Characteristics of a Disaster-Resilient Community that are most appropriate to the project and its operating conditions. It will probably be necessary either to select key relevant Characteristics against which to measure progress, or to use the Components of Resilience as a broader framework in which to fit the project's results.

It may not be necessary or practical for every member of the evaluation team to become familiar with every detail, but team leaders and those who are selecting key indicators will probably need to go through the *Characteristics* thoroughly as part of that selection process.

4.4.3 Research

Research is potentially an important application of the *Characteristics* framework. Research studies are unlikely to be based purely on the *Characteristics*; rather, it will be one of several resources, frameworks and concepts used by researchers to design their projects and direct their questioning.

Several research proposals and projects have already made use of the *Characteristics* to look at a range of issues, including: accountability in flood risk management, assessing resilience in mountain communities (focusing on local knowledge of risk and sustainable environmental practices, adoption of DRR practices and diversity of livelihoods and access to natural resources), local governance of disaster risk, and individual and group psychological coping strategies. (See also Box 12: Researching resilience-building)

Christian Aid has applied the *Characteristics* extensively as a conceptual framing tool for analysis and the development of case studies of vulnerable communities: Case Study 7 (Using the *Characteristics* for data collection and research) describes the process adopted. The research findings were mostly related to the projects concerned but sometimes raised issues of much wider significance (for example, research in Malawi pointed to the association between

NGOs, power structures and VCAs, suggesting that the influence of local power structures on the VCA process could distort their results, with serious implications for the direction of project planning and the accountability of project management).[20]

4.4.4 Advocacy

The *Characteristics* supports advocacy by providing an evidence base (it helps to identify vulnerabilities and capacities, indicate priority areas for intervention and demonstrate the impact of DRR measures) and stimulating discussion and partnerships.

Some NGOs have found the Characteristics of an Enabling Environment a helpful tool in their advocacy work, especially in developing an agenda for 'mainstreaming' DRR at higher levels to complement their grass-roots work (see Box 13: Linking community resilience to the Enabling Environment). Because the Characteristics of an Enabling Environment tend to be quite general, they may need to be sharpened to create more focused advocacy targets (e.g. getting specific DRR laws passed by parliament). However, even as it stands, this part of the framework has helped civil society organizations to ask specific questions of local governments regarding resilience and DRR, and thereby enabled them to engage in policy discussions with government officials. The Enabling Environment also covers different levels, local, national and international. Advocacy initiatives need to identify their goals at each level and to work out how to link them.

SECTION 5: FURTHER READING

This list contains selected important sources that are widely available (most are online).

The Hyogo Framework of Action and UN DRR indicators

- Global Network of Civil Society Organizations for Disaster Reduction 2009, *Clouds but little rain ... Views from the Frontline: A local perspective of progress towards implementation of the Hyogo Framework for Action* (Teddington: Global Network of Civil Society Organizations for Disaster Reduction) www.globalnetwork-dr.org
- UN ISDR Hyogo Framework for Action web page, http://www.unisdr.org/eng/hfa/hfa.htm
- UN ISDR 2008, *Indicators of Progress: Guidance on Measuring the Reduction of Disaster Risks and the Implementation of the Hyogo Framework for Action* (Geneva: UN International Strategy for Disaster Reduction) www.unisdr.org
- UN ISDR/UN OCHA 2008, *Disaster Preparedness for Effective Response: Guidance and Indicator Package for Implementing Priority Five of the Hyogo Framework* (Geneva: UN International Strategy for Disaster Reduction/UN Office for Coordination of Humanitarian Affairs) www.preventionweb.net

The *Characteristics* and their application:

- Liebmann M, Pavanello S 2007, 'A critical review of the Knowledge and Education Indicators of Community-Level Disaster Risk Reduction' (London: Aon Benfield UCL Hazard Research Centre, unpublished report) www.proventionconsortium.org/?pageid=90 and www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13
- Twigg J 2009, *Identifying Partnership Needs and Opportunities* (London: Aon Benfield UCL Hazard Research Centre, Disaster Studies Working Paper 18) www.abuhrc.org
- See also the case studies and other documents on the Characteristics web page, at: www.proventionconsortium.org/?pageid=90 or www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13

Other DRR and Resilience Indicator Guidelines

- ADPC 2006, *Critical Guidelines: Community-based Disaster Risk Management* (Bangkok: Asian Disaster Preparedness Center) www.adpc.net
- Benson C, Twigg J 2007 (with T Rossetto), *Tools for Mainstreaming Disaster Risk Reduction: Guidance Notes for Development Organizations* (Geneva: ProVention Consortium) www.proventionconsortium.org/mainstreaming_tools
- Benson C, Twigg J 2004, *'Measuring Mitigation': Methodologies for assessing natural hazard risks and the net benefits of mitigation: a scoping study* (Geneva: ProVention Consortium) www.proventionconsortium.org/mainstreaming_tools
- Centre for Community Enterprise 2000, *The Community Resilience Manual: a resource for rural recovery and renewal* (Port Alberni, BC: Centre for Community Enterprise) www.cedworks.com
- IOTWS 2007, *How Resilient is Your Coastal Community? A guide for evaluating coastal community resilience to*

[20] Penya JL, Nyrongo J 2008, 'Who controls development? NGOs, accountability and power in rural Malawi' (London: Christian Aid, unpublished paper).

tsunamis and other hazards (Bangkok: US Indian Ocean Tsunami Warning System Program) www.preventionweb.net/english/professional/publications/v.php?id=2389

- LaTrobe S, Davis I 2005, *Mainstreaming disaster risk reduction: a tool for development organizations* (Teddington: Tearfund) http://tilz.tearfund.org
- McEntire DA 2000, 'Sustainability or invulnerable development? Proposals for the current shift in paradigms'. *Australian Journal of Emergency Management* 15(1): 58-61.
- ProVention Consortium 2006, *Risk Reduction Indicators*. TRIAMS Working Paper (Geneva: ProVention Consortium) www.proventionconsortium.org/themes/default/pdfs/TRIAMS_full_paper.pdf
- Tearfund undated, *CEDRA: Climate Change and Environmental Degradation Risk and Adaptation Assessment. An environmental field tool for agencies working in developing countries* (Teddington: Tearfund) http://tilz.tearfund.org
- Williamson L, Connor H 2008, *Vulnerability – Adaptation – Energy Resilience (VAR): Indicators and methodology to identify adaptation projects that reinforce energy systems resilience* (Paris: Helio International) www.helio-international.org

DRR and climate change adaptation

- *Disasters*, Vol. 30, No.1, March 2006 (special issue on 'Natural Disasters and Climate Change').
- Ensor J, Berger R, 2009, *Understanding Climate Change Adaptation: Lessons from community-based approaches* (Rugby: Practical Action Publishing).
- Pasteur K, 2010 (in press), *From Vulnerability to Resilience (V2R): Guidelines for Analysis and Action to Build Community Resilience* (Rugby: Practical Action Publishing) http://www.practicalaction.org/
- Venton P, La Trobe S, 2008, *Linking climate change adaptation and disaster risk reduction* (Teddington: Tearfund) www.tearfund.org/webdocs/Website/Campaigning/CCA_and_DRR_web.pdf

Local and community-based DRR

- ADPC 2006, *Critical Guidelines: Community-based Disaster Risk Management* (Bangkok: Asian Disaster Preparedness Center) www.adpc.net
- Twigg J 2004, *Disaster risk reduction: Mitigation and preparedness in development and emergency programming* (London: Overseas Development Institute, Humanitarian Practice Network, Good Practice Review No. 9) www.odihpn.org
- UN ISDR/UNDP 2007, *Building Disaster Resilient Communities: Good Practices and Lessons Learned* (Geneva: UNISDR/UNDP) www.unisdr.org

Resilience and the disaster-resilient community

- Buckle P, Marsh G, Smale S 2000, 'New approaches to assessing vulnerability and resilience.' *Australian Journal of Emergency Management* 15(2) 8-14.
- Cutter S *et al*. 2008, 'A place-based model for understanding community resilience to natural disasters'. *Global Environmental Change* 18: 598-606.
- Cutter S *et al*. 2008, *Community and Regional Resilience: Perspectives from Hazards, Disasters and Emergency Management* (Community and Regional Resilience Initiative) www.resilientus.org
- Geis DE 2000, 'By Design: the Disaster Resistant and Quality-of-Life Community'. *Natural Hazards Review* 1(3): 151-160.
- Godschalk DR 2003, 'Urban Hazard Mitigation: Creating Resilient Cities'. *Natural Hazards Review* 4(3) 136-143.
- IFRC 2004, *World Disasters Report 2004: Focus on community resilience* (Geneva: IFRC), pp. 11-35.
- Learning for Sustainability website, www.learningforsustainability.net (Community Resilience and Adaptation page)
- McEntire DA 2005, 'Why vulnerability matters. Exploring the merit of an inclusive disaster reduction concept'. *Disaster Prevention and Management* 14(2) 206-222.
- Manyena SB 2006, 'The concept of resilience revisited'. *Disasters* 30(4): 433-450.
- Sapirstein G 2006, 'Social Resilience: The Forgotten Dimension of Disaster Risk Reduction'. *Jamba* 1(1) 54-63.

Communities and DRR

- Buckle P 1998/9, 'Re-defining community and vulnerability in the context of emergency management'. *Australian Journal of Emergency Management* 13(4) 21-26.
- Enders J 2001, 'Measuring community awareness and preparedness for emergencies'. *Australian Journal of Emergency Management* 16(3): 52-58.
- IFRC 2004, *World Disasters Report 2004: Focus on community resilience* (Geneva: IFRC), pp. 27-31.
- Marsh G, Buckle P 2001, 'Community: the concept of community in the risk and emergency management context'. *Australian Journal of Emergency Management* 16(1): 5-7.

SECTION 6: THE *CHARACTERISTICS* TABLES

THEMATIC AREA 1: GOVERNANCE

Components of resilience:

1. DRR policy, planning, priorities, and political commitment
2. Legal and regulatory systems
3. Integration with development policies and planning
4. Integration with emergency response and recovery
5. Institutional mechanisms, capacities and structures; allocation of responsibilities
6. Partnerships
7. Accountability and community participation

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
1. DRR policy, planning, priorities, and political commitment.	1.1. Shared vision of a prepared and resilient community. 1.2. Consensus view of risks faced, risk management approach, specific actions to be taken and targets to be met.[1] 1.3. Vision and DRR plans informed by understanding of underlying causes of vulnerability and other factors outside community's control. 1.4. Community takes long-term perspective, focusing on outcomes and impact of DRR. 1.5. Committed, effective and accountable community leadership of DRR planning and implementation. 1.6. Community DRR (and DP) plans, developed through participatory processes, put into operation, and updated periodically.	• Political consensus on importance of DRR. • DRR a policy priority at all levels of government. • National DRR policy, strategy and implementation plan, with clear vision, priorities, targets and benchmarks. • Local government DRR policies, strategies and implementation plans in place. • Official (national and local) policy and strategy of support to community-based disaster risk management (CBDRM). • Local-level official understanding of, and support for, community vision.
2. Legal and regulatory systems	2.1. Community understands relevant legislation, regulations and procedures, and their importance. 2.2. Community aware of its rights and the legal obligations of government and other stakeholders to provide protection.	• Relevant and enabling legislation, regulations, codes, etc., addressing and supporting DRR, at national and local levels. • Jurisdictions and responsibilities for DRR at all levels defined in legislation, regulations, by-laws, etc. • Mechanisms for compliance and enforcement of laws, regulations, codes, etc., and penalties for non-compliance defined in laws and regulations. • Legal and regulatory system underpinned by guarantees of relevant rights: to safety, to equitable assistance, to be listened to and consulted. • Land-use regulations, building codes and other laws and regulations relating to DRR enforced locally.

[1] Including agreement on level of acceptable risk.

Thematic Area 1 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
3. Integration with development policies and planning	3.1. Community DRR seen by all local stakeholders as integral part of plans and actions to achieve wider community goals (e.g. poverty alleviation, quality of life).	• Government (all levels) takes holistic and integrated approach to DRR, located within wider development context and linked to development planning across different sectors. • DRR incorporated into or linked to other national development plans and donor-supported country programmes.[2] • Routine integration of DRR into development planning and sectoral policies (poverty eradication, social protection, sustainable development, climate change adaptation, desertification, natural resource management, health, education, etc.). • Formal development planning and implementation processes required to incorporate DRR elements (e.g. hazard, vulnerability and risk analysis, mitigation plans). • Multi-sectoral institutional platforms for promoting DRR. • Local planning policies, regulations and decision-making systems take disaster risk into account.
4. Integration with emergency response and recovery	4.1. Community and other local-level actors in sustainable development and DRR engage in joint planning with community and local-level emergency teams and structures.	• National policy framework requires DRR to be incorporated into design and implementation of disaster response and recovery. • Policy, planning and operational linkages between emergency management, DRR and development structures. • Risk reduction incorporated into official (and internationally supported and implemented) post-disaster reconstruction plans and actions.
5. Institutional mechanisms, capacities and structures; allocation of responsibilities	5.1. Representative community organisations dedicated to DRR/DRM. 5.2. Local NGOs, CBOs and communities of interest engaged with other issues capable of supporting DRR and response.[3] 5.3. Responsibilities, resources, etc., defined in community disaster plans. 5.4. Shared understanding among all local stakeholders regarding DRR responsibilities, authority and decision making.	• Supportive political, administrative and financial environment for CBDRM and community-based development. • Institutional mandates and responsibilities for DRR clearly defined. Inter-institutional or co-ordinating mechanisms exist, with clearly designated responsibilities. • Focal point at national level with authority and resources to co-ordinate all related bodies involved in disaster management and DRR. • Human, technical, material and financial resources for DRR adequate to meet defined institutional roles and responsibilities (including budgetary allocation specifically to DRR at national and local levels).

[2] Poverty Reduction Strategies, national Millennium Development Goal reports, National Adaptation Plans of Action, UNDP assistance frameworks, etc.

[3] i.e. emergent, extending or expanding organisations. Expanding organisations are expected to take on additional functions at times of crisis, which they do by increasing their capacity or altering their organisational structures (e.g. a local Red Cross branch calling on trained volunteers to support its small core of professional staff). Extending organisations are not expected to respond to disasters but during disasters may perform non-regular tasks (e.g. a construction company clearing debris to assist rescue operations). Emergent organisations do not exist before a disaster event but form in response to it (e.g. spontaneous search and rescue groups). See Webb GR 1999, *Individual and Organizational Response to Natural Disasters and other Crisis Events: the continuing value of the DRC typology* (University of Delaware, Disaster Research Center, Preliminary Paper #277), http://dspace.udel.edu:8080/dspace/handle/19716/662

Thematic Area 1 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	5.5. Community-managed funds and other material resources for DRR and disaster recovery. 5.6. Access to government and other funding and resources for DRR and recovery.	• Devolution of responsibility (and resources) for DRR planning and implementation to local government levels and communities, as far as possible, backed up by provision of specialist expertise and resources to support local decision-making, planning and management of disasters. • Committed and effective community outreach services (DRR and related services, e.g. healthcare).
6. Partnerships	6.1. Local stakeholders committed to genuine partnerships (with open and shared principles of collaboration, high levels of trust). 6.2. Clear, agreed and stable DRR partnerships between local stakeholder groups and organisations (communities and CBOs with local authorities, NGOs, businesses, etc.). 6.3. Processes are community-led (supported by external agencies). 6.4. Local capacity and enthusiasm to promote DRR and scale up activities (through community-external actor partnerships). 6.5. Community and local groups/ organisations have capacity to recruit, train, support and motivate community volunteers for DRR, and work together to do so.	• DRR identified as responsibility of all sectors of society (public, private, civil), with appropriate inter-sectoral and co-ordinating mechanisms. • Long-term civil society, NGO, private sector and community participation and inter-sectoral partnerships for DRR and emergency response. • Linkages with regional and global institutions and their DRR initiatives.
7. Accountability and community participation	7.1. Devolved DRR structures facilitate community participation. 7.2. Access to information on local government plans, structures, etc. 7.3. Trust within community and between community and external agencies. 7.4. Capacity to challenge and lobby external agencies on DRR plans, priorities, actions that may have an impact on risk. 7.5. Participatory M&E systems to assess resilience and progress in DRR. 7.6. Inclusion/representation of vulnerable groups in community decision making and management of DRR. 7.7. High level of volunteerism in DRR activities.	• Basic rights of people formally recognised by national and local government (and civil society organisations: CSOs): to safety, to equitable vulnerability reduction and relief assistance, to be listened to and consulted (implies responsibility to guarantee these rights where appropriate). • Effective quality control or audit mechanisms for official structures, systems, etc., in place and applied. • Democratic system of governance holding decision makers to account. • Government consults civil society, NGOs, private sector and communities. • Popular participation in policy development and implementation. • Citizen demands for action to reduce disaster risk. • Existence of 'watchdog' groups to press for change.

THEMATIC AREA 2: RISK ASSESSMENT

Components of resilience:

1. Hazards/risk data and assessment
2. Vulnerability/capacity and impact data and assessment
3. Scientific and technical capacities and innovation

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
1. Hazards/risk data and assessment	1.1. Community hazard/risk assessments carried out which provide comprehensive picture of all major hazards and risks facing community (and potential risks). 1.2. Hazard/risk assessment is participatory process including representatives of all sections of community and sources of expertise. 1.3. Assessment findings shared, discussed, understood and agreed among all stakeholders, and feed into community disaster planning. 1.4. Findings made available to all interested parties (within and outside community, locally and at higher levels) and feed into their disaster planning. 1.5. Ongoing monitoring of hazards and risks and updating of assessments. 1.6. Skills and capacity to carry out community hazard and risk assessments maintained through support and training.	• Hazard/risk assessments mandated in public policy, legislation, etc., with standards for preparation, publication, revision. • Systematic and repeated assessments of hazards and disaster risks undertaken in higher-level development programming. High-risk areas identified. • Good-quality data on hazards and risks (scientific databases, official reports, etc.) made available to support local-level assessments. • Existing knowledge collected, synthesised and shared systematically (through disaster management information systems). • Participation of all relevant agencies/ stakeholders in assessments. • Government (local and/or national) and NGOs committed to providing technical and other support to local and community hazard/risk assessments.
2. Vulnerability/capacity and impact data and assessment	2.1. Community vulnerability and capacity assessments (VCAs) carried out which provide comprehensive picture of vulnerabilities and capacities. 2.2. VCA is participatory process including representatives of all vulnerable groups. 2.3. Assessment findings shared, discussed, understood and agreed among all stakeholders and feed into community disaster planning. 2.4. VCAs used to create baselines at start of community DRR projects.	• VCA mandated in public policy, legislation, etc., with standards for preparation, publication, revision. • Vulnerability and capacity indicators developed and systematically mapped and recorded (covering all relevant social, economic, physical and environmental, political, cultural factors). • Disaster impact data and statistical loss information available and used in VCA. • Systematic use of VCA in higher-level development programming. Vulnerable groups and causes of vulnerability identified. • Existing knowledge collected, synthesised and shared systematically (through disaster management information systems).

Thematic Area 2 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	2.5. Findings made available to all interested parties (within and outside community) and feed into their disaster and development planning. 2.6. Ongoing monitoring of vulnerability and updating of assessments. 2.7. Skills and capacity to carry out community VCA maintained through support and training.	• Participation of all relevant agencies/ stakeholders in assessments. • Government (local and/or national) and NGOs committed to providing technical and other support to local and community VCA.
3. Scientific and technical capacities and innovation	3.1. Community members and organisations trained in hazards, risk and VCA techniques and supported to carry out assessments. 3.2. Use of indigenous knowledge and local perceptions of risk as well as other scientific knowledge, data and assessment methods.	• Institutional and technical capacity for data collection and analysis. • Ongoing scientific and technological development; data sharing, space-based earth observation, climate modelling and forecasting; early warning. • External agencies value and use indigenous knowledge.

THEMATIC AREA 3: KNOWLEDGE AND EDUCATION

Components of resilience:

1. Public awareness, knowledge and skills
2. Information management and sharing
3. Education and training
4. Cultures, attitudes, motivation
5. Learning and research

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
1. Public awareness, knowledge and skills	1.1. Shared vision of a prepared and resilient community. 1.2. Whole community has been exposed to/taken part in ongoing awareness campaigns, which are geared to community needs and capacities (e.g. literacy levels). 1.3. Community knowledge of hazards, vulnerability, risks and risk reduction actions sufficient for effective action by community (alone and in collaboration with other stakeholders). 1.4. Possession (by individuals and across community) of appropriate technical and organisational knowledge and skills for DRR and response actions at local level (including indigenous technical knowledge, coping strategies, livelihood strategies). 1.5. Open debate within community resulting in agreements about problems, solutions, priorities, etc.	• General public aware of and informed about disaster risks and how to manage them. • Appropriate, high-visibility awareness-raising programmes designed and implemented at national, regional, local levels by official agencies. • Media involvement in communicating risk and raising awareness of disasters and counter-disaster measures. • Public communication programmes involve dialogue with stakeholders about disaster risks and related issues (not one-way information dissemination). • External agencies understand communities' vulnerabilities, capacities, risks, risk perception and rationality of risk management decisions; and recognise viability of local knowledge and coping strategies. • Levels of education provision, access, literacy, etc., facilitate effective information dissemination and awareness raising.
2. Information management and sharing (more formal)	2.1. Information on risk, vulnerability, disaster management practices, etc., shared among those at risk. 2.2. Community disaster plans publicly available and widely understood. 2.3. All sections of community know about facilities/services/skills available pre-, during and post-emergency, and how to access these. 2.4. Content and methods of communicating information developed with communities (i.e. 'communication' not 'information dissemination'). 2.5. Maximum deployment of indigenous, traditional, informal communications channels. 2.6. Impact of information materials and communication strategies evaluated.[1]	• Government (national and local) is committed to information sharing (transparency) and dialogue with communities relating to information about risk and DRM. • Legislation specifies right of people to be informed and obtain information about risks facing them. • Common understanding among external agencies of principles, concepts, terminology, alternative approaches in DRR. • Public and private information-gathering and -sharing systems on hazards, risk, disaster management resources (incl. resource centres, databases, websites, directories and inventories, good practice guidance) exist and are accessible. • Active professional networks for disaster risk management (sharing scientific, technical and applied information, traditional/ local knowledge).

[1] i.e. on community and individual attitudes towards disaster risk and risk management strategies

Thematic Area 3 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
3. Education and training	3.1. Local schools provide education in DRR for children through curriculum and where appropriate extra-curricular activities.[2] 3.2. DRR/DRM and other training addresses priorities identified by community and based on community assessment of risks, vulnerabilities and associated problems. 3.3. Community members and organisations trained in relevant skills for DRR and DP (e.g. hazard-risk-vulnerability assessment, community DRM planning, search and rescue, first aid, management of emergency shelters, needs assessment, relief distribution, fire-fighting). 3.4. Householders and builders trained in safe construction and retrofitting techniques, and other practical steps to protect houses and property. 3.5. (rural) Community members skilled or trained in appropriate agricultural, land use, water management and environmental management practices. 3.6. Community experience of coping in previous events/crises, or knowledge of how this was done, used in education and training.	• Inclusion of disaster reduction in relevant primary, secondary and tertiary education courses (curriculum development, provision of educational material, teacher training) nationally. • Specialised vocational training courses and facilities for DRR/DRM available, at different levels and for different groups, linked through overall training strategy. Certification of training. • Appropriate education and training programmes for planners and field practitioners in DRR/DRM and development sectors designed and implemented at national, regional, local levels. • Training resources (technical, financial, material, human) made available by government, emergency services, NGOs, etc., to support local-level DRR.
4. Cultures, attitudes, motivation	4.1. Shared community values, aspirations and goals (and positive sense of the future, commitment to community as a whole, agreement of community goals). 4.2. Cultural attitudes and values (e.g. expectations of help/self-sufficiency, religious/ideological views) enable communities to adapt to and recover from shocks and stresses. 4.3. Informed, realistic attitudes towards risk and risk management. 4.4. Justifiable confidence about safety and capacities of self-reliance. 4.5. Possession of (or access to) the information, resources and support desired/needed to ensure safety. 4.6. Feelings of personal responsibility for preparing for disasters and reducing disaster risk. 4.7. Safer behaviour as result of awareness raising.	• Political, social and cultural environment that encourages freedom of thought and expression, and stimulates inquiry and debate. • Official and public acceptance of precautionary principle: need to act on incomplete information or understanding to reduce potential disaster risks.

[2] Assumes high levels of school attendance; and if not, outreach activities.

Thematic Area 3 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
5. Learning and research	5.1. Documentation, use and adaptation of indigenous technical knowledge and coping strategies. 5.2. Participatory M&E systems to assess resilience and progress in DRR.	• National and sub-national research capacity in hazards, risk and disaster studies (in specialist institutions or within other institutions), with adequate funding for ongoing research. • Encouragement of inter-disciplinary and policy-oriented research. • National, regional and international cooperation in research, science and technology development. • Comprehensive agenda for scientific, technical, policy, planning and participatory research in DRR.

THEMATIC AREA 4: RISK MANAGEMENT AND VULNERABILITY REDUCTION

Components of resilience:

1. Environmental and natural resource management
2. Health and well being
3. Sustainable livelihoods
4. Social protection
5. Financial instruments
6. Physical protection; structural and technical measures
7. Planning régimes

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
1. Environmental and natural resource management	1.1. Community understanding of characteristics and functioning of local natural environment and ecosystems (e.g. drainage, watersheds, slope and soil characteristics) and the potential risks associated with these natural features and human interventions that affect them. 1.2. Adoption of sustainable environmental management practices that reduce hazard risk.[1] 1.3. Preservation of biodiversity (e.g. through community-managed seed banks, with equitable distribution system). 1.4. Preservation and application of indigenous knowledge and appropriate technologies relevant to environmental management. 1.5. Access to community-managed common property resources that can support coping and livelihood strategies in normal times and during crises.	• Policy, legislative and institutional structure that supports sustainable ecosystems and environmental management, and maximises environmental resource management practices that assist DRR. • Effective official action to prevent unsustainable land uses and resource management approaches that increase disaster risk. • Policy and operational interface between environmental management and risk reduction policies and planning. • DRR policies and strategies integrated with other adaptation policies and strategies. • Local government experts and extension workers available to work with communities on long-term environmental management and renewal.
2. Health and well being (including human capital)	2.1. Physical ability to labour and good health maintained in normal times through adequate food and nutrition, hygiene and health care. 2.2. High levels of personal security and freedom from physical and psychological threats. 2.3. Food supplies and nutritional status secure (e.g. through reserve stocks of grain and other staple foods managed by communities, with equitable distribution system during food crises).	• Public health structures integrated into disaster planning and prepared for emergencies. • Community structures integrated into public health systems. • Health education programmes include knowledge and skills relevant to crises (e.g. sanitation, hygiene, water treatment).

[1] e.g. soil and water conservation, sustainable forestry, wetland management to reduce flood risk, conservation of mangroves as buffer against storm surges, maintenance of water supply and drainage systems.

Thematic Area 4 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	2.4. Access to sufficient quantity and quality of water for domestic needs during crises. 2.5. Awareness of means of staying healthy (e.g. hygiene, sanitation, nutrition, water treatment) and of life-protecting/saving measures, and possession of appropriate skills. 2.6. Community structures and culture support self confidence and can assist management of psychological consequences of disasters (trauma, PTSD). 2.7. Community health care facilities and health workers, equipped and trained to respond to physical and mental health consequences of disasters and lesser hazard events, and supported by access to emergency health services, medicines, etc.	• Policy, legislative and institutional commitment to ensuring food security through market and non-market interventions, with appropriate structures and systems. • Engagement of government, private sector and civil society organisations in plans for mitigation and management of food and health crises. • Emergency planning systems provide buffer stocks of food, medicines, etc.
3. Sustainable livelihoods	3.1. High level of local economic activity and employment (including among vulnerable groups); stability in economic activity and employment levels. 3.2. Equitable distribution of wealth and livelihood assets in community. 3.3. Livelihood diversification (household and community level), including on-farm and off-farm activities in rural areas. 3.4. Fewer people engaged in unsafe livelihood activities (e.g. small-scale mining) or hazard-vulnerable activities (e.g. rainfed agriculture in drought-prone locations). 3.5. Adoption of hazard-resistant agricultural practices (e.g. soil and water conservation methods, cropping patterns geared to low or variable rainfall, hazard-tolerant crops) for food security. 3.6. Small enterprises have business protection and continuity/ recovery plans. 3.7. Local trade and transport links with markets for products, labour and services protected against hazards and other external shocks.	• Equitable economic development: strong economy in which benefits are shared throughout society. • Diversification of national and sub-national economies to reduce risk. • Poverty reduction strategies target vulnerable groups. • DRR seen as integral part of economic development, reflected in policy and implementation. • Adequate and fair wages, guaranteed by law. • Legislative system supports secure land tenure, equitable tenancy agreements and access to common property resources. • Financial and other incentives provided to reduce dependence on unsafe or hazard-vulnerable livelihood activities. • Chambers of commerce and similar business associations support resilience efforts of small enterprises.

Thematic Area 4 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
4. Social protection (including social capital)	4.1. Mutual assistance systems, social networks and support mechanisms that support risk reduction directly through targeted DRR activities, indirectly through other socio-economic development activities that reduce vulnerability, or by being capable of extending their activities to manage emergencies when these occur.[2] 4.2. Mutual assistance systems that co-operate with community and other formal structures dedicated to disaster management. 4.3. Community access to basic social services (including registration for social protection and safety net services). 4.4. Established social information and communication channels; vulnerable people not isolated. 4.5. Collective knowledge and experience of management of previous events (hazards, crises).	• Formal social protection schemes and social safety nets accessible to vulnerable groups at normal times and in response to crisis. • Coherent policy, institutional and operational approach to social protection and safety nets, ensuring linkages with other disaster risk management structures and approaches. • External agencies prepared to invest time and resources in building up comprehensive partnerships with local groups and organisations for social protection/security and DRR.
5. Financial instruments (including financial capital)	5.1. Household and community asset bases (income, savings, convertible property) sufficiently large and diverse to support crisis coping strategies. 5.2. Costs and risks of disasters shared through collective ownership of group/community assets. 5.3. Existence of community/group savings and credit schemes, and/or access to micro-finance services. 5.4. Community access to affordable insurance (covering lives, homes and other property) through insurance market or micro-finance institutions. 5.5. Community disaster fund to implement DRR, response and recovery activities. 5.6. Access to money transfers and remittances from household and community members working in other regions or countries.	• Government and private sector supported financial mitigation measures[3] targeted at vulnerable and at-risk communities. • Economic incentives for DRR actions (reduced insurance premiums for householders, tax holidays for businesses, etc.). • Micro-finance, cash aid, credit (soft loans), loan guarantees, etc., available after disasters to restart livelihoods.

[2] These comprise informal systems (individual, household, family, clan, caste, etc.) and more structured groups (CBOs: e.g. emergency preparedness committees, support groups/buddy systems to assist particularly vulnerable people, water management committees, burial societies, women's associations, faith groups).

[3] e.g. insurance/ reinsurance, risk spreading instruments for public infrastructure and private assets such as calamity funds and catastrophe bonds, micro-credit and finance, revolving community funds, social funds

Thematic Area 4 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
6. Physical protection; structural and technical measures (including physical capital)	6.1. Community decisions and planning regarding built environment take potential natural hazard risks into account (including potential for increasing risks through interference with ecological, hydrological, geological systems) and vulnerabilities of different groups. 6.2. Security of land ownership/tenancy rights. Low/minimal level of homelessness and landlessness. 6.3. Safe locations: community members and facilities (homes, workplaces, public and social facilities) not exposed to hazards in high-risk areas within locality and/or relocated away from unsafe sites. 6.4. Structural mitigation measures (embankments, flood diversion channels, water harvesting tanks, etc.) in place to protect against major hazard threats, built using local labour, skills, materials and appropriate technologies as far as possible. 6.5. Knowledge and take-up of building codes/regulations throughout community. 6.6. Adoption of hazard-resilient construction and maintenance practices for homes and community facilities using local labour, skills, materials and appropriate technologies as far as possible. 6.7. Community capacities and skills to build, retrofit and maintain structures (technical and organisational). 6.8. Adoption of physical measures to protect items of domestic property (e.g. raised internal platforms and storage as flood mitigation measure, portable stoves) and productive assets (e.g. livestock shelters). 6.9. Adoption of short-term protective measures against impending events (e.g. emergency protection of doors and windows from cyclone winds).	• Compliance with international standards of building, design, planning, etc. Building codes and land use planning regulations take hazard and disaster risk into account. • Compliance of all public buildings and infrastructure with codes and standards. • Requirement for all public and private infrastructure system owners to carry out hazard and vulnerability assessments. • Protection of critical public facilities and infrastructure through retrofitting and rebuilding, especially in areas of high risk. • Security of access to public health and other emergency facilities (local and more distant) integrated into counter-disaster planning. • Legal and regulatory systems protect land ownership and tenancy rights, and rights of public access. • Regular maintenance of hazard control structures • 'Hardware' approach to disaster mitigation is accompanied by 'software' dimension of education, skills training, etc. • Legal, regulatory systems and economic policies recognise and respond to risks arising from patterns of population density and movement.

Thematic Area 4 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	6.10. Infrastructure and public facilities to support emergency management needs (e.g. shelters, secure evacuation and emergency supply routes). 6.11. Resilient and accessible critical facilities (e.g. health centres, hospitals, police and fire stations – in terms of structural resilience, back-up systems, etc.). 6.12. Resilient transport/service infrastructure and connections (roads, paths, bridges, water supplies, sanitation, power lines, communications, etc.). 6.13. Locally owned or available transport sufficient for emergency needs (e.g. evacuation, supplies), at least in the event of seasonal hazards; transport repair capacity within community.	
7. Planning régimes	7.1. Community decision making regarding land use and management, taking hazard risks and vulnerabilities into account. (Includes micro-zonation applied to permit/restrict land uses). 7.2. Local (community) disaster plans feed into local government development and land use planning.	• Compliance with international planning standards. • Land use planning regulations take hazard and disaster risk into account. • Effective inspection and enforcement régimes. • Land use applications, urban and regional development plans and schemes based on hazard and risk assessment and incorporate appropriate DRR.

THEMATIC AREA 5: DISASTER PREPAREDNESS AND RESPONSE

Components of resilience

1. Organisational capacities and co-ordination
2. Early warning systems
3. Preparedness and contingency planning
4. Emergency resources and infrastructure
5. Emergency response and recovery
6. Participation, voluntarism, accountability

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
1. Organisational capacities and coordination	1.1. Local and community DP/response capacities assessed by communities (themselves or in partnership with external agencies). 1.2. Local organisational structures for DP/emergency response (e.g. disaster preparedness/evacuation committees).[1] 1.3. Local DP/response organisations are community managed and representative. 1.4. Roles and responsibilities of local DP/response organisations and their members clearly defined, agreed and understood. 1.5. Emergency facilities (communications equipment, shelters, control centres, etc.) available and managed by community or its organisations on behalf of all community members. 1.6. Sufficient number of trained organisational personnel and community members to carry out relevant tasks (e.g. communication, search and rescue, first aid, relief distribution). 1.7. Regular training (refresher courses and new skills) provided by/for local organisations; regular practice drills, scenario exercises, etc. 1.8. Defined and agreed co-ordination and decision-making mechanisms between community organisations and external technical experts, local authorities, NGOs, etc. 1.9. Defined and agreed co-ordination and decision-making mechanisms with neighbouring communities/localities and their organisations.	• National and local policy and institutional frameworks recognise and value local and community DP as integral part of the national preparedness and response system. • Defined and agreed structures, roles and mandates for government and non-government actors in DP and response, at all levels, and based on co-ordination not command-and-control approach. • Emergency planning and response responsibilities and capacities delegated to local levels as far as possible. • Ongoing dialogue, coordination and information exchange (vertical and horizontal) between disaster managers and development sectors at all levels. • National and local disaster management capacities (technical, institutional, financial) adequate for supporting community-level DP/response activity. • Adequate budgets for DP activities included and institutionalised as part of DP planning at all levels. • Funds to strengthen the capacity and activities of civil society stakeholders active in DP.

[1] These may be groups set up specifically for this purpose, or existing groups established for other purposes but capable of taking on a DP/response role.

Thematic Area 5 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
2. Early warning systems [2]	2.1. Community-based and people-centred EWS at local level. 2.2. EWS capable of reaching whole community (via radio, TV, telephone and other communications technologies, and via community EW mechanisms such as volunteer networks). 2.3. EW messages presented appropriately so that they are understood by all sectors of community. 2.4. EWS provides local detail of events and takes local conditions into account. 2.5. EWS based on community knowledge of relevant hazards and risks, warning signals and their meanings, and actions to be taken when warnings are issued. 2.6. Community DP/response organisations capable of acting on EW messages and mobilising communities for action. 2.7. Community trust in EWS and organisations providing EW. 2.8. Technical resources (monitoring and communications equipment) in place, with systems and trained personnel for maintenance and operation.	• Efficient national and regional EWS in place, involving all levels of government and civil society, based on sound scientific information, risk knowledge, communicating and warning dissemination and community response capacity. • Vertical and horizontal communication and co-ordination between all EW stakeholders, with roles and responsibilities clearly defined and agreed. • Local government included in all planning and training and recognised as key stakeholder in EWS. • Communities and other civil society stakeholders active participants in all aspects of the development, operation, training and testing of EWS. • Mass media part of EWS, not acting independently. • EWS linked to DP and response agencies. • EWS backed up by wider public awareness campaigns.
3. Preparedness and contingency planning	3.1. A community DP or contingency plan exists for all major risks.[3] 3.2. DP/contingency plans developed through participatory methods, and understood and supported by all members of community. 3.3. Plans co-ordinated with official emergency plans and compatible with those of other agencies. 3.4. Roles and responsibilities of different local and external actors defined, understood and agreed – and appropriate. 3.5. Planning process builds consensus and strengthens relationships and co-ordination mechanisms between various stakeholders.	• Politically supported/approved and clearly articulated national disaster preparedness plan in place and disseminated to all levels; part of integrated disaster management plans with all relevant policies, procedures, roles, responsibilities and funding established. • Roles and responsibilities of each state and non-state actor are clearly defined for each disaster scenario and have been disseminated accordingly. • Civil society organisations participate in the development and dissemination of national and local-level preparedness plans; roles and responsibilities of civil society actors clearly defined. • Community planning seen as key element in overall plans and incorporated into them. • Resources available to support necessary actions identified by community-level plans.

[2] See also Table 2: Risk Assessment

[3] The terms DP or contingency plan are used broadly here to cover all kinds of plan for preparing and responding to disasters and emergencies. It is assumed that the plan, like all good DP/contingency plans, has clearly stated objective(s), sets out a systematic sequence of activities in a logical and clear manner, assigns specific tasks and responsibilities, is practical and based on realistic parameters (i.e. appropriate focus, level of detail, format for local users' needs and capacities), is process-driven (i.e. does not overemphasize the importance of a written plan) and leads to actions. For more detailed guidance on preparedness and contingency planning, see UN OCHA 2007, *Disaster Preparedness for Effective Response: Implementing Priority Five of the Hyogo Framework for Action* (Geneva: Office for the Coordination of Humanitarian Affairs); Choularton R 2007, *Contingency planning and humanitarian action: a review of practice* (London: Humanitarian Practice Network, Network Paper 59).

Thematic Area 5 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	3.6. Linkages (formal/informal) to technical experts, local authorities, NGOs, etc., to assist with community planning and training. 3.7. Plans tested regularly through e.g. community drills or simulation exercises. 3.8. Plans reviewed and updated regularly by all relevant stakeholders. 3.9. Households and families develop their own DP plans within context of community plan. 3.10. Local businesses develop their own continuity and recovery plans within context of community plan. 3.11. Contingency planning informed by understanding of broader local planning provisions and facilities.	• All contingency plans are based on a solid assessment of hazards and risks and the identification of high risk areas throughout the country. Developed and tested contingency plans are in place for all major disaster scenarios in all high risk areas. • Training, simulation and review exercises carried out with the participation of all relevant government and non-government agencies. • Cross-cutting issues such as gender, community participation and environmental considerations are included in all contingency plans. • Local emergency services and critical facilities develop their own contingency plans, co-ordinated with community plans.
4. Emergency resources and infrastructure	4.1. Community organisations capable of managing crises and disasters, alone and/or in partnership with other organisations. 4.2. Safe evacuation routes identified and maintained, known to community members. 4.3. Emergency shelters (purpose built or modified): accessible to community (distance, secure evacuation routes, no restrictions on entry) and with adequate facilities for all affected population. 4.4. Emergency shelters for livestock. 4.5. Secure communications infrastructure and access routes for emergency services and relief workers. 4.6. Two-way communications systems designed to function during crises. 4.7. Emergency supplies (buffer stocks) in place, managed by community alone or in partnership with other local organisations (incl. grain/seed banks). 4.8. Community-managed emergency/contingency funds.[4]	• Local emergency services (facilities, structures, staff, etc.) capable of managing crises and disasters, alone and/or in partnership with other organisations. • Higher-level emergency services with structure, capacity, facilities and procedures that enable them to support local-level actions effectively. • Emergency contingency funds and stocks that can be made available quickly to those in need, with established procedures for releasing them. • Pre-arranged agreements signed with donor agencies for access to funding or loans at the international or regional level as part of emergency and recovery plans.
5. Emergency response and recovery	5.1. Community capacity to provide effective and timely emergency response services: e.g. search and rescue, first aid/medical assistance, needs and damage assessment, relief distribution, emergency shelter, psychosocial support, road clearance. 5.2. Community and other local agencies take lead role in co-ordinating response and recovery.	• Civil protection and defence organisations, NGOs and volunteer networks capable of responding to events in effective and timely manner, in accordance with agreed plans of co-ordination with local and community organisations. • Capacity to restore critical systems and infrastructure (e.g. transport, power and communications, public health facilities) and agreed procedures for action.

[4] These could be part of or separate from other savings and credit or micro-finance initiatives.

Thematic Area 5 - Continued

COMPONENTS OF RESILIENCE	CHARACTERISTICS OF A DISASTER-RESILIENT COMMUNITY	CHARACTERISTICS OF AN ENABLING ENVIRONMENT
	5.3. Response and recovery actions reach all affected members of community and prioritised according to needs. 5.4. Community psychosocial support and counselling mechanisms. 5.5. Community knowledge of how to obtain aid and other support for relief and recovery. 5.6. Community trust in effectiveness, equity and impartiality of relief and recovery agencies and actions. 5.7. Community/locally led recovery planning[5] and implementation of plans linking social, physical, economic and environmental aspects and based on maximum utilisation of local capacities and resources. 5.8. Agreed roles, responsibilities and co-ordination of recovery activities (involving local and external stakeholders). 5.9. Incorporation of DRR into community and local recovery plans.	• Support programmes for livelihood-focused recovery (e.g. cash for work, replacement of productive assets, emergency loans or start-up capital). • Resources (human, institutional, material, financial) available for long-term reconstruction and recovery. • Government relief and recovery resources inventoried; information on resources and how to obtain them made available to at-risk and disaster-affected communities. • Official agencies willing and able to guarantee public safety after disasters and to protect highly vulnerable groups. • Official continuity and recovery plans in place or capable of being developed, supported by appropriate systems and capacities. • National policy framework requires DRR incorporation into design and implementation of response and recovery. • DRR 'mainstreamed' into relevant organisations' recovery planning and practice.
6. Participation, voluntarism, accountability	6.1. Local leadership of development and delivery of contingency, response, recovery plans. 6.2. Whole-community participation in development and delivery of contingency, response, recovery plans; community 'ownership' of plans and implementation structures. 6.3. Justifiable community confidence in EW and emergency systems and its own ability to take effective action in a disaster. 6.4. High level of community volunteerism in all aspects of preparedness, response and recovery; representative of all sections of community. 6.5. Organised volunteer groups integrated into community, local and supra-local planning structures. 6.6. Formal community DP/response structures capable of adapting to arrival of spontaneous/emergent groups of volunteers (from within and outside community) and integrating these into response and recovery. 6.7. Self-help and support groups for most vulnerable (e.g. elderly, disabled). 6.8. Mechanisms for disaster-affected people to express their views, for learning and sharing lessons from events.	• Recognition by external and local emergency responders of people's right to appropriate assistance after disasters, to participation in disaster recovery planning and to protection from violence (defined in legislation). • Internationally accepted principles of rights and accountability in disaster response and recovery[6] agreed and adopted by national authorities, local government, civil society organisations and other stakeholders. • Legal instruments mandating specific actions by public organisations in emergency response and disaster recovery. • Participatory mechanisms ensuring all stakeholders involved in the development of all components of disaster management planning and operations at all levels. • Local government and other agencies have planned for co-ordination of 'emergent groups' of volunteers. • Application of social audits, report cards and other mechanisms enabling those affected by disasters to evaluate emergency response. • Independent assessments of DP capacities and mechanisms carried out and acted upon. • Effective and transparent mechanisms for monitoring and evaluating DP and response.

[5] Including resettlement plans.
[6] e.g. HAP Principles of Accountability, Sphere, Red Cross Code of Conduct.

Box 1: Other DRR indicator initiatives

In recent years, a number of organizations have been developing frameworks and indicators of resilience or DRR to support programming in different contexts. Because many of these initiatives were under way at the same time, there has been an opportunity to share information and debate ideas, and to ensure that the various outputs complement each other where possible.

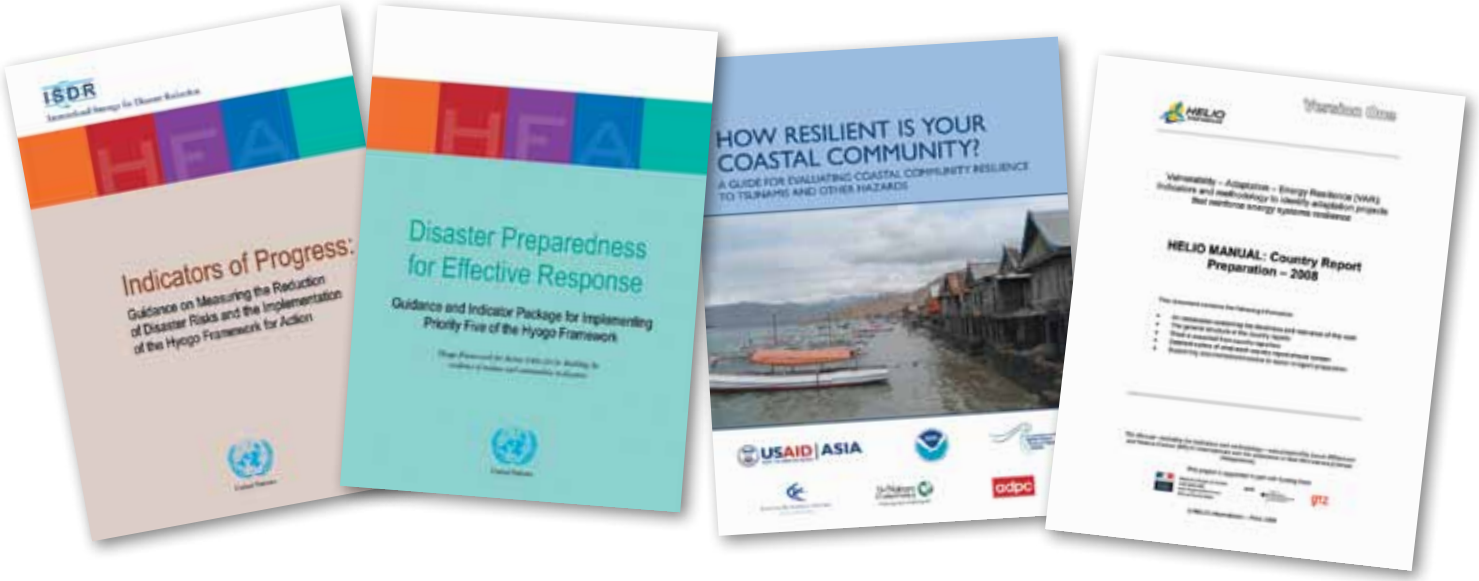
Two UN agencies have been developing national-level DRR indicator sets, based on the Hyogo Framework for Action (the *Characteristics* seeks to complement these at local level):

- The UN International Strategy for Disaster Reduction (UN ISDR) has produced guidance on indicators for priorities 1-4 of the Hyogo Framework (UN ISDR 2008).
- The UN Office for Co-ordination of Humanitarian Affairs (UN OCHA) has developed indicators for priority 5 of the Hyogo Framework (UN ISDR/UN OCHA 2008).

Other recent or current initiatives on frameworks and indicators for DRR and resilience include:

- The US Indian Ocean Tsunami Warning System Program's manual on evaluating coastal community resilience to hazards, intended to support and complement community development and coastal management planning (IOTWS 2007).
- Helio International's manual for assessing the resilience of energy systems at national level (Williamson and Connor 2008).

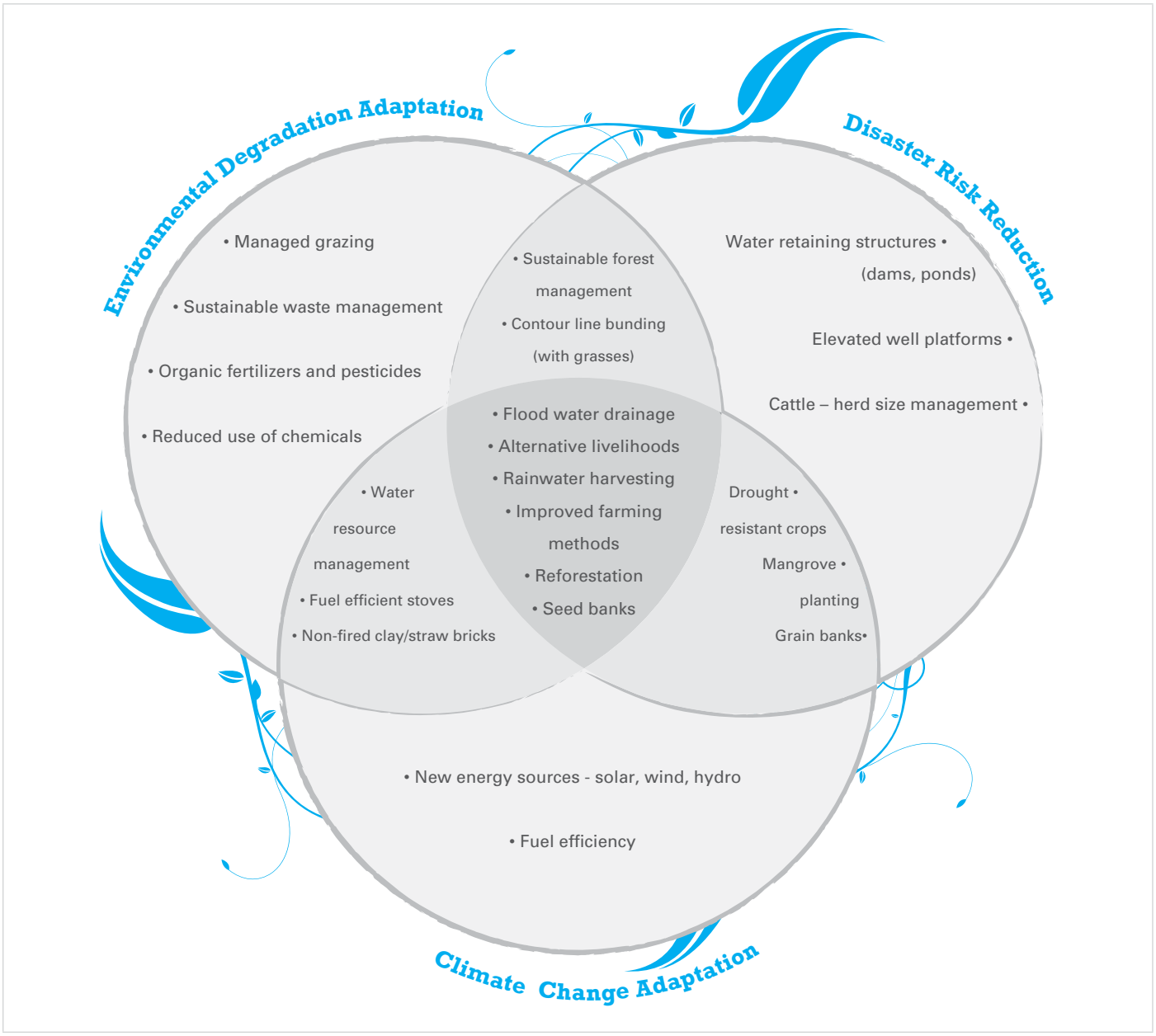
See Section 5 (Further Reading) for details of these and other DRR and resilience indicator guidelines.



Box 2: Integrating DRR and CCA

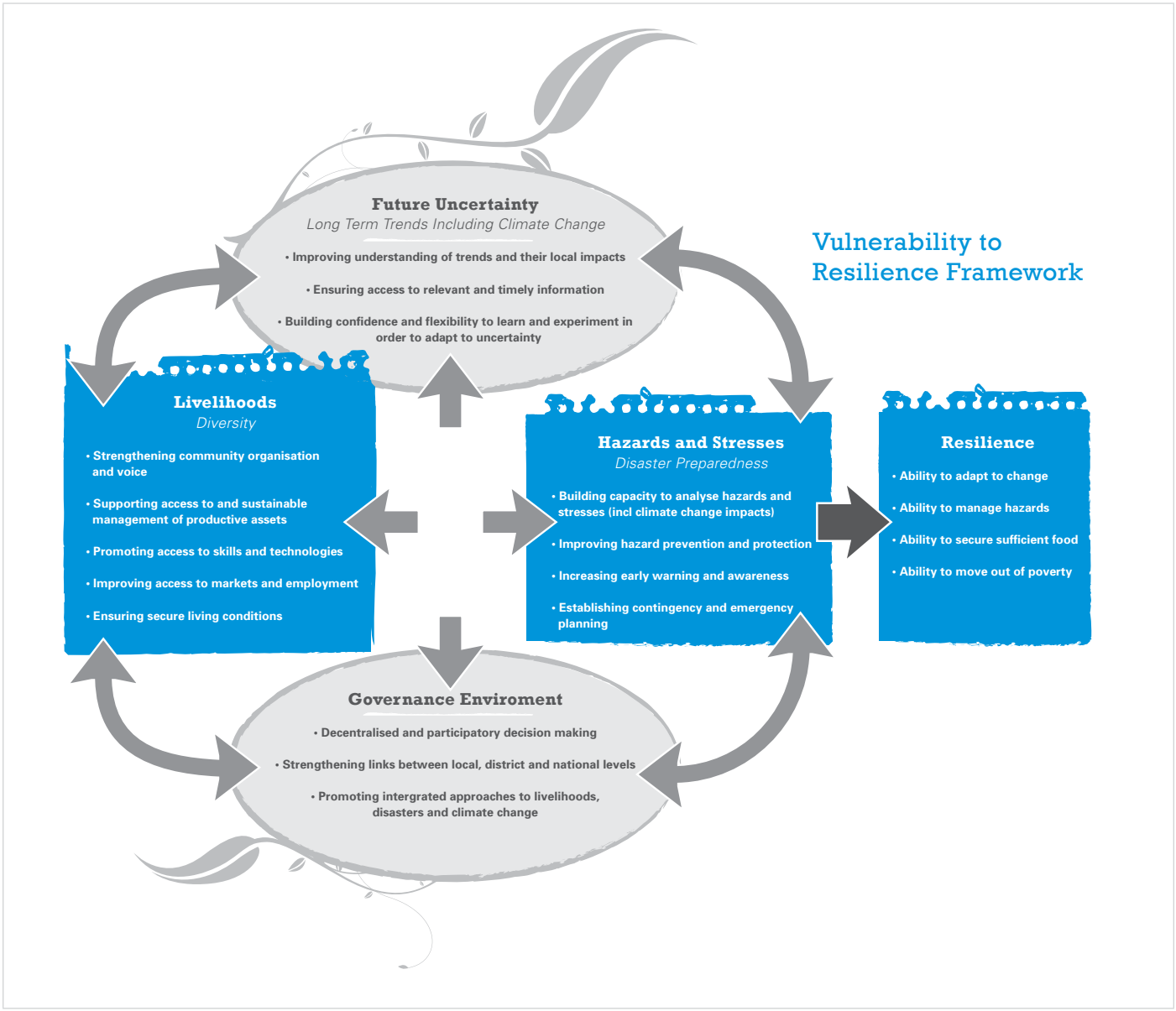
A number of development and disaster agencies are currently exploring ways of conceptualizing, explaining and visualizing the ways in which DRR and CCA overlap and are linked to one another. There are many ways of doing this. As yet there is no single explanatory model. Three examples are given here, in the form of tables and diagrams taken from work by members of the Interagency Group that commissioned the *Characteristics* project. All three examples represent work in various stages of progress.

Example 1. Tearfund uses Venn diagrams to show the overlap between DRR, CCA and other forms of adaptation to environmental degradation. The diagram below contains examples of the type of response that might be needed in each area. This serves as an illustration to grassroots practitioners that certain choices of development activity can promote environmental sustainability, reduce disaster vulnerability and support climate change adaptation.



Source: Tearfund

Example 2. Practical Action's Vulnerability to Resilience (V2R) model identifies the linkages between livelihoods, governance, future uncertainty/long-term trends (including climate change) and hazards and stresses. From this an integrated approach to resilience can be developed.



Source: Pasteur K, 2010 (in press), *From Vulnerability to Resilience (V2R): A Framework for Analysis and Action to Build Community Resilience* (Rugby: Practical Action Publishing) http://www.practicalaction.org/

Example 3. Christian Aid, the Institute of Development Studies and Plan International are working on ways of making DRR more responsive to changing climate extremes. They hypothesize a transition from conventional 'climate-sensitive' DRR approaches to a 'climate-smart' approach with a different emphasis, set out in the table below.

Climate-Sensitive DRR	Climate-Smart DRR
Proactively manages risk, with dominant focus on intensive risks.	Proactively manages risk, for focus on intensive and extensive risks.
Considers the underlying drivers of vulnerability, particularly social, political, environmental and economic root causes.	Considers the underlying drivers of vulnerability, particularly social, political, economic, environmental and those root causes attributable to climate change.
Systems designed to improve reliability of forecasting the likely impacts of many hazards (weather-related hazards being a subset).	System adopts a more flexible, longer-term perspective, recognizing changes in the risks and the uncertainties associated with changing climate extremes.
Takes action based on experience of the frequency and magnitude of previous events (from both scientific and traditional sources).	Takes action based on improved information of changing climate extremes and on experience of historic hazard trends (from both scientific and traditional sources).
Considers past and current vulnerability.	Considers past, current and future vulnerability, recognizing subtle changes in climate-related means can significantly increase people's future vulnerability.
Is predominantly held accountable to humanitarian standards.	Is predominantly held accountable to development and environmental standards.
Builds capacity of target groups to manage risks based on experience and improved short-range forecasting.	Builds capacity of target groups to manage changing risks and uncertainties associated with longer-range climate-related forecasts.
Does not consider whether interventions contribute to climate change (e.g. sourcing of materials in relief/ reconstruction).	Assesses and favours interventions that do not contribute to the problem of climate change.

Source: Strengthening Climate Resilience Project http://community.eldis.org/scr

Box 3: Creating successful resilience processes

A recent Canadian initiative to support community socio-economic resilience identified six 'behaviours' that characterize successful or resilient communities. Basically, all of these relate to the *process* of building resilience, which involves negotiation, partnership and decision making:

- they take a multi-functional approach to create a sustainable (economically, ecologically, politically and socially) development system within the community;
- through strategic planning or other efforts, they maximize the use of their limited time and resources in those areas that will yield the greatest overall benefits;
- they develop plans that merge social and economic goals and build local capacity;
- they are able to mobilize key sectors of the community around priorities;
- they focus their energies on mobilizing internal assets (both financial and human) while also leveraging outside resources to achieve their goals;
- they have established a critical mass of co-operative organizations through which locally based initiatives are implemented and evaluated

Source: *The Community Resilience Manual: a resource for rural recovery and renewal* (Port Alberni, BC: Centre for Community Enterprise, 2009, www.cedworks.com).

Box 4: Engaging with young people

A consultant looking at ways of applying the *Characteristics* to Plan International's DRR work with children and young people suggested the following process to better define a resilient community from the community's perspective:

- Work in separate child/youth groups and adult groups – explore the usefulness of dividing them by gender.
- Begin with an open discussion (brainstorm) of an individual Thematic Area, selected for local relevance. This 'brainstorming' can be done in different ways including drawing, role play, visualisation.
- Then probe further using the Components of Resilience – again, based on local relevance.
- Suport local children/youth and adults to devise appropriate indicators – this needs some support from facilitators, but is not only possible but also empowering.
- Devise a locally suitable process for sharing the results (Plan DRR staff in Bangladesh got children to draw images of a resilient community and then take the pictures around to adults to see if they agreed with the vision). This could be more integrated from the start – a joint process of development.
- Communicate findings – e.g. a mural (could be on cloth/canvas so it would be portable) depicting their resilient community; theatre, concerts, etc. – as appropriate to the culture and location.

Box 5: Adapting the *Characteristics* to local contexts

The Marinduque Council for Environmental Concerns (MACEC), based on the island of Marinduque off the coast of mainland Luzon in the Philippines, used the *Characteristics* in planning its community development work. In particular, it aimed to develop interventions that strengthened community resilience by integrating DRR and CCA. To help it identify and analyse the opportunities for integrating its work, MACEC adapted individual community-level Characteristics of a Disaster-Resilient Community as well as Characteristics of an Enabling Environment to make them more suitable to the context in which it was working.

Here is one illustration from this, relating to a Component of Resilience in Thematic Area 1 (Governance). The ordinary text is from the original *Characteristics* guidance note. The text in italics is MACEC's translation of this in its work, focusing on the Enabling Environment.

Thematic Area 1: Governance

Component of Resilience 3: Integration with development policies and planning

Characteristic of a Disaster-Resilient Community 3.1:
Community DRR seen by all local stakeholders as integral part of plans and actions to achieve wider community goals (e.g. poverty alleviation, quality of life).

MACEC related the significance of DRR and CCA to the Millennium Development Goals, the Philippine Medium Term Development Plan, the 10 Point Agenda of the current Administration, the Provincial Vision and Development Framework Plan.

Characteristics of an Enabling Environment
- Government (all levels) takes holistic and integrated approach to DRR, located within wider development context and linked to development planning across different sectors.
- DRR incorporated into or linked to other national development plans and donor-supported country programmes.
- Routine integration of DRR into development planning and sectoral policies (poverty eradication, social protection, sustainable development, climate change adaptation, desertification, natural resource management, health, education, etc.).
- Formal development planning and implementation processes required to incorporate DRR elements (e.g. hazard, vulnerability and risk analysis, mitigation plans).
- Multi-sectoral institutional platforms for promoting DRR.
- Local planning policies, regulations and decision-making systems take disaster risk into account.

Learning from the lessons shared by the National Economic and Development Authority on incorporating DRR elements into the formal development and planning processes, MACEC tried to use the same approach at a local level and focused on integrating DRR and CCA in the village-level planning and budgeting processes.

In particular, MACEC focused its effort on integrating DRR and adaptation into the Barangay (village) Development Plans and the Annual Investment Plans of 119 Barangays in Marinduque. In this context it drew up its own strategic Characteristics of an Enabling Environment:

Suggested Characteristics of an Enabling Environment

- *Coherence in national and local policies that are significant to DRR and CCA.*
- *Multi-sectoral institutional platforms that facilitate participation in policy-making processes in DRR and CCA at all levels of governance.*

Box 6: Creation of new Thematic Areas

As part of its work to adapt the *Characteristics* to its child-centred approach, Plan UK has been exploring the idea of creating a new Thematic Area specifically for this issue. This is still under discussion, but the initial draft is reproduced below to indicate how Plan has approached this task. Substantial modifications have been made which may make the *Characteristics* more relevant to Plan's work, while the process of thinking and discussion about the modifications may lead to much stronger 'ownership' of the resource within the organization and its partners.

(draft) Thematic Area 0: General Characteristics of Child-Centred and Gendered Culture and Practice for Organizations and Communities

Components of Resilience	Characteristics of a Child-Centred and Gendered Disaster-Resilient Community	Enabling Environment
1. Child-Centredness and Child Rights	1.1. Child/youth committees exist and have a recognized voice in the community. 1.2. Child/youth committee recommendations feed into other levels of governance. 1.3. Child protection policies incorporated into Plan policy documentation. 1.4. Child protection policies incorporated into local community plans. 1.5. Emergency preparedness plans should include a child protection element. 1.6. There should be a continuous risk assessment of the emergency situation and all activities involving children in relation to child protection related risks. 1.7. Plan staff and Associates should familiarize themselves with situations which may present risks to children and learn how to deal with those situations. 1.8. Plan staff and Associates should receive training as appropriate to their roles to ensure procedures related to child protection standards are implemented and followed effectively. 1.9. Children must be involved appropriately in addressing protection issues that affect them, and in developing child protection measures	• Relevant child rights legislation adopted and practised by government at all levels. • Local decision makers are open to children's participation. • Existence of child protection legislation, policies and local processes of implementation.

Components of Resilience	Characteristics of a Child-Centred and Gendered Disaster-Resilient Community	Enabling Environment
2. Gender Rights	2.1. Women's and men's practical needs and strategic interests are recognized in policies, plans and programmes. 2.2. Differences in gender roles and relations are recognized. 2.3. Sex-disaggregated data collected and used routinely. 2.4. Gender-balanced staff teams/committee membership are the norm. 2.5. Gender balance is aspired to in community-based work. 2.6. Understanding of the widespread prevalence of gender-based violence and measures to deal with it are common throughout staff base.	• Relevant gender rights legislation adopted and practised.
3. Community Definitions	3.1. Community groups/committees are as socially inclusive as possible. 3.2. Local power dynamics have been understood and accounted for in the setting up of local committees and decision-making bodies. 3.3. Plan staff (at all levels) trained and aware of power dynamics conflict sensitivity within communities.	• Government (at different levels) supportive of devolved, participatory, democratic processes.
4. Participation/ Social Inclusion	4.1. Recognition among Plan staff that there are levels of participation and that higher levels of participation, involving child and community empowerment, are aspired to. 4.2. Efforts are made to reach out to all parts of a given community – including the so-called 'hard to reach'.	
5. Root Causes of Disaster and Development Vulnerability	5.1. Recognition that many unresolved problems of development are created at higher scales than the community, and that appropriate forms of advocacy or action should be engaged upon	

Box 7: Tearfund's 'top 20' Characteristics

For general use across the organization and its partners, Tearfund has reduced the set of Characteristics of a Disaster-Resilient Community to a much smaller, manageable number that it considers to be most relevant to its work organization-wide.

First, it selected key Characteristics in relation to the organization's DRR work as a whole (Tearfund calls this list its 'top 20' Characteristics). The initial selection was made by two DRR specialists: they chose those Characteristics which were thought to be achievable and measurable, and which applied to most disaster types. To ensure a balance, the list had to contain at least two Characteristics from each of the five Thematic Areas.

A similar selection was carried out to find Characteristics that are measurable and relevant to slow-onset disasters, especially those involving long-term, chronic food insecurity.

The two sets of Characteristics are shown in the tables below.

Both selections involved some rewriting of the Characteristics where this was thought to be appropriate. In a few cases two or more Characteristics were combined into new ones. Both lists have references to the original Characteristics (by number) to allow users to check back to the full list.

Rather than using the 'top 20' rigidly, Tearfund encourages its Country Representatives to work on their own selections, as appropriate to the country and its disaster profile. The important point is not enforced compliance with Characteristics imposed from above, but the need to possess a set which explains resilience in that particular context.

Tearfund found that the exercise did help to make the *Characteristics* resource more user-friendly and hence to de-mystify DRR. Busy programme staff were much more willing to engage with the shorter lists. But it was difficult to select just a few Characteristics of a Disaster-Resilient Community, especially when trying to apply them to several hazard types at once; as a result there was a risk of the document becoming too imprecise.

Tearfund's Abbreviated Characteristics of a Disaster-Resilient Community ('top 20')

Thematic Area 1: Governance	Reference (full list of Characteristics)
• Committed, effective and accountable community leadership of DRR planning and implementation.	• 1.5
• Capacity to challenge and lobby external agencies on DRR plans, priorities and actions that may have an impact upon local risks.	• 7.4
• Evidence that disaster risk is being taken into account in planning developmental activities.	• 3.1 & 4.1
Thematic Area 2: Risk Assessment	
• Participatory hazard/risk, vulnerability and capacity assessments carried out and updated, which provide a comprehensive picture of all major hazards/risks, vulnerabilities and capacities in the community.	• 1.1 & 2.1
• Community uses indigenous knowledge and local perceptions of risk, as well as other scientific, data-based assessment methods.	• 3.2
Thematic Area 3: Knowledge and Education	
• Possession of appropriate technical and organizational knowledge and skills for risk reduction and disaster response at local level (e.g. indigenous technical knowledge, coping mechanisms and livelihood strategies).	• 1.4
• All sections of community know about contingency plans, facilities, services and skills available pre-, during and post- emergency, and how to access them.	• 2.3
• DRR knowledge is being passed on formally through local schools and informally via oral tradition from one generation to the next.	• 3.1
Thematic Area 4: Risk Management and Vulnerability Reduction	
• Food and water supply secure in times of crisis (e.g. through community managed stocks of grain and other staple foods; protected or stored water supplies).	• 2.3 & 2.4
• Livelihood diversification at household and community level, including on-farm and off-farm in rural areas, with few people engaged in unsafe livelihood practices or hazard-vulnerable activities.	• 3.3 & 3.4
• Adoption of hazard-resistant agricultural practices and sustainable environmental management (e.g. soil and water conservation, flexible cropping patterns, hazard-tolerant crops, forest management).	• 1.2 & 3.5
• Existence of and access to community savings and credit schemes, and/or a community disaster fund to implement preparatory, responsive or recovery activity.	• 5.3 & 5.5
• Structural mitigation measures in place (e.g. water-harvesting tanks, embankments, flood diversion channels).	• 6.4
• Houses, workplaces and public facilities located in safe areas or hazard-resistant construction methods in use.	• 6.3, 6.5 & 6.6
• Measures in place to protect key assets (e.g. livestock) and items of domestic property (e.g. use of raised internal platforms or plastic containers).	• 6.8

Thematic Area 5: Disaster Preparedness and Response	
• Accessible emergency facilities and equipment available (for shelter, communications, rescue, etc.), owned and managed by the community.	• 1.6
• Community-based and people-centred early warning system in place at local level, producing messages which are trusted and understood by whole community.	• 2.1 & 2.3
• Community and family level contingency plans exist, developed and owned by the community, linked to higher-level plans and practised regularly.	• 3.2, 3.3 & 3.7
• Community has the capacity to provide effective and timely emergency response services, including training and deployment of volunteers with appropriate skills (e.g. search and rescue, first aid, managing emergency shelters, fire-fighting).	• 5.1 & 6.4
• Community has appropriate plans and mutual support systems in place to take care of the most vulnerable – usually the elderly, disabled, AIDS-sufferers, mothers and young children.	• 6.7

Tearfund's Characteristics of a Disaster-Resilient Community – from a food security perspective

Thematic Area 1: Governance	Reference (full list of Characteristics)
• Committed, effective and accountable leadership of DRR planning and implementation.	• 1.5
• Community aware of its rights and the legal obligations of government and other stakeholders to provide protection.	• 2.2
• Inclusion/representation of vulnerable groups in community decision making and management of DRR.	• 7.6
Thematic Area 2: Risk Assessment	
• Community-level hazard, vulnerability and capacity (HVC) assessments carried out, to provide a comprehensive picture of all HVCs.	• 1.1 & 2.1
• HVC assessment (above), carried out as a participatory process, involving representatives of all sectors of community, including all vulnerable groups.	• 1.2 & 2.2
• Use of indigenous knowledge and local perceptions of risk as well as other scientific knowledge, data and assessment methods.	• 3.2
Thematic Area 3: Knowledge and Education.	
• Local schools provide education in DRR for children through the curriculum and where appropriate, extra-curricular activities.	• 3.1
• Community members skilled or trained in appropriate agricultural, land-use, water management and environmental management practices.	• 3.5
Thematic Area 4: Risk Management and Vulnerability Reduction	
• Adoption of sustainable environmental management practices that reduce hazard risk.	• 1.2
• Food supply and nutritional status secure (e.g. through reserve stocks of grain and other staple foods managed by the community, with an equitable distribution system during food crisis).	• 2.3
• Access to sufficient quantity and quality of water for domestic needs for 12 months of year.	• 2.4
• Livelihood diversification (household and community level) including on-farm and off-farm activities in rural areas.	• 3.3
• Adoption of hazard resistant agricultural practices (e.g. soil and water conservation methods, cropping patterns geared to low or variable rainfall, hazard tolerant crops) for food security.	• 3.5
• Mutual assistance systems, social networks and support mechanisms that support risk reduction directly through targeted DRR activities, indirectly through other socio-economic development activities that reduce vulnerability, or by being capable of extending their activities to manage emergencies when these occur.	• 4.1

• Existence of community/group savings and credit schemes, and/or access to micro-credit facilities. • Structural mitigation measures in place – e.g for water harvesting, field bunding or irrigation dams and channels – built using local labour, skills, materials and appropriate technology as far as possible.	• 5.3 • 6.4
Thematic Area 5: Disaster Preparedness & Response	
• Local organizational structures for disaster preparedness or emergency response in place (e.g. disaster preparedness committee) • Community-based and people-centred early warning system in place, which generates timely, trustworthy and understandable warnings of hazards to reach all members of community. • Community and household contingency plans in place for drought, including preservation of key assets (e.g. fodder, water and health of livestock). • Emergency supplies (buffer stocks) in place, managed by community, alone or in partnership with other local organizations (including grain/seed banks).	• 1.2 • 2.1, 2.2, 2.3, 2.7 • 3.1 & 3.9 • 4.7

Note: Characteristics have been selected according to measurability and relevance to slow-onset disasters, choosing at least two per Thematic Area and minimizing overlap between them. They may not necessarily be the most important Characteristics.

Box 8: ADPC's key indicators of community resilience

In its guidance on community-based disaster risk management, the Asian Disaster Preparedness Center (ADPC) has drawn up the following list of indicators of a 'minimum level of resiliency':

- A community organization.
- A DRR and disaster preparedness plan.
- A community early warning system.
- Trained manpower: risk assessment, search and rescue, medical first aid, relief distribution, masons for safer house construction, fire fighting.
- Physical connectivity: roads, electricity, telephone, clinics.
- Relational connectivity with local authorities, NGOs, etc.
- Knowledge of risks and risk reduction actions.
- A community disaster reduction fund to implement risk reduction activities.
- Safer houses to withstand local hazards.
- Safer sources of livelihoods.

Source: ADPC 2006, *Critical Guidelines: Community-based Disaster Risk Management* (Bangkok: Asian Disaster Preparedness Center; www.adpc.net)

Box 9: 'Mapping' vulnerabilities and capacities using the *Characteristics* framework

As part of its DRR programme, Church World Service – Pakistan/Afghanistan carried out a rapid hazard, vulnerability and capacity assessment in a mountainous district in Pakistan. The basic purpose of the exercise was: (a) to identify a community exposed to various hazards; (b) with the help of the community identify the hazards which affected them, categorize their vulnerabilities and map out their capacities; (c) engage the community to develop a DRR plan (a holistic set of developmental and disaster management activities); (d) disseminate the results among the relevant stakeholders. The assessment team used a combination of qualitative and quantitative methods including secondary data (e.g. hazard maps), focus group discussions involving a variety of participatory rural appraisal tools (e.g. timelines, seasonal calendars, hazard priority charts and village maps), transect walks, and other discussions with local stakeholders.

The exercise produced a lot of information about hazards, vulnerabilities and capacities that was later used in drawing up the DRR plan. To help structure the assessment findings about vulnerabilities and capacities, these were reviewed later using the *Characteristics* framework and grouped ('mapped') under the five Thematic Areas, as shown in the two tables below.

Vulnerabilities

Thematic Area 1: Governance	• Ethnic, caste and socio-economic divisions in community. • Lack of effective political structures. • Weak government disaster management structures (national & local).
Thematic Area 2: Risk Assessment	• Lack of data. • Lack of any early warning system.
Thematic Area 3: Knowledge and Education	• Fatalism. • Lack of understanding of root causes of disasters. • Different male-female perspectives on hazards and disasters. • Low levels female education. • Lack of educational facilities for girls. • Low levels female hazard knowledge.
Thematic Area 4: Risk Management and Vulnerability Reduction	• High population density. • Very high proportion of population in hilly locations exposed to multiple hazard risks. • High levels of poverty. • Limited livelihood opportunities (dependence on agriculture). • Remoteness; inadequate transport infrastructure. • Difficulty in accessing markets (goods & labour). • Landholding arrangements (high tenancy levels). • Women confined in/ around home. • Inadequate housing (not earthquake-resistant). • Lack of local health facilities. • Lack of power supplies. • Lack of public facilities for community meetings, etc.
Thematic Area 5: Disaster Preparedness and Response	• Lack of any formal CBDM.

Capacities

Thematic Area 1: Governance	• Community self-reliance and solidarity in crisis. • Political representation of poor/marginalized groups. • Custom of landlords providing help in crisis. • External involvement in development projects.
Thematic Area 2: Risk Assessment	• Community identification of landslide-prone locations.
Thematic Area 3: Knowledge and Education	• Community memory of past events. • High levels community awareness of hazards and risks. • High levels access to mobile phones and radios. • Community demand for girls' school.
Thematic Area 4: Risk Management and Vulnerability Reduction	• External involvement in development projects (sustainable livelihoods). • Remittances from migrant workers. • Surplus of livestock products. • Honey production.
Thematic Area 5: Disaster Preparedness and Response	• Community self-reliance in DP and response.

Note: A fuller account of this project can be found as a case study on the *Characteristics* web page at: www.proventionconsortium.org/?pageid=90 or www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13

Box 10: Turning Characteristics into indicators

In its recently published *Measuring the Impact of Disaster Risk Reduction* (part of a series of internal 'Learning Companion' documents), Oxfam GB provides practical guidance on many aspects of monitoring and evaluation in DRR, including how to use the *Characteristics* to develop outcome indicators.

The document illustrates how individual Characteristics of Resilience can be refined into generic outcome indicators for DRR implementation, with 10 examples, drawn from across the five Thematic Areas. An extract is reproduced here, featuring the three Characteristics/indicators selected from Thematic Area 5 (Disaster Preparedness and Response).

Characteristics, Thematic Area 5: Disaster Preparedness and Response

(Hyogo Priority 5: Strengthen disaster preparedness at all levels)

Component of Resilience 1: Organisational Capacities and Coordination

Characteristic 1.6 Sufficient number of trained and organisational personnel and community members to carry out specific relevant tasks (e.g. communication, search and rescue, first aid, relief distribution)

- Potential generic indicator: % of committee members showing skills in carrying out relevant response tasks according to minimum standards in a coordinated manner
- Example indicator from an Oxfam programme: % of (e.g. committees) having a system for managing their response equipment and options for replacing consumables, doing essential maintenance and supporting basic organisational activities

Component of Resilience 2: Early warning systems

Characteristic 2.2 Early warning system capable of reaching whole community (via radio, TV, telephone and other communications technologies, and via community early warning mechanisms such as volunteer networks)

- Potential generic indicator: % of community members who receive early warning messages from at least one source
- Example indicator from an Oxfam programme: level of functioning of the communications/early warning system for the transmission of alerts that permits information to reach people in an appropriate and timely manner

Component of Resilience 4: Emergency resources and infrastructure

Characteristic 4.2: Safe evacuation routes identified, maintained, and known to community members

- Potential generic indicator: % of safe evacuation routes that receive regular maintenance and % of community members able to identify safe evacuation routes
- Example indicator from an Oxfam programme: % of the community population who are able to reach shelters safely and quickly

Source: *Measuring the Impact of Disaster Risk Reduction: A Learning Companion* (Oxfam GB, 2009).

Box 11: Characteristics/indicators: quantitative or qualitative?

The *Characteristics* tables are qualitative. Communities and their partners therefore need to make their own judgements about whether or not certain aspects of resilience have been achieved. Some of these will be more straightforward than others. For instance, it is easy to tell if a community disaster preparedness or contingency plan exists (even if its quality is another matter). But it is much harder to decide if there is an equitable distribution of wealth and livelihood assets in a community, or the adequacy of access to common property resources that can support coping strategies during crises.

The *Characteristics* guidance note cannot tell projects and communities how they should reach these judgements. They are matters for collective agreement between the stakeholders. The conclusions will be different in each case, according to context and expectations, and there will be some subjective judgement. But in every case the process for reaching decisions must be transparent and participatory.

Some guidelines and experts have suggested the need for quantitative indicators of certain aspects of DRR (e.g. the number of volunteers trained in first aid, the percentage of households in a community with property insurance). It is impossible to fix standard quantitative measures that can be applied to every context, but quantitative indicators can be used at an individual project level, if required. In such cases, they could form part of the data on which broader judgements about attainment of resilience are based. It is for individual project teams to decide what kinds of quantitative indicator are appropriate and what levels of attainment to set.

Box 12: Researching resilience-building

The local NGO BEDROC (Building and Enabling Disaster Resilience of Coastal Communities) has carried out an extensive study for Oxfam America of the impact of post-tsunami rehabilitation efforts in Tamil Nadu, India, on local and community resilience. With aid agency programmes nearing their end, the sustainability of their diverse efforts to build local capacities needed to be assessed. The research also sought to draw more general lessons about what makes recovery programmes successful. Two districts were chosen for the study and evidence was collected from communities and key outsiders who had played significant roles in the tsunami response.

BEDROC's research team used the *Characteristics* as a framework for assessment, working across all five Thematic Areas. Relevant Components of Resilience were selected for attention, as were key Characteristics of a Disaster-Resilient Community and Characteristics of an Enabling Environment relating to those Components.

Data-gathering took place against this framework. A range of research tools was deployed to gather views and information and many different kinds of evidence were gathered. The findings were written up in sections covering each of the selected Components of Resilience, enabling the team to build up a detailed and comprehensive picture. The researchers also made judgements regarding the level of progress towards resilience for each selected Component, using the framework's milestones scheme.

The report, which sets out the method and the findings in detail, was published in 2008 and is available in print and online (*Building Local Capacities for Disaster Response and Risk Reduction: An Oxfam-BEDROC Study*; www.bedroc.in).

Box 13: Linking community resilience to the Enabling Environment

Part of Coastal CORE Sorsogon's DRR project in the poor, vulnerable coastal community of Sitio Gumang in the Philippines (supported by Christian Aid), which focused on health, livelihoods and social protection, aimed to improve the Enabling Environment as well as strengthen community resilience. The *Characteristics* resource was used to identify the desired outcomes in both these aspects, modified to fit the local context (see the table below). The roles of local government partner agencies in attaining these aims were also specified in the plan

Characteristics of a Disaster-Resilient Sitio Gumang	Characteristics of an Enabling Environment
1. High awareness of families on maintaining healthy lives through basic and simple family nutrition and good sanitation.	• Clean and sanitary environment. • Technical and infrastructure support provided by the Local Government Unit (e.g. provision of biosand water filters to half of the target households). • Set and agreed community-level policies on sanitation and the maintenance of cleanliness in the Sitio. • Support strategies provided by the Municipal Health Office of Gubat to specifically focus the midwives' and Barangay Health Workers' services to the community's goal to achieve health especially among the malnourished children. • Support provided by the Local Government Unit of Gubat to encourage the establishment and maintenance of a communal vegetable garden in the Sitio.
2. Better access to sufficient and quality water for domestic needs, especially during crises.	
3. Self-reliant and self-sufficient members of the community with sustainable livelihoods.	• Focused and efficient capacity-building trainings for sustainable livelihoods identification and development, skills enhancement, and financial management. • Organisational support of the COTIPABA (the project's co-operative organization partner) to its members in livelihood activities and financing. • Marketing support for the co-operative members' livelihood activities.
4. Gender sensitive and DRR implementation committed residents as part of their community visioning and DRR plan.	• Behavioural change capability-building trainings towards gender sensitivity and awareness. • Disaster plans supported by community vision/plan as guided by Barangay Council members. • Local policies support and promote gender and development initiatives.

Case Study 1:

Helping DRR practitioners to define resilience in the context of rural Bangladesh

Organization: Tearfund, with local partner HEED Bangladesh

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Purpose

As part of field testing, Tearfund presented the *Characteristics* to its core DRR partners for feedback on the resource's: (a) usefulness and ease of understanding in the current format; and (b) validity to particular country situations. This study documents the testing and application of the *Characteristics* to rural communities in Bangladesh.

Methodology

The exercise was carried out in a single day, with a mix of field and head-office staff. It was presented by a single person, utilizing PowerPoint, flip charts and interactive activities and discussions. The difficulty of presenting all of the *Characteristics* systematically was recognized; it was felt more appropriate to work backwards to see what disaster-resilient characteristics were already found in a Bangladeshi setting and then to match these against those listed in the *Characteristics* publication.

Following an oral summary of the day's schedule, the methodology was as follows.

a. Introduction to the *Characteristics*, its development and purpose.

b. Drawing a large floor map of a typical coastal village in Bangladesh, with relevant geographical and structural features. Cards were added (all one colour) to highlight features which were particularly vulnerable to prevailing hazards. A second set of cards (in a different colour) was then added with suggested activities to reduce those vulnerabilities.

c. Distribution of copies of the *Characteristics* and time allowed to read and discuss in the local language.

d. Matching of specific Characteristics with the risk-reducing activities previously suggested. Sometimes, multiple Characteristics were matched with an activity.

Positive Outcomes

- Practitioners saw the positive value of the *Characteristics*. Previously, they knew what they wanted to prevent in a disaster-prone village; now they could see what they wanted to achieve. They could see the potential value of this approach in the communities, who often focused on the problems of disaster impact rather than development of disaster resilience.
- They discovered gaps in project design. From a comprehensive table of resilience factors, they discovered new aspects which they could include in their work. This revelation was not seen as burdensome, but a useful addition. They were realistic about what they could and could not achieve in supporting a community towards resilience.
- They valued the community-based linkages that the *Characteristics* provide to the Hyogo Framework for Action. HEED already had a strong grasp of Hyogo, but the *Characteristics* provided a lateral application of all five actions, a strong framework for future reference.
- They recognized that the *Characteristics* set was new, but were eager to see its ongoing development into a variety of tools. They recognized their ability to adapt the *Characteristics* to be a community-based resource; with help, they could develop resilience indicators.
- They felt that the *Characteristics* set was comprehensive and helpful for Bangladesh. They saw the potential to reduce the number of Characteristics to represent an average target village and to get this professionally drawn by an artist. In community training, this picture could be compared with the current realities in the target community.

Challenges

- Overall the exercise took far longer than the time allocated. It was designed to take half a day, but took up two thirds instead. In part, this was due to the language barrier, but perhaps more to the in-depth and healthy discussions that followed amongst the practitioners concerning the exact nature and the goal of DRR.
- There is no separation in the presentation of Characteristics between those that are passive and those which are active. There is the potential for a Characteristic to be gained by a community, but lost in the course of time, and so some Characteristics need to be 'active' and constantly renewed.
- This exercise had a strong bias towards Thematic Areas 3, 4 and 5 and was weaker in developing understanding about Thematic Areas 1 and 2. 'Software' activities are harder to capture in a largely pictorial format. The Enabling Environment was also under-represented; it needs to be emphasized differently, as an influencer of project design.
- It took much lateral application to identify the location of social capital within the framework. Religious community structures have importance in psycho-social support after a disaster, but this was hard to find within the *Characteristics*. Sustainable resource management activities also struggled initially to find obvious matches with a Characteristic.
- The exercise did assume that the interaction between practitioners and the community was already highly participatory and that all decisions or activities were carried out in a collaborative manner. However, this slightly defeated the object of identifying that participation is a key characteristic of a disaster-resilient community.

Recommendations

- The *Characteristics* should be used in training DRR teams, to assist understanding of what a disaster-resilient community looks like in practice. In this way, the focus is shifted from the negative impact of hazards to the positive achievement of resilience.
- Drawings or maps of disaster-prone communities should be made to show where Characteristics are to be found or could be developed, in Thematic Areas 3, 4 and 5. Other tools are needed to demonstrate Thematic Areas 1 and 2, and the Enabling Environment.
- For a particular community, the list of Characteristics should be reduced to a minimum, expressed in pictures and used in training and awareness raising in that community.
- The *Characteristics* should be used as a tool to assist project design, either at the start or at a review point in implementation. They can help to identify gaps in implementation of the 5 thematic areas of the Hyogo Framework.
- The *Characteristics* can be used to help identify specific activities which would build local resilience.

Below is a selection of the specific activities which the practitioners identified and how they matched the *Characteristics*

1. Raising the household onto stilts above the level of the annual flood and establishing a flood shelter: Thematic Area 5 (Disaster Preparedness and Response) – Characteristic 4.3 (Emergency shelters accessible to community and with adequate facilities for all affected population).
2. Starting a new school system where annual flooding coincided with school vacations (so that family members are together during the flooding season and schooling is not disrupted if a school structure doubles as a flood shelter): Thematic Area 1 (Governance) – Characteristic 3.1 (Community DRR seen by local stakeholders as integral part of plans and actions to achieve wider community goals).
3. Ensuring access to safe drinking water and awareness of its importance during times of flooding: Thematic Area 3 (Knowledge and Education) – Characteristic 3.5 (Community members skilled or trained in appropriate agricultural, land use, water management and environmental management practices); and Thematic Area 4 (Risk Management and Vulnerability Reduction) – Characteristic 2.5 (Awareness of means of staying healthy and of life-protecting/saving measures, and possession of appropriate skills).
4. Developing alternative cropping practices (such as different cropping seasons or flood-resistant variants): Thematic Area 4 (Risk Management and Vulnerability Reduction) – Characteristic 3.5 (Adoption of hazard-resistant agricultural practices); and Thematic Area 3 (Knowledge and Education) – Characteristic 3.5 (Community members skilled or trained in appropriate agricultural, land use, water management and environmental management practices).

Note: A longer version of this case study can be found at www.proventionconsortium.org/?pageid=90 and www.abuhrc.org/research/dsm/Pages/project_view.aspx?project=13

Case Study 2:

Introducing the *Characteristics* to partner NGO field staff in Nepal

Organization: Practical Action

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Purpose

Practical Action's project 'Mainstreaming Livelihood-Centred Approaches to Disaster Management' seeks to demonstrate that activities that strengthen and diversify livelihoods and preparedness increase the resilience of targeted communities to the impact of locally prevalent shocks and stresses.

The *Characteristics* was introduced to a group of local partner field staff in Nepal to:

- Explain the development of the guidance note.
- Clarify the concept of 'resilience'.
- Relate project activities to specific elements of the *Characteristics*.
- Provide guidance for measuring progress towards the attainment of resilience.
- Provide positive outcomes or targets.

Methodology

The exercise was carried out through group work and discussion over six hours in Practical Action's Chitwan office, by a single facilitator using flip charts and PowerPoint. Following an introductory discussion, setting out the workshop schedule, the rationale for the development of the *Characteristics* was briefly explained.

The two partner organizations are working in different geographical areas. SAHAMATI is working in a watershed with both upstream and downstream communities in Nawalparasi District, while MADE is working on the plains (Terai) with river-bank communities in Chitwan District.

As both partners had already conducted hazard assessments in their respective target communities, each partner group was asked to record the hazards threatening these communities and to identify the elements at risk from these hazards (elements of vulnerability). The following hazards and vulnerable elements were identified:

SAHAMATI	MADE
Floods • Farmland • Grazing • Houses near river • Roads, culverts, etc. – physical structures	**Floods and erosion** • Source of income • Available crops and land • Livestock • Infrastructure – roads, irrigation canals, electricity, etc. • Drinking water • Health and sanitation – diseases
Landslides • Forest land • Grazing • Farm land • Livestock • Houses • Irrigation canals • Drinking water • Roads, etc.	

SAHAMATI	MADE
Drought • Seasonal production • Reduced drinking water • Irrigation • Fire	**Drought** • Available crops – source of income • Water resources • Health and sanitation – diseases
Wildlife • Crops • Livestock deaths • Human lives	**Wildlife** • Crops and livestock • Human resources • Infrastructure, shelters, etc.

The table shows that land and livelihoods were the most severely affected. Following participatory vulnerability and capacity assessments, the affected communities have initiated activities designed to reduce the impact of these hazards on their lives, assets and livelihoods.

The question was asked: 'Do these activities contribute to the resilience of the communities?'

The *Characteristics* resource was then introduced in a short PowerPoint presentation and the concept of 'resilience' was discussed. Reference was made to the appropriate pages of the printed version of the guidance note. The breakdown of the tables and their relationship to the vulnerabilities and the elements with which the project is working were explained.

The participants rapidly identified that most of their community-based activities fell in Thematic Area 4 (Risk Management and Vulnerability Reduction). Each group was then asked to link their activities with the Components of Resilience and identify the specific Characteristics to which they contributed (see the table at the end of this case study).

Results

The community-based activities, designed to reduce the vulnerability of the exposed populations, were initiated before production of the *Characteristics*. How to measure their contribution to increased resilience was, in effect, not yet determined. The *Characteristics* has provided timely guidance on the contribution that these activities make towards the attainment of resilience.

All the participants easily identified the components of resilience to which their activities were contributing. In addition, they recognized the significance of the *Characteristics* in the identification of appropriate indicators. This initiated a vigorous discussion on the merits of reducing vulnerability versus increasing resilience.

Participants agreed that the *Characteristics* clarified what the ultimate objective of the project was. Many felt that moving towards resilience was a positive outcome as opposed to the more negative connotation associated with reducing vulnerability. Resilience was seen as an attainable target, while eliminating vulnerability was seen as less possible.

Some activities contributed to more than one Component of Resilience, others made only a relatively minor contribution to a single Component.

It was suggested that due to the complexity of the tables and the large number of Characteristics that partially applied to the activities being implemented by communities, it would be useful to identify a selection of 'key' characteristics of resilience that could become targets for the project.

The partners have since been back to their communities to discuss their interpretation of the *Characteristics* and facilitated a community-based list of desirable Characteristics of a Disaster-Resilient Community specific to their communities which can be expressed in the local language. These will become targets.

It was recognized that different components of the other Thematic Areas are also of relevance to the project, but time did not allow these to be investigated.

Conclusions

Experienced DRR practitioners are able to relate community-based activities to the *Characteristics* more easily than newcomers to the discipline.

Some activities contribute to several Characteristics. It would be useful to pick a core of most relevant Characteristics that define the organization's approach.

Translation of some of the terminology is extremely difficult and time consuming.

Resilience is seen as a 'positive' target which, while dynamic, is attainable.

Components of Resilience	Characteristics of a Disaster-Resilient Community	Community activities SAHAMATI	Community activities MADE
1. Environmental and natural resource management	1.1. Community understanding of characteristics and functioning of local natural environment and ecosystems.	• Watershed management	
	1.2. Adoption of sustainable environmental management practices that reduce hazard risk.	• Conservation area/ riverbank tree planting	
	1.3. Preservation of biodiversity.		• Biodiversity • Aquatic resources/water harvesting
	1.4. Preservation and application of indigenous knowledge and appropriate technologies relevant to environmental management.	• Indigenous flood and landslide control	• Appropriate technology • Organic pest control
	1.5. Access to community-managed common property resources that can support coping and livelihood strategies in normal times and during crises.	• Construction of irrigation channels	• Water harvesting
2. Health and well being	2.1. Physical ability to labour and good health maintained in normal times through adequate food and nutrition, hygiene and health care.	• Vegetable/kitchen gardens	• Crop and livestock production leading to food security
	2.4. Access to sufficient quantity and quality of water for domestic needs during crises.	• Improved irrigation system	

Components of Resilience	Characteristics of a Disaster-Resilient Community	Community activities SAHAMATI	Community activities MADE
	2.5. Awareness of means of staying healthy and of life-protecting/saving measures, and possession of appropriate skills.	• Toilets constructed / improved piggeries	
3. Sustainable livelihoods	3.1. High level of local economic activity and employment; stability in economic activity and employment levels.	• Savings groups, nurseries, pig and goat rearing	• Commercial agriculture • Initiation of local employment
	3.3. Livelihood diversification.	• Seed saving, bee-keeping • Animal husbandry – pigs, goats, bees, etc.	• Diversification on-farm • Seasonal and non-seasonal crops
	3.4. Fewer people engaged in unsafe livelihood activities or hazard-vulnerable activities.		• Reduced number in drought-prone agriculture
	3.5. Adoption of hazard-resistant agricultural practices for food security.	• Bamboo plantation • Irrigation management	• Soil and water conservation • Shallow tube wells • Legumes
4. Social protection	4.1. Mutual assistance systems, social networks and support mechanisms that support risk reduction.	• Group formation • Village disaster management committees	• Network and links to Village Development Committee (VDC), District Development Committee (DDC), government agencies • Local disaster management committees
	4.2. Mutual assistance systems that co-operate with community and other formal structures dedicated to disaster management.	• Community-based disaster management (CBDM) plan prepared	
	4.3. Community access to basic social services.		• Networks with VDC and DDC
	4.4. Established social information and communication channels; vulnerable people not isolated.	• Warning boards	• Access to early warning system (DIPECHO) • Warning boards
	4.5. Collective knowledge and experience of management of previous events.	• Historical hazard profile • Baseline study	• Collective knowledge

Components of Resilience	Characteristics of a Disaster-Resilient Community	Community activities SAHAMATI	Community activities MADE
5. Financial instruments	5.1. Household and community asset bases sufficiently large and diverse to support crisis coping strate	• Saving	• Savings/credit/income generation. • Asset base improved
	5.2. Costs and risks of disasters shared through collective ownership of group/ community assets	• Resources from VDC used for protection	
	5.3. Existence of community/ group savings and credit schemes, and/or access to micro-finance services	• Savings	• Savings groups - women, forest users
	5.5. Community disaster fund to implement DRR, response and recover activities	• VDC, DDC and forest groups contribute	
6. Physical protection; structural and technical measures	6.2. Security of land ownership/ tenancy rights. Low/minimal level of homelessness and landlessness	• Land ownership	• Land ownership • Landless
	6.3. Safe locations: community members and facilities not exposed to hazards in high-risk areas within locality and/or relocated away from unsafe sites	• Safe locations	
	6.4. Structural mitigation measures in place to protect against major hazard threats, built using local labour, skills, materials and appropriate technologies as far as possible	• Water tank extension • Irrigation channel	• Flood diversion, water harvesting, local technology
	6.10. Infrastructure and public facilities to support emergency management needs.		• Early warning system (DIPECHO)
	6.12. Resilient transport/ service infrastructure and connections	• Infrastructure	

Components of Resilience	Characteristics of a Disaster-Resilient Community	Community activities SAHAMATI	Community activities MADE
7. Planning régimes	7.1. Community decision making regarding land use and management, taking hazard risks and vulnerabilities into account	• Public land management	
	7.2. Local (community) disaster plans feed into local government development and land use planning.	• CBDM plan • VDC plan	• Planning with VDC and CBDM

Case Study 3:

Using the *Characteristics* to assess capacity skills and gaps

Organization: Tearfund, with local partners in Malawi

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Purpose

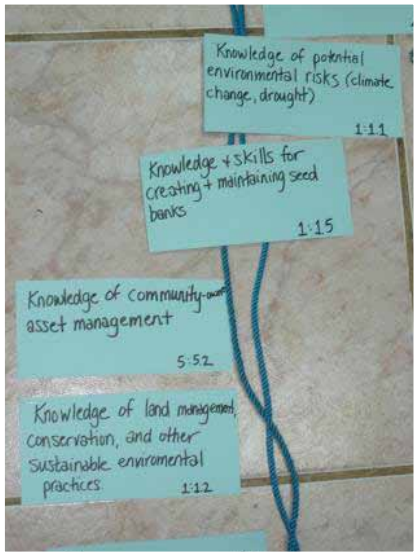
To test the usefulness of the *Characteristics* as a tool for assessing capacities and skills of DM practitioners, and to identify additional skills needed to achieve programme objectives. The exercise was carried out in Zomba in southern Malawi with 20 field and management staff from a consortium of Tearfund's longstanding Disaster Management (DM) partners.

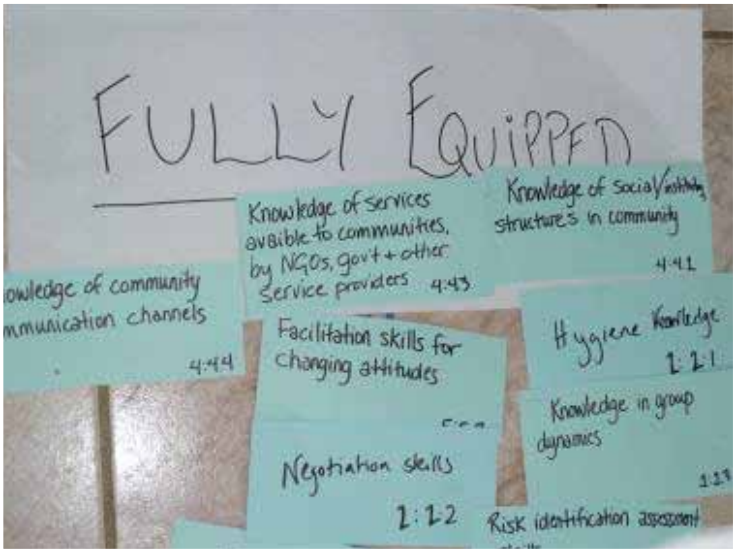
Method

The exercise was carried out during the course of one afternoon (four hours) in a conference centre. It was presented by a single person, utilizing PowerPoint, a flip chart, coloured cards, and interactive activities and discussions. It would be impossible in a single session to review capacity against all the Characteristics, so Thematic Area 4 (Risk Management and Vulnerability Reduction) was chosen as the basis for discussion.

The process was as follows.

- A presentation on the development of the *Characteristics* (i.e. their purpose and the process of their design. They should be seen as….
  - A vision of a disaster-resilient community in a perfect world, from which desired outcomes for a community could be identified.
  - A resource, not as a tool: i.e. the *Characteristics* needs modification and adaptation for different cultures, hazards and stages of the project cycle.
  - A 'menu' of a wide variety of DRR interventions, which could be of immediate use as a resource in the day-to-day work of DRR and development practitioners.
- A closer review of Thematic Area 4 to ensure a basic understanding of the concept of the *Characteristics*. The group was also introduced to Training Needs Analysis, and the sub-groupings used within this model – Knowledge, Skills and Attitudes.
- Practitioners were then asked to brainstorm the knowledge, skills and attitudes required by them to design and implement project activities which would deliver Characteristics under Thematic Area 4, Component 2 (Health and Well Being). Practitioners were advised to keep within the mandate of their organization. For example, if an NGO did not provide health services, they were encouraged to consider how such services could be delivered through partnerships or incorporated into an advocacy plan.
- Working in two separate groups, one group then looked at Components of Resilience 3, 6 and 7 (Sustainable Livelihoods, Physical Protection and Planning Régimes respectively), whilst the other group looked at Components 1, 4 and 5 (Environmental and Natural Resource Management, Social Protection and Financial Instruments). Three different sets of coloured card were provided to represent Knowledge, Skills and Attitudes. Each group then performed a similar exercise to the one above for Component 2, making sure that each card also made reference to an individual Characteristic of a Disaster-Resilient Community
- After a time, the two groups came together again and each sub-group presented its findings, and clustered similar knowledge, skills and attitudes together.
- A rope was then placed on the floor and three titles added at the top, middle and bottom of the rope saying 'Fully equipped', 'Medium Capacity' and 'Limited Scope'. The wider group was then asked to decide where they would place their cards on the rope (see photographs below).
- Finally, members reflected on what knowledge, skills and attitudes the group felt it had and did not have, and how it could obtain, improve or share them.





Outcomes

- The rope exercise demonstrated where there were strengths and where there were weaknesses in capacity to deliver the *Characteristics* .The clustered cards were mostly placed between the titles 'Fully Equipped' and 'Medium Capacity', with a gentle flow of cards going down towards the 'Limited Scope'. It highlighted areas where there was a need for further capacity development, for sharing of skills between partners or, alternatively, bringing in services from other organizations.
- Partners recognized the need and the opportunity to support each other, in terms of sharing skills/capacities, and the need to work in partnership with government and local communities. They did not, in themselves, possess every necessary skill.
- All the Characteristics found some resonance within the Malawi setting. Some were harder to apply than others, but practitioners were able to see the gaps in their own project design or approaches which needed to be filled.
- All the partners saw clearly that in-depth technical expertise was required to implement certain DRR activities. For example, most already employed agricultural specialists but had not truly recognized their value. Equally, they realized just how much environmental knowledge was required to effectively support the communities.
- The practitioners enjoyed debating the capacity required for the *Characteristics*. It allowed them to consider each Characteristic closely, often identifying comparisons between DRR characteristics and sustainable livelihoods, social protection and agricultural good practice (amongst others).

Lessons learned

- The conclusions in terms of partner capacities were very much Malawi-specific; different results would be identified if this was done in a different country.
- An exercise of this type requires a lot of motivation from staff. In this case, with development professionals and technical specialists, it was possible to use the experience to reflect deeply on the presence/absence of key skills.
- The separation onto different coloured cards for Knowledge, Skills and Attitudes was not really needed for the general nature of this exercise, but could prove beneficial if undertaking a more focused approach.
- The exercise would be more useful if done with a group of agencies who were at the early stages of considering a partnership, enabling them to see the necessity for and benefits of strategic partnerships.
- Some agencies may not want to openly express areas of limited capacity, although there was 'safety in numbers' for this exercise, because the final section was done as a collective consortium and no one agency felt exposed.
- A full day is needed for the exercise if there is to be a well thought through collective action plan. Time constraints with this group meant that they were encouraged not to think too deeply about each issue!
- For full effect and longer-term value, a strong action planning process should be incorporated into the procedure. Alternatively, narrowing the exercise down to focus on a series of pre-selected Characteristics could help.
- During the course of the exercise the volume of knowledge needed of the Enabling Environment became very clear (for example, knowledge of the rights and entitlements of the beneficiaries, as well as the provision and the policy commitments the government or local authorities have towards communities).

Case Study 4:

Customizing the *Characteristics* for child-centred risk reduction

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Introduction

Plan International has used the *Characteristics* to plan, monitor and review its child-centred DRR (CC-DRR) work. Plan started its CC-DRR initiative challenged with how best to design the work since, in common with most agencies, there was no widely agreed framework for defining resilience that could be used as a foundation. As such, the CC-DRR project embraced the challenge of developing a child centred approach set under the five areas of action specified in the Hyogo Framework. Plan then joined the consortium of NGOs that commissioned the production of the *Characteristics*, and subsequently committed to testing them and using them to refine its work. This case study describes how this led to the development of a child-centred resilience model. The model presents outcome indicators for child-centred DRR which can be utilized for programme and project development, monitoring and evaluation and advocacy.

Purpose

The purpose of Plan's engagement with the *Characteristics* was to develop a practical resource that could be used by country programmes for designing, implementing and reviewing progress of their work. From regional consultations with DRR staff, it became apparent that before the *Characteristics* could be taken up by the organization, it would need to become more closely aligned with its existing programme approach of child-centred community development.

Methodology

Plan began testing the *Characteristics* during meetings that were designed to introduce DRR concepts to colleagues working in countries vulnerable to the impacts of natural hazards.

After introducing DRR and the concept of community resilience, the participants mapped Plan's existing programme work against the five Thematic Areas of the *Characteristics*. This was done in the following manner:

1. Working in groups, workshop participants were asked to: 'List all the activities Plan currently implements which support the building of community resilience'. Each activity was written on a post-it note.
2. The workshop facilitator then posted the headings of the five Thematic Areas (Governance, Risk Assessment, Knowledge and Education, Risk Management and Vulnerability Reduction, Disaster Preparedness and Response) around the room, and group members were requested to discuss among themselves and classify their individual responses according to each Thematic Area. All groups then posted their post-it notes accordingly.
3. A volunteer from each group was then tasked to read through the assembled groupings of posted responses under each Thematic Area, with the facilitator providing input and questioning whether re-classification should be considered.
4. Once this process was completed, the facilitator reviewed the results and inquired:
   (a) Are there any Thematic Areas where Plan seems to be less engaged in (i.e. where fewer post-it notes were generated)? Why?
   (b) What additional interventions could be undertaken within this Thematic Area?
5. Each group then presented its group work to the wider group so the initial responses provided at the start of the exercise were complemented with new ideas through consensus agreement.

Having located Plan's child-centred work within the framework of the *Characteristics*, staff felt more at ease with the concept of resilience, based on a realization that Plan is already doing a lot of work which is in fact building communities' resilience to disasters.

The information collated from this exercise conducted in the four regional workshops was consolidated by Plan UK's DRR Programme staff with the support of external consultants, and is summarized in the table below:

Thematic Area	Key Elements of Plan's Child-Centred Approach to DRR
Governance	• Participation • Organizational development • Resource development • Partnerships • Advocacy
Risk Assessment and Planning [1]	• School and community vulnerability and capacity assessments • School and community DRR preparedness and contingency planning
Knowledge and Education	• Awareness raising • Capacity building • Research and learning
Risk management and vulnerability reduction	• Disaster Prevention and Mitigation
Disaster preparedness and response	• Preparedness activities • Disaster response • DRR in disaster recovery

The second step in Plan's adoption of the *Characteristics* was to align it with the principles of the UN Convention of the Rights of the Child. The aim was to ensure that Plan's work on children's rights – to survival, protection, development and participation – would be more clearly reflected and aligned with the five Thematic Areas.

The outcomes that the Plan DRR programme aimed to achieve in terms of changes in the lives of children and communities were identified for each of the above key elements of a child-centred approach to DRR. The wording of the *Characteristics* was then modified to suit Plan's child-centred approach.

For example, when considering the Characteristics of an Enabling Environment, the work to achieve desired outcomes focused on the roles of duty bearers at the levels of local government, national government and civil society, with a set of questions to prompt staff and partners to re-assess their role in realizing these desired outcomes and ensuring these adhered to the key principles of child rights and sustainable development (including the best interests of the child, non-discrimination, environmental impact and sustainability).

The table that follows illustrates the result of this process, for one Thematic Area: Knowledge and Education (the full set of tables covers all the Thematic Areas of the *Characteristics* and Plan's own Key Elements).

[1] In the *Characteristics*, planning is included in Thematic Area 1 (Governance). However, Plan felt that, in practice, planning tends to be implemented alongside risk assessment and it was therefore put under Thematic Area 2 (Risk Assessment).

Table: Child-Centred Knowledge and Education Outcomes

Disaster-resilience Outcomes at the level of rights holders	Enabling Environment Outcomes at the level of duty bearers
Children and communities	**Local Government**
Awareness raising 1. Children and young people (CYPs), including vulnerable girls and boys, are aware of and informed about disaster risks and how to manage them through school and community-based training and education activities. 2. Awareness-raising campaigns on DRR have been conducted for the whole community with the participation of CYPs using different forms of communication that are suitable for all ages, different abilities and gender, and are culturally appropriate. 3. The whole community is aware of and informed about disaster risks and how to manage them. 4. Community members exhibit positive attitudes and behaviours towards the reduction of risk and to the participation of CYPs in DRR and disaster management. **Capacity building** 5. CYPs and community members have been trained and have skills that enable them to implement the actions that have been determined in the DRR plans. **Research and learning** 6. CYPs have the skills to research, document and communicate their DRR experiences to different audiences using different forms of communication. 7. CYPs and community groups regularly monitor and evaluate the DRR activities in which they are involved and use the lessons learnt to modify future practice.	1. The local government provides opportunities for CYPs to participate in awareness-raising activities on DRR. 2. DRR is part of the school curriculum and is also included in non-formal education activities. **National Government** 3. The national government provides opportunities for CYPs to participate in awareness-raising activities on DRR. 4. DRR is part of the national school curriculum **Civil Society** 5. Intermediary organizations support awareness-raising and education activities on DRR by children and communities. 6. Media organizations participate in communicating risks, measures to address them and the role of CYPs in DRR. 7. Academic institutions support local research on the role of CYPs in DRR and child-centred DRR processes and practices and use the findings to increase awareness and knowledge of the role of CYPs in DRR at national and international levels through papers and presentations.
Plan's role: To what extent has Plan contributed to these changes?	
Child Centredness: To what extent does the change affect children (positively or negatively)? Best interests of the child: Have there been any negative impacts on children? Non-discrimination and inclusion: Who benefits from the change? Who doesn't? Why? (With special attention to gender, age, cultural diversity and vulnerability). Environmental impact: Have the changes impacted positively or negatively on the environment? Sustainability: To what extent will the change be sustained, how resilient is the change?	

Results

The child-centred Characteristics are now being used by Plan staff and partner organizations to design new child-centred DRR programmes, for advocacy and monitoring and evaluation, and to develop proposals being submitted to donors for funding.

In Bangladesh, they were used to design a baseline study for a European Union DIPECHO-funded project. They formed the structure for focus group discussions with children and community members. At the end of the project the outcomes tables were also used to frame a series of case studies about the lessons, challenges and opportunities exposed by the projects.

In El Salvador, Plan utilized the child-centred Characteristics to conduct a diagnostic study of resilience in five communities (four of which had been participating in its child-centred DRR project's activities and one external community serving as a control group). The results were used to plan a programme strategy for strengthening the capacity of local government disaster management committees in four municipalities. The *Characteristics* helped to identify priorities and framed the action plans, defining the roles and responsibilities of various actors. The M&E indicators for assessing this work are drawn directly from the child-centred Characteristics.

Outcomes

The *Characteristics* provided the foundation and a resource for developing a conceptual framework for child-centred DRR. Plan was able to use this in a number of ways to support:

- Primary research, by generating questions based on the *Characteristics* for focus group discussions that were conducted as part of project baselines in Bangladesh, Cambodia and Ecuador.
- Planning through the development of a resource to assist staff to identify potential intervention areas.
- Programme analysis by providing a framework for situational analysis (diagnosis) for municipal-level disaster management work in El Salvador.
- Global advocacy by generating questions for surveys conducted in 13 countries with over 800 children. The survey results were the evidence and data for the child-centred supplementary report to the *Views from the Frontline* survey conducted by the Global Network of Civil Society Organizations for Disaster Reduction and presented at the UN ISDR's 2009 Global Platform. (The Children's Views from the Frontline surveys results are available at http://www.plan-uk.org/pdfs/Children_on_the_Frontline_GP_report.pdf)

Lessons learnt

The *Characteristics* is a very comprehensive resource, covering all the aspects of disaster risk management which explain a community's resilience. However, given the breadth and depth of this holistic approach to disaster risk management, it is essential to select Characteristics that are most relevant for a particular intervention, and to explain these in simple user-friendly, non-technical language. To be really useful at the local level they do need to be understandable, especially by vulnerable communities and children.

In introducing the *Characteristics*, Plan found it best to first allow people to explore their own understanding of resilience by facilitating open discussions about ongoing work that seems to promote local resilience to disasters. This first step was very important. Building from existing knowledge helped to overcome resistance to the idea that the *Characteristics* was 'yet another' new tool.

In addition, it was found that the inter-relatedness of the *Characteristics* causes a further degree of complexity. For example, elements of the Governance and Knowledge and Education Thematic Areas can be seen as cross cutting throughout all the Thematic Areas. To address this challenge, Plan grouped the Characteristics according to typical project activities – such as awareness raising, capacity building, research and learning. This helped Plan staff to identify links between work that fell between as well as within Thematic Areas, which simplified planning processes.

Plan commissioned the support of technical experts on child rights to assist in adapting the *Characteristics* to fit within a child rights framework. This expertise ensured that the individual Characteristics more clearly related to the needs, capacities and rights of children.

During the course of the validation exercise Plan concluded that the *Characteristics* must always be adapted and simplified to suit local contexts and capacities.

Case Study 5:

Strategic planning using the *Characteristics*

Organization: Christian Aid

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Purpose

This case study shows how the *Characteristics* was used to guide the development of a regional strategy covering both DRR and CCA in Central America.

In 2008, ten years after Hurricane Mitch, Christian Aid and its partners took on the task of updating their regional approach to DRR, taking stock of the lessons from the last strategy (2003-2008) and considering the implications of climate change for the lives and livelihoods of poor and marginalized people in Central America.

Methodology and challenges

Christian Aid is a partnership-based organization and, for this reason, strategic planning was approached through a joint process with its partners in El Salvador, Guatemala, Honduras and Nicaragua, the four countries currently comprising the Central American programme.

In August 2008, Christian Aid staff drafted the strategic goals during a regional staff meeting held in Tegucigalpa. After that, Christian Aid convened a workshop to discuss them with partner organizations and to develop jointly the strategic lines of action or, in other words, the programme areas. The workshop was held at Copan (Honduras), 24th-26th September 2008, with representatives of around 20 organizations.

During the first half of the workshop, the participants reviewed the results of the previous strategy and considered different options to update it, including action-research, rights-based approaches to DRR and the use of the *Characteristics* for project design. During the second half they met in country-based groups, with Christian Aid country programme officers acting as facilitators. Homogeneous groups were preferred to the random mix of participants because:

1. Organizations of the same country have a long story of co-operation and had already developed internal group dynamics. Facilitation by the country officer aimed to multiply this effect.
2. Single-country hazards and vulnerabilities are better understood and easier to address than those resulting from mixed-country groups.

The groups were asked to select three Components of Resilience as priority 'lines of action'. They worked in two separate 90-minute sessions, one for advocacy and the second for community work, using the tables for Thematic Areas 1 (Governance) and 4 (Risk Management and Vulnerability Reduction), respectively, as a starting point for the group discussions. After one hour, the groups reported on the Components selected and the justification for their decisions. The Components selected by each country-group were then compared in an open session and the regional priorities chosen by simple consensus rules:

1. Components selected by more than half the number of groups (three groups in this case) were taken as main priorities.
2. Components selected by two groups were included as secondary priorities.
3. Components selected by only one group were rejected as regional priorities, although participants could save these results for further use at the country level.

Results

The results of the workshop were taken up by Christian Aid and passed over to staff to write the draft strategy. In November 2008, the final document was presented for approval to regional staff and disseminated to partners. The whole process took four months, a reasonable length for a five-year strategy.

The methodology produced a quick and strong consensus on the priorities at the regional level (the priorities are in the box below). The result was surprisingly uncontroversial, given the complexities involved, and was considered as very well aligned with the long-term trends by both Christian Aid staff and partner organizations.

The use of the *Characteristics* as a guide for the focus group discussions had two additional consequences:

1. It made the *Characteristics* the accepted framework for further development of the programme areas (at the project level, for instance).
2. It transformed the *Characteristics* into something close to a reference document for conflict resolution, detailed discussion and clarifications for organizations working in DRR and CCA.

Main Lines of Christian Aid partners' Central American strategy for disaster risk reduction and climate change adaptation

LINE OF ACTION 1: ADVOCACY

Main priority: Policies, planning, priorities and political commitment to DRR and CCA.
Secondary priorities:

- Legal and regulatory systems.
- Partnerships
- Accountability and community participation

LINE OF ACTION 2: COMMUNITY WORK

Main priorities:

- Natural capital: environmental and natural resources management, including climate change adaptation.
- Sustainable livelihoods.

Secondary priorities:

- Health and wellbeing.
- Physical protection, technical and structural measures.
- Planning systems.

Recommendations

1. **Integration between different communities of practice:** The use of the *Characteristics* can help to navigate the complexities of working with a diverse group of partner organizations in the area of risk reduction and adaptation, a grey area where different communities of practice intersect, each one carrying its own conceptual load.

The development of strategic lines for DRR and CCA involves sources of complexity that were overcome by using the *Characteristics*. The first is the usually controversial point on whether climate change work should be integrated with other risk management areas or treated as a separate theme. Additionally, participants had to navigate through

other areas of contention such as the integration of advocacy and service delivery and the linkages between relief and development. Finally, the outcome must respect the long-term commitments of individual organizations to specific sectors such as water, natural resources, gender or agriculture.

The use of the *Characteristics* was critical to navigate these constraints, providing a robust but flexible frame to bridge the gaps and build common understanding between diverse communities of practice such as, for instance, needs-based organizations and rights-based groups, specialists in relief and development or gender and environmental activists. Some features of the document especially useful for this task were:

- The high number of individual elements available, making different communities of practice feel that their particular points of interest were well represented and taken into account.
- The articulation between general Thematic Areas and Components of Resilience clustering more specific sets of indicators, allowing participants to find relevant areas and assimilate them quickly to the work sectors and activities familiar to them.
- The parallel presentation of 'community' and 'enabling environment' indicators, facilitating the joint discussion of local advocacy and service delivery components.

2. Diversity and expertise of the team: The main effect of the document is its notable capacity to focus discussion and accelerate consensus. To make the most of this effect, participants should be familiar with the document before the workshop. The use of homogeneous single-country discussion groups also facilitated the effect.

Two other features contributed to this success:

- All the participants belonged to committed partners, with experience in DRR, livelihoods and related areas and with an explicit interest in exploring the new area of climate change work.
- Most of the participants knew the document in advance and, in some cases, had already used it for monitoring or project design purposes.

Case Study 6:

Using the *Characteristics* for reviews and evaluations

Organization: Christian Aid

Author: Cristina Ruiz cruiz@christian-aid.org

Purpose

As part of the mid-term review of a major global DRR programme funded by DFID, Christian Aid used the *Characteristics* to further develop the output indicators in the programme's logical framework. The indicators were used to form the terms of reference for the mid-term review of the programme in Honduras, Malawi and Bangladesh.

Methodology and challenges

An international project team (nine people) looked at how to reduce the number of indicators from the original logical framework and make them more measurable, with a good balance of qualitative and quantitative indicators.

In order to structure this process, reference was made to the relevant sections of the *Characteristics* document that could inform indicator development. Thus, individual output indicators were linked to specific Thematic Areas and Components of Resilience that could assist to asses the level of achievement of that specific indicator. In some cases the wording of the indicators was then revised using the *Characteristics* as a guide.

It is important to notice that this exercise was done half-way through the programme implementation; therefore it was not possible to replace indicators or add new ones to the (donor-agreed) logical framework. Instead, indicators could be modified by splitting, rewording or clarifying. This was a challenge for the team but also an opportunity to add more precision to the 'old' indicators to actually measure resilience.

For example, in the case of an indicator that referred to 'Helpful/positive strategies in place that reduce community risk vulnerability', the team decided to refer to the seven Components of Resilience in Thematic Area 4 (Risk Management and Vulnerability Reduction) and their individual Characteristics, to inform how to decide whether a specific strategy was 'useful or positive'.

Results

The table below shows how some of the original indicators were re-worded in the logical framework. The text in italics refers to those sections of the *Characteristics* tables that will help Christian Aid and its partners to measure the new indicators.

Output indicators in original logical framework (January 2006)	Revised output indicators, using *Characteristics* (June 2008)
• Incorporation of DRR approach and indicators in Christian Aid's (CA) corporate thematic supporting strategies and regional Africa, Latin America/Caribbean and Asia/Middle East strategies that underpin its corporate framework 2005 – 2010 • Positive performance against indicators defined in CA corporate strategy – goal 1: secure livelihoods – and goal 3 – governance • Positive learning replicated	1. Incorporation of DRR approach and indicators and their uptake in CA's supporting strategies that underpin CA's corporate framework 2005 – 2010; at corporate level and in the regional strategies in Africa, LAC and Asia/Middle East. 2. Appropriate learning materials (information, communication, education) on DRR produced by CA/ other sources disseminated (using different forms of media) and used. *To be guided by Thematic Area 3, Components 1 to 5.*

Output indicators in original logical framework (January 2006)	Revised output indicators, using *Characteristics* (June 2008)
• Increased uptake and awareness of DRR and SLA approaches in development and emergency programming across CA and partners • Learning materials on DRR produced by CA/other sources • Committees/volunteers/government extension workers replicating knowledge through practical action • DRR learning reflected in proposals received • At least five links created with academic/other institutions to produce and disseminate learning documents, peer reviewed publications and presentation at appropriate national or international seminars • Publication of final 'learning' report • Number of risk assessments undertaken • Number of sustainable livelihood strategies in place • Policy level changes • Number and regularity of round table/meeting forums • Scale and scope of partners' active membership in advocacy networks • Number of exchange activities between partners • Media used to disseminate information (radio programmes, seminars) • At least one common initiative with other UK agencies and/or ecumenical networks initiated • Positive feedback from communities on risk reduction initiatives	3. Positive learning replicated at community level (committees, volunteers, government extension workers). 4. DRR learning reflected in proposals received from partners and through practical action in projects implemented. 5. Scale and scope of CA and partners' active membership in advocacy networks result in policy level changes. 6. Number of exchange activities between partners leading to learning and innovation within organisations. 7. Productive links created with academic, scientific and other institutions to produce and disseminate learning documents, peer reviewed publications and presentation at appropriate national or international seminars. 8. Number and quality of efficient, effective and timely participatory community assessments undertaken. *To be guided by Thematic Area 2, Components 1 to 3.* 9. Number of helpful/positive strategies in place that reduce community risk vulnerability, in terms of changes in management of natural resources; livelihood; physical and social protection; or others. *To be guided by Thematic Area 4, Components 1 to 7.* 10. Number of actions that improved community organization for disaster preparedness. *To be guided by Thematic Area 5, Components 1 to 6.* 11. Communities and partners understand details of relevant legislation and operational plans on DRR. *To be guided by Thematic Area 1, Components 1 and 2.* 12. Effective advocacy actions initiated by communities result in increased access to public resources and/or positive policy influencing. *To be guided by Characteristics of an Enabling Environment across all Thematic Areas.*

The new version of the indicators was approved by the donor and was used to inform the mid-term review. The logframe type of project documents can not include the amount and level of detail that is contained in the *Characteristics*: therefore the logframe presented to the donor did not include the reference to the *Characteristics* in each indicator but just a general reference to how the document would guide the indicators.

Recommendations

All participants agreed that the *Characteristics* clarified and helped defining the indicators. The team was formed by experienced DRR practitioners from the Philippines, Bangladesh, Honduras, El Salvador, Malawi and the UK . There was a consensus on the usefulness of the *Characteristics* despite the different contexts and risks that members of the team were working with, but in order to have this level of discussion there is a need for expertise and practical knowledge of DRR work.

Ideally the exercise of defining indicators should be completed at the start of the project, using the *Characteristics* to define and shape the project from the beginning. Then, reviews and evaluations will be done in reference to the indicators agreed with the donor.

Case Study 7:

Using the *Characteristics* for data collection and research

Organization: Christian Aid

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Purpose

As part of the mid-term review of a global DFID-funded DRR project, Christian Aid used the *Characteristics* to develop case studies on community and partner experiences which were to be used during the review as a basis for discussion and in-depth analysis. A series of case studies was developed in three project countries, each choosing a different analytical focus and combining particular components of the *Characteristics* document:

The purpose of the case studies was threefold:

1. To provide initial lessons and identify key challenges in specific focus areas to guide team discussion in a preparatory review workshop.
2. To field-test the *Characteristics* as a conceptual framework for in-depth analysis and case studies (using selected Characteristics of particular relevance to building disaster-resilient communities).
3. To generate a basis and initial ideas for the country-specific evaluations.

Methodology and challenges

The case studies aimed to reflect particular project focus areas and resilience components, based on the original project log frame and the *Characteristics* document.

The project team selected a few key Thematic Areas, Components of Resilience and Characteristics of a Disaster-Resilient Community that were of particular relevance to the project aims and that were expected to produce useful initial findings in preparation for the country evaluations. Therefore the criteria for choosing particular resilience components and characteristics for the case studies were:

- the objectives of the project (as defined in the log frame);
- a list of components committed to field-testing; and
- partner and Christian Aid competencies in particular countries.

For example, in **Bangladesh** the case study focused on the community level and analysed the link between levels of local risk knowledge and environmental practice. Two Thematic Areas with relevant components and Characteristics were selected and combined in the following way:

Thematic Areas and Components of Resilience	Characteristics of a Disaster-Resilient Community	Characteristics of an Enabling Environment
Thematic Area 2: Risk Assessment **Component 1. Hazards/ risk data and assessment**	1.2. Hazard/ risk assessment is participatory process including representatives of all sections of community and sources of expertise. 1.3. Assessment findings shared, discussed, understood and agreed among all stakeholders, and feed into community disaster planning. 1.4. Findings made available to all interested parties and feed into their disaster planning. 1.5. Ongoing monitoring of hazards and risks and updating of assessments.	
Thematic Area 4: Risk Management and vulnerability reduction **Component 1. Environmental and natural resource management**	1.1. Community understanding of characteristics and functioning of local natural environment and potential risks. 1.4. Preservation and application of indigenous knowledge and appropriate technologies relevant to environmental management.	

The selected Characteristics were then discussed and revised together with the local Christian Aid partner staff before visiting the communities; and the main themes and questions for the interviews, focus groups and individual interview participants were agreed. The following overall questions guided the process:

1. Have hazard and risk assessments, including the assessment of climate change risks, conducted in the project community contributed to and changed people's perception of risk and of preparedness?

2. Has the process of participatory assessments improved people's knowledge of roles and responsibilities during response and are they able to address the underlying risk factors?

3. Has the involvement of various local actors, including government, influenced the process of hazard and risk mapping, and has the process had any impact on the relationship between the community and government representatives, and subsequent access to public services?

In the communities, interviews were held with members of the Village Disaster Management Committees (both separate and joint interviews with female and male members of the committees), with members of the Volunteer Committees, ethnic minorities, the Ward representatives and Union Parishad members of the villages, and local government staff (engineers, veterinary staff, Upazilla head). Additionally, individual interviews were conducted where appropriate with doctors, teachers, and business people within and outside the community.

In **Honduras**, the case study developed combined risk awareness and advocacy capacity. It focused on the community level and analysed the following key questions:

- Is a community with a shared vision of a prepared and resilient community, well trained and aware of disaster risks, in a better position to increase its influence on governance at local level?

- What other factors and aspects of an Enabling Environment are required for communities to be able to engage effectively with governments and other stakeholders?

The Characteristics selected were:

Thematic Areas and Components of Resilience	Characteristics of a Disaster-Resilient Community	Characteristics of an Enabling Environment
Thematic Area 3: Knowledge and Education **Component 1. Public awareness, knowledge and skills**	1.2. Whole community has been exposed to/taken part in ongoing awareness campaigns, which are geared to community needs and capacities (e.g. literacy levels). 1.3. Community knowledge of hazards, vulnerability, risks and risk reduction actions sufficient for effective action by community (alone and in collaboration with other stakeholders). 1.4. Possession (by individuals and across community) of appropriate technical and organisational knowledge and skills for DRR and response actions at local level (including indigenous technical knowledge, coping strategies, livelihood strategies).	
Thematic Area 3: Knowledge and Education **Component 3. Education and training**	3.1. Local schools provide education in DRR for children through curriculum and where appropriate extra-curricular activities. 3.2. DRR/DRM and other training addresses priorities identified by community and based on community assessment of risks, vulnerabilities and associated problems. 3.3. Community members and organisations trained in relevant skills for DRR and DP.	
Thematic Area 1: Governance **Component 1. DRR policy, planning, priorities, and political commitment**	1.2. Consensus view of risks faced, risk management approach, specific actions to be taken and targets to be met. 1.5. Committed, effective and accountable community leadership of DRR planning and implementation. 1.6. Community DRR (and DP) plans, developed through participatory processes, put into operation, and updated periodically.	• Political consensus on importance of DRR. • DRR a policy priority at all levels of government. • National DRR policy, strategy and implementation plan, with clear vision, priorities, targets and benchmarks. • Local government DRR policies, strategies and implementation plans in place. • Local-level official understanding of, and support for, community vision.
Thematic Area 1: Governance **Component 2. Legal and regulatory systems**	2.2. Community aware of its rights and the legal obligations of government and other stakeholders to provide protection.	

In **Malawi**, the case study looked at knowledge generation and communication channels at the community level, addressing the following key questions:

- Do established social information and communication channels leave some vulnerable people isolated? Does vulnerability and capacity analysis (VCA) help to solve this isolation?
- Does VCA capture collective knowledge and experience of management of previous crises? To what extent? What kind of activities, factors, actions, etc., foster or hinder this?

For this, the following Characteristics were selected and combined:

Thematic Areas and Components of Resilience	Characteristics of a Disaster-Resilient Community	Characteristics of an Enabling Environment
Thematic Area 2: Risk Assessment **Component 2. Vulnerability/ capacity and impact data and assessment**	2.2. VCA is participatory process including representatives of all vulnerable groups.	• VCA mandated in public policy, legislation, etc., with standards for preparation, publication, revision. • Disaster impact data and statistical loss information available and used in VCA. • Existing knowledge collected, synthesised and shared systematically (through disaster management information systems). • Participation of all relevant agencies/stakeholders in assessments.
Thematic Area 4 Risk Management and Vulnerability Reduction **Component 4. Social protection (including social capital)**	4.4. Established social information and communication channels; vulnerable people not isolated. 4.5. Collective knowledge and experience of management of previous events (hazards, crises).	• Formal social protection schemes and social safety nets accessible to vulnerable groups at normal times and in response to crisis. • External agencies prepared to invest time and resources in building up comprehensive partnerships with local groups and organisations for social protection/security and DRR.

Interview guidelines for each case study were developed in dialogue with local Christian Aid staff and partners, taking as reference the specific characteristic chosen for each case. Open and semi-structured interviews as well as group discussions were conducted with community members, project partner staff, local government representatives and relevant local stakeholders.

Results and recommendations

During the course of the research the clear focus of the research questions based on the *Characteristics* showed that the assumptions on which some of the hypotheses were based did not hold. For example, in Bangladesh, the study found that the assessment process was not fully participatory and the findings were not broadly shared within the communities and outside. Moreover the local government, even though informed about the participatory VCA, did not participate in the exercise, apart from one community member who is the Ward representative in the Union Parishad.

The study then sought to understand what prevented the two communities from benefiting more from the risk assessment process and more broadly from the project activities. In doing so the research not only highlighted three key factors for successful DRR interventions that partners had taken for granted but not reflected on (participation, empowerment and sustainability), but also allowed raising new research questions for discussion and further analysis.

The *Characteristics* proved to be a very useful tool in framing specific study questions for the field research. It was helpful in focusing broad research interests down to specific questions and to guide interview questions. Using the *Characteristics* in this way also made it easier for Christian Aid staff to engage in open discussions with local partners around measuring progress of community resilience rather than evaluating partner achievements.

To make the *Characteristics* a useful tool for this exercise a thorough selection process of relevant Components of Resilience and Characteristics of a Disaster-Resilient Community had to be done in open dialogue with everybody involved. Though this was relatively time-intensive, the process also helped in focusing and framing the analysis in everyone's minds – so well worth the effort.

Despite the detailed preparations, in some instances the selected Characteristics needed to be adapted once the team arrived in the communities. This needed to be done to better reflect the local realities – and was easily possible.

Some specific recommendations include:

- Selection of the community and interview participants: The selection of the community and interview partners should be carried out in a joint manner with all those involved in the process and particularly in consultation with the staff conducting the interviews.
- Selection of Characteristics: The Thematic Areas and Components of the *Characteristics* framework selected for data collection and research should take into consideration the context of the project/community/initiative that they relate to: i.e. project log frames, community action plans, strategic priorities, etc., should be considered during the selection process.
- Developing the interview guide: Identifying interview questions and guidelines can then be easily organized following each of the Characteristics that are most relevant within the Components selected. The guide should be adopted with the agreement of each of the groups and key informants.

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