

# TOOLKIT FOR MEASURING COMMUNITY DISASTER RESILIENCE

**GUIDANCE MANUAL** 

Prepared by GOAL May 2015



## Credits

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# Abbreviations & Acronyms

DFID:	Department for International Development of the UK
DipECHO:	Disaster Preparedness Programme of European Community Humanitarian Office (ECHO)
DRR:	Disaster Risk Reduction
DRM:	Disaster Risk Management
FAO:	Food and Agriculture Organization of the United Nations
GOAL:	International Humanitarian Agency (Ireland)
NGO:	Non-Governmental Organization
UNEP:	United Nations Environment Programme
MEAL:	Monitoring, Evaluation, Accountability and Learning
KAPB:	Knowledge, Attitudes, Practices and Behaviours
VCA:	Vulnerability and Capacity Assessment
FGD:	Focus Group Discussions
PLHIV:	People Living with HIV and AIDS
LQAS:	Lot Quality Assurance Sampling
MOV:	Means of Verification

### a. Introduction

Major hazards such as hurricanes, earthquakes, volcano eruptions, droughts, and landslides, among others, constantly threaten the lives and livelihoods of the most vulnerable populations across the world. In the context of accelerated climate change and population growth, the current trend of frequent major disasters is expected to increase in the foreseeable future. To mitigate this trend, increased **Disaster Resilience**<sup>1</sup> is essential to reduce the potential impact of humanitarian crises on the poorest communities. Who are disproportionately affected by these disasters.

This *Toolkit for Measuring Community Disaster Resilience* has been developed as a concise and user-friendly tool to measure the level of disaster resilience at community level through the assessment of a broad range of resilience components. These components span five key thematic areas, namely Governance, Risk Assessment, Knowledge and Education, Risk Management and Vulnerability Reduction and Preparedness.

This toolkit builds on the work on disaster resilience by the Inter-Institutional Group, coordinated by the UK Department for International Development (DFID), documented in the publication "Characteristics of Disaster Resilient Communities".<sup>2</sup> The toolkit's development was also informed by consultations with stakeholders at policy and technical level, as well as validation through extensive field-testing in rural indigenous communities in the La Moskitia region of Honduras; urban neighbourhoods in landslide and flood risk zones in Tegucigalpa, Honduras and Port-au-Prince, Haiti; and in rural flood and drought prone areas in Malawi and Ethiopia.

It is recommended that this toolkit be applied as part of a wider framework of stakeholder consultations and risk assessments to obtain the fullest understanding possible of all the context specific and complex aspects of disaster resilience at community level.

GOAL invites feedback from users of this toolkit so that it can be continually updated and improved. Please send your comments to the following address: resilience@goal.ie.

### B. Background to the development of this toolkit

GOAL is an international humanitarian organisation, founded in Ireland in 1977, dedicated to alleviating the suffering of the poorest and most vulnerable communities across the developing world. GOAL has responded to the majority of the major disasters which have occurred over the last 38 years and has contributed some €790 million in humanitarian and development programs in more than 50 countries):

In 2006 GOAL identified the need to measure disaster resilience at community level, and in 2007 GOAL completed a comprehensive KAPB survey in its operational area in La Moskitia, Honduras to gain a better understanding of the factors influencing communities' disaster resilience. In 2010, GOAL developed a survey toolkit for assessing disaster resilience, which incorporated over 210 questions on a variety of aspects relating to disaster resilience and including specific quantifiable disaster resilience characteristics, based on the work by John Twigg.<sup>3</sup> Over 2010 and 2011, GOAL applied this tool in its operational area in La Moskitia and it proved very effective in measuring progress in strengthening disaster resilience, with results being consistent with other monitoring and evaluation processes, e.g. simulation drills and programme evaluations, among others.

<sup>&</sup>lt;sup>1</sup> For the purposes of this toolkit Disaster Resilience is defined as "The ability of communities and households to anticipate and adapt to risks and to absorb, respond and recover from shocks and stresses in a timely and effective manner without compromising their long term prospects."

<sup>&</sup>lt;sup>2</sup> Twigg, John. Characteristics of a Disaster-resilient Community – A Guidance Note. Version 1, 2007 and Version 2, 2009.

<sup>&</sup>lt;sup>3</sup> "Characteristics of a Disaster-resilient Community – A Guidance Note", in both of its versions, 2007 & 2009 was identified as the key reference material for the development of this guideline.

In 2011, GOAL initiated large scale Resilience and DRR programming as part of the ECRP DISCOVER consortium funded by DFID in Nsanje, Malawi. Within this programme GOAL also utilized survey tools to measure resilience at community level. Simultaneously GOAL initiated programmes under the second and third DipECHO Action Plans in Africa. The same year GOAL began implementation of the Irish Aid Programme fund, a multi-annual, integrated programme which incorporates resilient livelihoods programming.

In 2013-2014 GOAL carried out a comprehensive revision and validation of its work on measuring disaster resilience at community level in Honduras, Haiti, Malawi and Ethiopia, resulting in the current version of this toolkit focusing on 30 key components of resilience at community level.

During its development a draft version of the toolkit was shared with disaster risk management specialists, including officials from national risk management systems, UN agencies, ECHO field office in Central America, non-government organizations among others; their valuable feedback was incorporated into the final version of this toolkit.

### C. Definition of resilience

GOAL understands Resilience as the ability of communities and households to anticipate and adapt to risks and to absorb, respond and recover from shocks and stresses in a timely and effective manner without compromising their long term prospects. In 2013 GOAL produced a document entitled 'GOAL and Resilience: a Guidance Note' which highlights the emergence of resilience programming as a response to the increased frequency and impact of humanitarian crises affecting disproportionately the world's poorest and most vulnerable populations.' This document notes the unique opportunity resilience presents to address the root causes of vulnerability which exacerbate the impact of hazards. Resilience building can facilitate a transition from humanitarian response interventions to longer term development programming.

The measurement of community resilience using this toolkit can be interpreted in two ways. The toolkit can be used to give an indicative percentage of resilience based on the assessment of the key components of resilience. Alternatively, the toolkit can be used to determine levels of resilience as shown in Table 1 below:

%	LEVEL	CATEGORY	DESCRIPTION
0-20	1	Minimal Resilience	Little awareness of the issue(s) or motivation to address them. Actions limited to crisis response.
21-40	2	Low Resilience	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.
41-60	3	Medium Resilience	Development and implementation of solutions. Capacity to act is improved and substantial. Interventions are more numerous and long-term.
61-80	4	Resilient	Coherence and integration. Interventions are extensive, covering all main aspects of the problem, and they are linked within a coherent long-term strategy.
81-100	5	High Resilience	A 'culture of safety' exists among all stakeholders, where DRR is embedded in all relevant policy, planning, practice, attitudes and behaviour.

### D. The community resilience measurement toolkit

#### D.1 SUMMARY OF THE TOOLKIT

This Toolkit for Measuring Community Disaster Resilience is comprised of:

1. The Survey Questionnaire for Community Disaster Resilience, which is divided into two parts as described below:

#### Part A: General Context of the Community

The first part of the survey questionnaire collects data on the general context of the community, including socioeconomic and demographic data, identification of vulnerable groups and information on the main hazards faced by the community and their frequency of occurrence (there is a comprehensive checklist of hazards, please see the Glossary for the explanation of some of these).

#### Part B: Community Resilience Characteristics Assessment

This part of the survey features 30 consultation questions, each relating to a particular resilience component, grouped under five thematic areas:

- o Thematic Area 1: Governance
- o Thematic Area 2: Risk Assessment
- o Thematic Area 3: Knowledge and Education
- o Thematic Area 4: Risk Management and Vulnerability Reduction
- o Thematic Area 5: Disaster Preparedness and Response<sup>4</sup>

The consultation questions are designed to explore resilience characteristics under each component, based on a ranking scale. Each of the five potential answers relates to a resilience characteristic, which corresponds to an assigned "level of resilience", ranging from 1 to 5 (whereby 1 indicates minimal resilience and 5 indicates high resilience). The answers recorded will illustrate the community's resilience for each component, which are verified using specific means of verification. NB: When applying the survey, the key questions are to be answered by the survey technicians based on the dialogue generated with the community representatives and means of verification. Guiding questions are provided to facilitate this dialogue with the community. The technician should adapt these guiding questions to make them as context specific as possible and incorporate additional guiding questions as necessary to facilitate the discussion.

As a general rule it is recommended that all 30 key resilience components should be assessed in order to measure the overall community resilience score. However, based on the knowledge acquired on the community, the survey administrator may decide that some of the 30 questions do not apply to the particular context of a community or survey area. For this reason the toolkit allows the survey administrator to assign a weighting of 0 (if not relevant) or 1 (if relevant) to each resilience component. Components which have been given a weighting of 0 will be omitted, (i.e. the key question related to that component will not be asked during the survey process).

<sup>&</sup>lt;sup>4</sup> Twigg, 2009 "Characteristics of a Disaster-resilient Community – A Guidance Note"

#### 2. The Digital Data Gathering and Reporting Module

The toolkit is intended to be surveyed by field technicians, who will be collecting the data using mobile digital data collection. The Toolkit is based on the CommCare product platform which operates on Android devices, and stores data on the cloud-hosted CommCare servers. Any organization can download the GOAL Resilience Toolkit survey template and begin collecting data themselves. Directions to install the application from the CommCare Exchange can be found here: https://confluence.dimagi.com/display/commcarepublic/Building+A+Blank+App+or+Starting+From+The+Exchange. If necessary, for additional assistance

to download the GOAL application please send request to the following address: resilience@goal.ie.

After downloading from the CommCare exchange, the survey template will appear in a unique web domain, where the data collected from the field will appear once the mobile is synced with the CommCare server. Once the Toolkit application is available on your domain, or "project space", you can download the application onto your Android to begin collecting data:

https://confluence.dimagi.com/display/commcarepublic/Installing+CommCareODK+Android.

The entire application download process, from the CommCare Exchange to the application on the Android, should take 20-30 minutes if connected to the internet.

All information on application troubleshooting, navigating through the application on the mobile, selecting a compatible Android device, managing your project space, etc. can be found on the CommCare help site: http://help.commcarehq.org

Within the Toolkit application, surveyors will enter the name of the community being surveyed and complete the survey to get the community resilience score, which will calculate as the surveyor goes through the questionnaire. At the end of the survey, on the mobile, the application will present the score (Figure 1). The application works offline, and once the Android device is connected to the internet, the results of the questionnaire will be sent to the CommCare server and to the organization's unique project space. Further directions on navigating through the application are available on the CommCare help site.

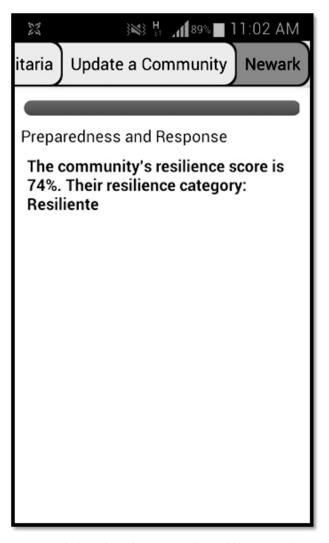


Figure 1: The hypothetical community, "Newark", has received a resilience score of 74%.

After the Android devices sync with the CommCare server either via wi-fi or via mobile data using a SIM card on the device, all data will become available on the organization's project space. Data can be exported on the CommCare server for analysis of resilience score across all communities. Additionally, GOAL has developed an offline Excel dashboard which connects to the CommCare server so the organization can monitor communities' resilience scores in almost real-time. Directions to customize the reporting template to connect to each organization's unique online database can be found here:

https://confluence.dimagi.com/display/commcarepublic/Tutorial%3A+Create+an+Excel+Dashboard.

Alternatively a GOAL offline dashboard reporting template can requested from the following address: resilience@goal.ie. The offline dashboard can automatically generate pro-forma reports, which allows the user to contrast the resilience scores achieved in the various assessments made during the lifetime of a project in a specific community, and to contrast the scores among various communities. This immediate, quantified and visual representation of the level of resilience during the intervals in which this was measured can be shared with beneficiaries and other interested actors, and inform and prioritize future interventions. See below sample schematic from the GOAL offline dashboard reporting template showing before and after resilience levels measured by the toolkit.

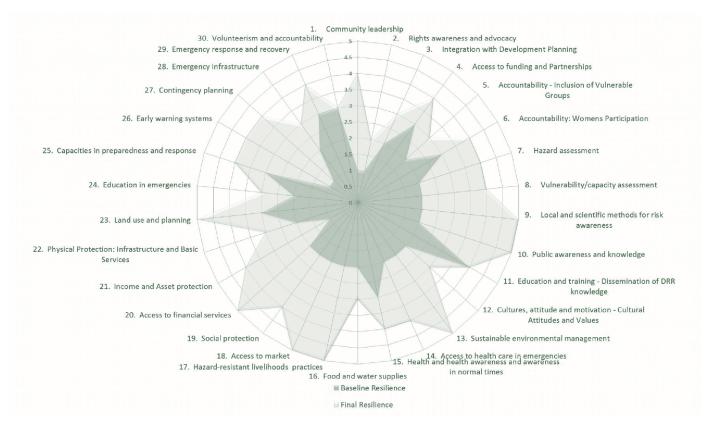


Figure 2: GOAL Offline Dashboard Schematic showing before and after resilience levels for a group of communities

3. The Guidance Manual on the toolkit (this document), containing the justification and background of the toolkit's development and an explanation of its application.

#### **D.2. RESILIENCE COMPONENTS**

Thematic Area (Twigg)	Component (Twigg)	Resilience Component in Toolkit	Twigg Resilience Characteristic(s) Selected
	Policy, planning, priorities and political commitment	1. Community leadership	TA 1, Characteristic 1.5
	Legal and regulatory systems	2. Rights awareness and advocacy	TA 1, Characteristic 2.2
	Integration with development policies and planning	3. Integration with development planning	TA 1, Characteristic 3.1
Thematic Area 1: Governance	Institutional mechanisms, capacities and structures; allocation of responsibilities	4. Access to funding and partnerships	TA 1, Characteristics 5.6
	Partnerships	parenerships	TA 1, Characteristic 6.2
	Accountability and community participation	5. Inclusion of vulnerable groups 6. Womens participation	TA 1, Characteristic 7.6
	Hazard/risk data and assessment	7. Hazard assessment	TA 2, Characteristics 1.1, 1.2, 1.3, 1.6
Thematic Area 2: Risk Assessment	Vulnerability/capacity and impact data and assessment	8. Vulnerability/capacity assessment	TA 2, Characteristics 2.1, 2.2, 2.3 & 2.6
	Scientific and technical capacities and innovation	9. Local and scientific methods for risk awareness	TA 2, Characteristic 3.2
	Public awareness, knowledge and skills	10. Public awareness and knowledge	TA 3, Characteristic 1.5
Thematic Area 3: Knowledge and Education	Education and training	11. Dissemination of DRR knowledge	TA 3, Characteristic. 3.1. and Tearfund question
	Cultures, attitudes, motivation	12. Cultural Attitudes and Values	TA 3, Characteristic 4.5

	Environmental and natural resource management	13. Sustainable environmental management	TA 4, Characteristic 1.2
		14. Access to health care in emergencies	TA 4, Characteristic 2.7
	Health and well being	15. Health access and awareness in normal times	TA 4, Characteristic 2.1 & 2.5
		16. Food and water supplies	TA 4, Characteristic 2.3
	Sustainable livelihoods	17. Hazard-resistant livelihoods practices	TA 4, Charact. 3.5
Thematic Area 4: Risk Management and	Justaniable livelinoods	18. Access to market	TA 4, Charact. 3.7
Vulnerability Reduction	Social protection	19. Social protection	TA 4, Charact. 4.1
	Financial instruments	20. Access to financial services	TA 4, Charact. 5.3
		21. Income and Asset protection	TA 4, Charact. 5.1
	Physical protection; structural and technical measures	22. Infrastructure and basic Services	TA 4, Charact. 6.3., 6.4. & 6.6
	Planning régimes	23. Land use and planning	TA 4, Charact. 7.1
	NA	24. Education in emergencies	NA
	Organizational capacities and coordination	25. Capacities in prepared- ness and response	TA 5, Characteristic 1.2
	Early warning systems	26. Early warning systems	TA 5, Characteristic 2.1
Thematic Area 5: Disaster	Preparedness and contingency planning	27. Contingency planning	TA 5, Characteristic 3.2
Preparedness and Response	Emergency resources and infrastructure	28. Emergency infrastructure	TA 5, Characteristic 4.3
	Emergency response and recovery	29. Emergency response and recovery	TA 5, Characteristic 5.2 & 5.3
	Participation, voluntarism, accountability	30. Volunteerism and accountability	TA 5, Characteristic 6.4

#### D.3. RATIONALE AND CLARIFICATIONS ON KEY QUESTIONS (SURVEY PART B)

#	Resilience Component	Key Question	Rationale and Clarifications	
	THEMATIC AREA 1: GOVERNANCE			
1	Community leadership in DRR	Is the community leadership in DRR committed, effective, and accountable?	This question assesses the existence, effectiveness, commitment and accountability of community leadership in DRR. It aims to capture details on leadership structures only, which are directly related to decision-making for emergency preparedness, response, risk mitigation and vulnerability reduction.	
2	Rights awareness and advocacy	Is the community aware of its rights and the legal obligations of government and other stakeholders that provide protection?	This question measures awareness of rights, associated obligations on the part of duty bearers, and the degree to which communities call on the duty bearer to fulfill these obligations. The question captures knowledge and action on the part of the community only. Details of participation and appetite of duty bearers to receive and action this information is not considered in this question.	
3	Integration with development planning	Is DRR seen by the community as an integral part of plans and actions to achieve wider community goals (e.g. poverty alleviation, quality of life)?	Given that resilience is crucial in ensuring that long-term development goals are not compromised and that development outcomes are not reversed with shocks and disasters, DRR measures that contribute to resilience should be seen as an integral part of development plans. This question captures whether the community realizes the role that risk reduction plays in the in the achievement of the community's development goals and whether this connection is clearly documented in the community's plans (local development plan, mitigation plan, etc.).	
4	Access to funding and partnerships	Are there clear, agreed and stable DRR partnerships between the community organization and other actors (local authorities, NGOs, businesses, etc.)?	Given that resilience often depends on the community's ability to access or leverage external funding and support, this question captures the existence of a representative DRR organization and its access for such support by probing whether the latter is available, in what frequency, as well as how proactive the community DRR organization is in trying to access this support.	
5	Inclusion of vulnerable groups	Are the vulnerable groups in the community included/represented in community decision making and management of DRR?	This question is important in measuring community resilience because it identifies the level in which vulnerable groups are involved in DRR decision-making. This question aims to capture the degree of their participation in regular community meetings, their involvement in the DRR decision-making body as well as whether decision being made (with or without their involvement) take into account their needs (with concrete examples).	
6	Women's participation	Do women participate in community decision making and management of DRR?	This question is important in measuring community resilience because it showcases whether both genders are part of decision making and that both take up leadership positions, especially considering the fact that women's participation and occupation of leadership positions is generally low when compared to men. In this question we are trying to capture whether women meaningfully participate in decision making and occupy leadership roles.	

	THEMATIC AREA 2: RISK ASSESSMENT			
7	Hazard assessment	Has the community carried out participatory hazard/ risk assessments, shared the findings and have human resources capable of conducting and monitoring these assessments?	Given that disaster risk equals hazard x vulnerability, divided by capacity, a community's access to a formal assessment of the hazard(s) to which the its members are exposed is a crucial factor in ensuring that the community's risk awareness is accurate, substantiated, and can effectively inform appropriate DRR actions. This question captures whether an updated and participatory hazard assessment has been conducted in the community and whether the community is aware of/uses the findings and has the capacity to conduct and monitor such assessments in the future.	
8	Vulnerability/ capacity assessment	Has the community carried out participatory vulnerability and capacity assessments (VCA), shared the findings and have human resources capable of conducting and monitoring these assessments?	Given that disaster risk equals hazard x vulnerability, divided by capacity, a community's access to a formal assessment of its vulnerabilities and capacities is a crucial factor in ensuring that the community's risk awareness is accurate, substantiated, and can effectively inform appropriate DRR actions. This question captures whether an updated and participatory VCA has been conducted in the community and whether the community is aware of/uses the findings and has the capacity to conduct and monitor such assessments in the future.	
9	Local and scientific methods for risk awareness	Does the community use local knowledge and perceptions of risk as well as other scientific knowledge, data and assessment methods?	Community risk awareness, especially in rural areas, traditionally relies on local perceptions and monitoring of weather events using local (informal) methods. The value of these methods should not be underestimated in acquiring crucial information on long-term patterns of frequency and magnitude of hazards, for example. However, climate change can compromise the reliability of these traditional methods in many instances, which is why it is important for these to be coupled with accurate scientific methods. In this question, we assess the extent of risk knowledge (indigenous knowledge or a combination of traditional and scientific knowledge) in the community and the extent to which this is used in DRR actions.	
		THEMATIC AREA 3	: KNOWLEDGE & EDUCATION	
10	Public awareness and knowledge	Is there an open debate within the community resulting in agreements about problems, solutions and priorities relating to disaster risk?	This question seeks to understand the degree to which the wider community participates in dialogue related to potential risks and associated mitigating strategies.	
11	Dissemination of DRR knowledge	Are DRR knowledge and capacities being passed on to children formally through local schools and informally via oral tradition from one generation to the next?	Question 11 seeks to understand the degree to which information and expertise related to DRR is shared with children through mechanisms such as formal education and informal community communication methods. Training of educators to disseminate information correctly is also a consideration.	
12	Cultural attitudes and values on disaster recovery	Do the community's cultural attitudes and values (e.g. expectations of help/self-sufficiency, religious/ideological views) enable it to adapt to and recover from shocks and stresses?	The extent to which religious/cultural beliefs and values impact on communities' understanding of risk and the capacity to adapt and recover in a cooperative and effective manner is the key focus here.  Toolkit For Measuring Community Disaster Resilience	

	THEMATIC AREA 4: RISK MANAGEMENT AND VULNERABILITY REDUCTION			
13	Sustainable environmental management	Does the community adopt sustainable environmental management practices that reduce hazard risk and adapt to new hazards related to climate change?	Environmental conditions not only modify the frequency of hazard events, but ecosystems also serve as natural barriers that can moderate the effects of a hazard and protect communities. Hence, pro-actively managing natural areas can ensure protection of the environment and reduce underlying risk factors for disaster by maintaining the resilience inherent in ecosystems.	
14	Access to health care in emergencies	Does the community have access to 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.?	Primary care is an essential service that is relied on by the community. Disasters and other crises may cause ill-health directly or through the disruption of health systems, facilities and services, leaving many without access to health care. The capacity of local health centers continue to provide services during disaster is essential for the survival and recovery of affected communities. In this question we aim to capture the level of resources (human and material), capacities and referral services available during small- and large-scale emergencies.	
15	Health access and awareness in normal times	Do community members maintain good health and physical ability in normal times (through adequate food and nutrition, hygiene and health care) and have awareness on means to staying healthy and life-protecting measures?	Community resilience during disasters and stresses is directly related to the community's health status before emergencies strike as well as their awareness on practices to help them stay healthy and to protect life during emergencies. In this question we aim to gauge the general health status of the community and the practices at community and household level to protect health.	
16	Food and water supplies	Does the community have a secure supply of food and water and manages an equitable distribution system during disasters?	Household food security exists when the household has at all times physical and economic access to sufficient, safe and nutritious food (including clean and accessible water) for a healthy and active life. Access to food, clean water and adequate nutrition is critical to survival in an emergency situation. Hence, not only should emergency-affected populations have access to adequate food and water supplies, but an equitable distribution stratgy should be designed, budgeted, and applied at the time of disaster. In this question we aim to capture whether such reserves exist, at what level (community vs. household) and the processes in place for their management during scarcity.	
17	Hazard- resistant livelihoods practices	Does the community employ hazard-resistant livelihoods practices for food security?	Question 17 emphasises the importance of diversified income generating opportunities to support sufficient food security during times of disaster.	
18	Access to market	Are the local trade and transport links with markets for products, labour and services protected against hazards and shocks?	This question emphasises the impact of hazards on trade and transport links and measures resilience based on the extent to which such infrastructure and availability of labour can withstand shocks.	

19	Social protection	Does the community have access to social protection schemes to support risk reduction directly, through targeted DRR activities, or indirectly, through socioeconomic development activities that reduce vulnerability?	Social protection is a collection of measures to improve or protect human capital. A country/community should have set policies and programs designed to reduce poverty and vulnerability by promoting efficient labor markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income. Social protection interventions are, therefore, essential to assist individuals, households, and communities to better manage and reduce risks that leave people vulnerable. This question captures access to both formal schemes (provided by government, farmer associations or other actors) and informal social protection measures (e.g. spontaneous assistance between households) for DRR and recovery. Social protection measures provided/supported by INGOs are not considered in this question.			
20	Access to financial services	Are there affordable and flexible community savings and credit schemes, and/or access to micro-finance services?	Question 20 seeks to understand the availability of financial resources to the community to facilitate preparedness, response and recovery actions.			
21	Income and asset protection	Are household and community asset bases (income, savings, and convertible property) sufficiently large and diverse to support disaster coping strategies and are there measures to protect them against disaster?	A livelihood comprises the capabilities, assets and activities needed for a means of living - and is sustainable when it can cope with and recover from shocks and stresses. The sustainable livelihoods approach considers vulnerabilities as the main factor that shapes how people make their living. The level of vulnerability of an individual or community is determined by how weak or strong their livelihoods are, what occupational activities they are engaged in, the range of assets they have access to for pursuing their livelihood strategies and the strength and support of the social networks and institutions that they are part of or which have influence over them.			
22	Protection of infrastructure and basic services	Are the community's building infrastructure and basic services resilient to disaster (including being located in safe areas, using hazard-resistant construction methods and structural mitigation measures)?	Hazards of nature—floods, earthquakes, typhoons, and climate change—affect infrastructures and accessibility and availability of basic services. When infrastructure fails during a natural disaster, it can interrupt vital services (water, sanitation, electricity, communications, etc.) magnifying the need for well-functioning and resistant systems beforehand. Making infrastructure resilient and able to anticipate, absorb, and recover from a hazardous event in a timely and efficient manner is essential.			
23	Land use and planning	Does the community decision- making regarding land use and management take hazard risks and vulnerabilities into account?	The focus of question 23 is on the extent to which the community considers use and management of land in the context of potential exposure to hazards. The governance structures which support these endeavours is also a key consideration.			
24	Operation of education services in emergencies	Do education services have the capacity to continue their operation without interruption during emergencies?	This question seeks to understand the capacity of educational services, including but not limited to schools, to continue to operate in times of disaster.			
		THEMATIC AREA 5:	THEMATIC AREA 5: PREPAREDNESS AND RESPONSE			

25	Capacities in Preparedness and response	Does the community have an operating organization in disaster preparedness and response?	The existence and capacity of organizations at community-level dealing with disaster preparedness and response demonstrates that the community can handle disasters in an organized manner. This question captures the existence of a community-level disaster preparedness and response and its credentials in terms of skills and capacities (e.g. in search and rescue, fire-fighting and risk assessment).
26	Early warning systems	Is there an operational Early Warning System in the community?	The availability of an operational Early Warning System in the community signifies how ready the community is to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations for appropriate preparation and action to reduce damage and loss. This question captures hazard monitoring, warning dissemination and response mechanisms, as part of a coherent EWS, and the community's capacity to operate and maintain it.
27	Contingency planning	Does the community use a contingency plan that takes into account the needs of vulnerable groups, and was prepared in a participative manner and considers the context of the community?	<ul> <li>This question is important in measuring resilience because of the need for contingency plans to consider the needs of vulnerable groups in times of emergencies. In this question, we are trying to capture: <ul> <li>Availability of contingency plan for emergencies</li> <li>How community members participated in the preparation of this plan</li> <li>Whether the plan is known and understood by the majority of the community</li> <li>If the contingency plan includes adequate measures for the protection of vulnerable groups</li> <li>Whether the simulation drills are carried out regularly to test and update the contingency plan</li> </ul> </li></ul>
28	Emergency infrastructure	Are emergency shelters (purpose built or modified) accessible to community and with adequate facilities for all affected population?	Accessibility and adequacy of emergency shelters becomes of critical importance for persons whose homes have been affected by disasters. In this question, we are trying to capture: the emergency shelter mechanisms currently employed by the community, the availability and accessibility of emergency shelters and the adequacy of their conditions not only to cover basic needs but also to ensure protection of vulnerable groups during disasters.
29	Emergency response and recovery	Does the community take a leading role in response and recovery actions that reach all affected members of community and prioritized according to needs?	This question is important in measuring resilience because the community that takes leading roles in response and recovery action that reach all affected members of the community and prioritized according to the needs is able to handle emergencies in time of disasters. In this question we aim to capture the level of leadership assumed by the community in disaster response and recovery.
30	Volunteerism and accountability	Is there a high level of community volunteerism in all aspects of preparedness, response and recovery; representative of all sections of community?	The level and quality of local volunteerism in preparedness, response and recovery is important in determining a community's resilience, as it is directly related to the community's capacity to tackle shocks and disasters effectively. Additionally, a community's volunteer corps usually involves persons who have direct proximity and interaction with the groups that are most vulnerable to the impact of disasters, which is why it is important to capture its representativeness and adherence to relevant protocol.

## E. Applying the toolkit in the field

#### **E.1. SCOPE OF THE QUESTIONNAIRE**

The questionnaire facilitates measurement of resilience at the community level according to the thirty resilience components and five key thematic areas outlined above. The Resilience toolkit does not propose to replace existing methods to assess vulnerability, capacities and risks at community level such as KAPB surveys, LQAS, VCA, Baseline, end line surveys/assessments. The toolkit should be seen to complement other existing participatory assessments tools to assist in giving an overall measure or snapshot of resilience at community level taking into account the various different key components of resilience.

While this toolkit is designed to measure resilience from the community's perspective, it is recognized that external factors outside the scope of the toolkit should also be assessed in determining overall resilience levels, local government and institutional response capacities.

The application of the toolkit at the community level does not necessarily ensure appropriate interventions will be forthcoming. Communication and consultation with communities to explain the scope and purpose of the toolkit is essential to facilitate accountable programming, and manage the community's expectations. Communities should be aware of how the data will be used, understand that participation does not equate to intervention (which may support consultations more reflective of reality), and be informed of how they can seek to support themselves or seek external support.

The results of the survey should be shared with all relevant stakeholders, including communities and government officials as appropriate.

The survey can be used in multiple phases of a project life cycle, including assessment, design and implementation; including as part of baselines, mid -term and end reviews, and evaluations.

#### E.2.1 PROFILE OF THE TECHNICAL FIELD STAFF

It is recommended that at least two facilitators, preferably one male and one female undertake the field survey assessment. One is required to lead the focus group discussions, while the other should take detailed notes, ensuring the details of the consultation with the community are captured to the fullest extent possible. It is vital that marking the resilience level for each component is done following the capture of important supporting analysis. It is recommended that at least one facilitator should be trained and experienced in DRR, and preferably have a detailed understanding of the context and cultural norms of the community. At least one of the facilitators should also have experience in field data collection methods. The facilitators must ensure that the responses represent the views of the community, which entails a level of cultural relativism.

Profile of 2 person Field Survey team

The persons conducting the field assessment should have the following skills:

- 1. Training and experience in disaster risk reduction programming.
- 2. Knowledge of the context of the community or communities to be visited.



- 3. Experience and skills in facilitating focus group discussions.
- Knowledge of the language and/or dialect used in the community. 4.
- Knowledge and use of participatory methodologies and tools. 5.
- Skills in data analysis.

#### **E.2.2 DATA COLLECTION**

#### Preparation:

Sufficient preparation before conducting the field survey will enable a more effective consultation with the community. Such preparation in advance should include a review of studies and research documenting the socio-economic background of the specific community (main livelihoods, health status, etc.) as well as the cultural context (religion, present ethnic groups, etc.), which will also help the technicians adopt the most appropriate approach for the consultation.

As mentioned above the survey questionnaire addresses 30 resilience components which are to be graded following the analysis of focus group discussion on each component. The guiding questions presented in the questionnaire are merely that, and questions, terms, and MOVs should be modified to the specific context of the target community. It is recommended that the facilitators are familiar with the questions and the discussion plan in advance of the field visit. This should be undertaken through:

- Facilitating training on how to implement the questionnaire.
- Developing a discussion plan in the local dialect to be used by all facilitators and adapted to the context, ensuring the cohesive and consistent use of language. This will reduce disparities in the data collected.

#### Implementation:

To gather field data using the toolkit, the following methods are recommended:

Focus Group Discussion: The FGD should generate a structured conversation on resilience in the community, using the survey instrument as a guide. The facilitators conducting the interview should maintain flexibility while managing the sequence of subjects, and the order of the questions. The facilitators should avoid interrogative techniques and instead establish a conversation that triggers authentic replies to the questions. The completion of the survey should be done in a participatory manner, seeking consensus from the participants. For the general context survey (Part A), prior consultation with key informants or a review of existing documentation may be sufficient to obtain the necessary data. If this is possible, this will allow the focus of the FGD to be on the resilience components in Part B of the questionnaire. In planning the focus group discussion, it is necessary to determine the size of the group, and the origin and characteristics of the participants. The size of the group should support opportunities for dialogue among a range of participants. The suggested number of participants is between six to fifteen people.

Composition of participants: The make-up of the FGD group should facilitate a range of opinions, attitudes, points of view, etc. and be representative of the different sectors of the community. For instance members of local organizations, people living in areas of risk, community leaders, vulnerable groups etc. All groups should include male and female adults, young persons and children, elderly persons and members of vulnerable groups, each of whom my provide interesting insights of disaster experiences and mitigation strategies from the perspective of their gender, age and condition.

Separate FGDs: Where deemed appropriate, separate FGDs be carried out with different groups, e.g. men and women, or community leadership and community members (or a combination of these). This approach would ensure that findings are not obscured by potential power dynamics or other factors inhibiting free expression of certain groups or individuals. This would produce two or more resilience measurements per community, so the field staff would have to convene and agree on the community's overall

resilience level, per component.

b) Interview with key informants: Interviews with key informants is more relevant for the completion of Part A of the survey. Completing Part B of the survey questionnaire should be entirely through focus group discussions. Should the participation of certain key informants, for example, a health worker and a teacher, inform more accurately on components relating to health and education respectively, the questions that require their participation should be asked of them separately, before assigning a resilience level.

#### **E.3.1. SURVEY PART A: GENERAL CONTEXT**

Most questions and fields of Part A of the field assessment require the input of numbers or by checking a box against the relevant response. However some are open questions and can be completed by the technician (i.e. identification of additional vulnerable groups, ethnic groups, geographical administrative area of assessment etc.). This section of the survey serves to rapidly assess the main hazards and identify the groups most vulnerable to these hazards. These generally include children, the elderly and persons with disabilities, although they can also include female headed or child-headed households, persons with serious illness such as PLHIV and other groups, according to the context. It is important to highlight these factors at the outset, so that they can be carefully considered in the assessment of the resilience characteristics (Part B).

#### E.3.2. SURVEY PART B: RESILIENCE CHARACTERISTICS ASSESSMENT

It is recommended that each question be introduced by reading out the resilience component title. Where necessary, the facilitator should give a general explanation of what is being assessed under that component. The key questions and characteristic levels are formulated for the reference of the technicians and not the communities. Reading the text of the key question or the characteristic levels to the community may distort the community's responses, or the language of the question may not be easily understood by the community. Instead, the technician should ensure an appropriate level of discussion and consensus before making their decision, through the use of the suggested guiding questions. Please note, that although the guiding questions are in their majority closed questions, the technician is expected to use these to stimulate discussion and probe for additional information, either with follow up questions or by asking for examples. After the completion of each component scoring, or at the end of the survey, it may be beneficial to then read each question and resilience characteristics back to the focus group to validate the facilitators scoring.

In the survey, below each key consultation question, there is a column containing the corresponding resilience characteristics (5 answer options) to each question, one of which will be marked as the answer. This answer should be the closest fit to match the findings of the discussion, and is ultimately based on an informed judgment that the technician should make and validate with the FGD participants before moving on to the next question.

The column of suggested means of verification contains ways of substantiating the answers of the community to make a more informed and objective interpretation of the community's resilience level for each component; if such means of verification are available. When possible, the means of verification should be gathered in advance of the FGD on the questionnaire. The technician should keep in mind that the means of verification and group discussion should be mutually reinforcing and not contradict one another.

Throughout the toolkit many questions describe the increasing resilience level of the 5 resilience characteristics (answer options), using terminology of increasing quantities of families or community members e.g. "few community members", "some", "most". A suggested reference to assist in interpreting this terminology is given below:

- "Few": up to approx. one quarter of community population (0-25%)
- "Some": approx. a quarter to half of community population (25-50%)
- "Most": approx. half to ninety per cent of community population (50-90%)

• "All": ninety to one hundred percent of community population (90-100%)

#### E.3.3. METHODS FOR DATA COLLECTION

Suggested timetable for completing the Survey Questionnaire in the field:

It is recommended that the survey questionnaire be applied in the field using the following steps:

- 1. Advance preparation and information gathering on the community. This will involve the collection of key documentation outlined as means of verification for multiple questions. Information may need to be sourced from a higher administrative level than the community targeted for assessment. In this instance, data collection at this level should be completed at least two days before the commencement of the questionnaire to facilitate time for review.
- 2.Introduction: Explanation of the process (15 mins)
- 3. Completion of Part A (General Context) of Community Resilience Characteristics Survey (1 hour): If secondary information sources are available on the general context of the community, the technician should complete Part A in advance and seek to validate the information with the key informant(s) if necessary.
- 4. Completion of Part B (Resilience Characteristics Assessment) of Survey (2-3 hours)
- 5. Validation: (20 mins): This can be done after each question or at the end of the survey. The facilitator should read out the key question and the assigned characteristic level and confirm the assessment with the community focus group.





#### Disaster:

A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources.<sup>5</sup>

#### **Disaster Risk Reduction:**

"...development and implementation of policies, strategies and practices to minimize vulnerabilities and disaster risks throughout society ... it is a systematic approach to identifying, assessing and reducing the risks of disaster... [it] is, therefore, the sum of the actions carried out or the process towards achieving resilience." <sup>6</sup>

#### Resilience:

The ability of communities and households to anticipate and adapt to risks and to absorb, respond and recover from shocks and stresses in a timely and effective manner without compromising their long term prospects.<sup>7</sup>

#### **Disaster Resilient Community:**

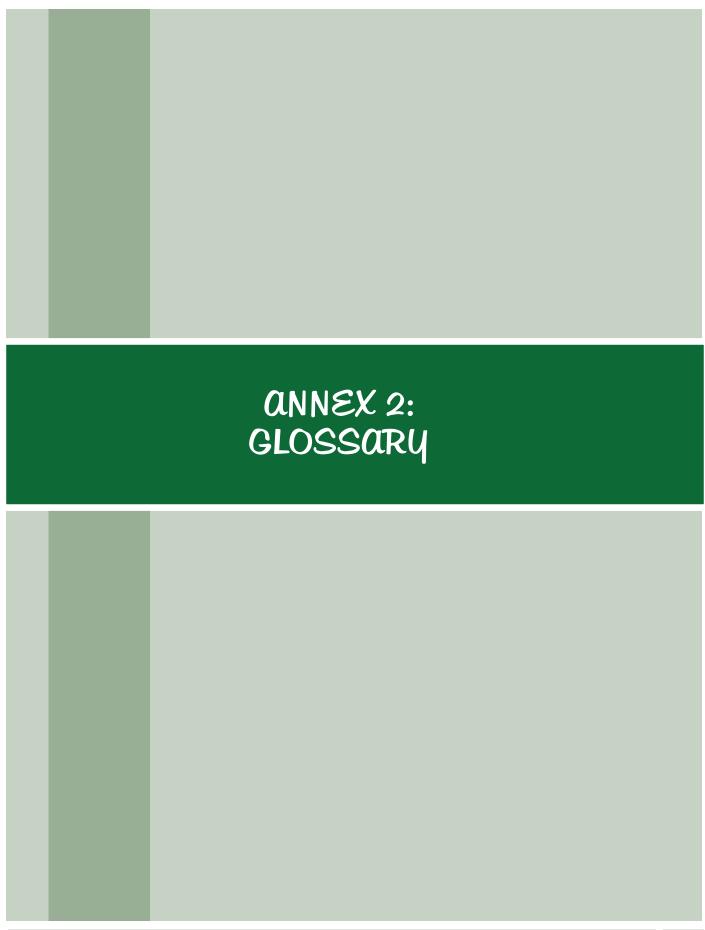
"No community can ever be completely safe from natural and man-made hazards. It may be helpful to think of a disaster-resilient or disaster-resistant community as the safest possible community that we have the knowledge to design and build in a natural hazard context, minimizing its vulnerability by maximizing the application of DRR measures. Place more emphasis on what communities can do by themselves, and how their capacities can be strengthened".

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.

5 UNISDR "Terminology on Disaster Risk Reduction", 2009

<sup>6</sup> Twigg John, "The Characteristics of a Disaster-Resilient Community: A Guidance Note" Version 2, 2009.

<sup>7</sup> GOAL. "GOAL and Resilience: A Guidance Note", August 2013



**Chemical and Nuclear Accidents<sup>8</sup>:** Discharging dangerous substances that can cause industrial accidents and can have an immediate negative effect on humans and animals or the environment.

**Chemical or biological residues**<sup>9</sup>: Chemical or biological residues that can cause sicknesses, damage to the ecosystem and to the environment.

Community: "In conventional emergency management, communities are seen in spatial terms: groups of people who live in the same area or close to the same risks. This overlooks other significant dimensions of the "community" which are to do with common interests, values, activities and structures... 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... Communities do not exist in isolation. The level of a community's resilience is also influenced by capacities outside... Nearly all communities are dependent on external duty bearers and service providers to a greater or lesser extent, even if some remain extremely marginalized." It was noted during the field testing for the questionnaire in Malawi (2014), that the smallest administrative level facilitates the most consensus in terms of resilience measurement. For the purpose of this toolkit it is acknowledged that communities, their constitution, size, identifying features differ according to the context. Definition of community can be determined in tune with that context in so far as a spatial element is also included.

Community can also be considered to be an urban neighbourhood. In addition in the urban context it may be useful to compare the neighbourhood resilience level with the resilience scorecard utilized under the United Nations International Strategy for Disaster Resilient Cities.

**Desertification**<sup>11</sup>: This refers to land degradation in arid, semi-dry and dry areas, due to climate changes or human activity. Desertification may happen due to inadequate land usage, excessive grazing, deforestation and over-exploitation.

**Disaster Risk Reduction:** "...develop and implement policies, strategies and practices to mitigate vulnerabilities and social risk... it is a systematic focus to identify, analyse and reduce disaster risks." <sup>12</sup>

**Drought**<sup>13</sup>: The National Meteorological Service of NOAA (NWS) defines a drought as "a period of time abnormally dry and of sufficient length due to lack of water to cause a severe hydrological disequilibrium in the area affected." Drought can be classified into four different definitions: meteorological (deviation from normal rainfall), agricultural (abnormal soil humidity conditions); hydrological (related to abnormal hydric resources) and socio-economic (when the lack of water affects the life and livelihoods of persons).

**Earthquakes**<sup>14</sup>: Earthquakes are due to the sudden release of accumulated tensions around earth crust faults. This energy is released through seismic waves that travel to the source area, causing the earth to tremble. Severe earthquakes can affect buildings and populations. The level of damage depends upon many factors, such as the earthquake intensity, the depth, the vulnerability of structures and the distance from the earthquake source.

**Epidemics**<sup>15</sup>: These are a significant threat at world level, above all in those areas that have already been affected by other severe dangers, poverty and under-development. Epidemics are easily spread through country borders. Globalization increases the

<sup>8</sup> Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 19

<sup>&</sup>lt;sup>9</sup> From the contamination term. WIKIPEDIA, es.wikipedia

<sup>&</sup>lt;sup>10</sup> Twigg, John. Twigg, John. Characteristics of a Disaster-resilient Community: Guidance Note. England. 2007. Page. 7.

<sup>11</sup> Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 27

 $<sup>^{12}</sup>$  Twigg, John. Characteristics of a Disaster-resilient Community: Guidance Note. England. 2007. Page 6.

<sup>13</sup> Ibid18

 $<sup>^{\</sup>rm 14}$  Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 20

<sup>15</sup> Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 25

potential of catastrophic outbreaks of disease; there is a risk of millions of people in the world becoming affected.

Examples: Anthrax; Bird flu; Crimea-Congo, haemorrhagic fever (FHCC); Dengue / haemorrhagic dengue; Ebola haemorrhagic fever; Hepatitis; Influenza; Lassa fever; Marburg haemorrhagic fever; Meningitis; The plague; Rift Valley fever; Severe Acute Respiratory Syndrome (SARS); Smallpox; Tularaemia; Yellow fever.

Erosion of river banks and soil 16: Wearing down of land surface due to external agents, such as water or wind.

**Flooding<sup>17</sup>:** Floods are often caused by severe storms, tropical cyclones and tornados. The numbers of floods have been growing steadily and have become, together with droughts, some of the deadliest natural disasters in recent decades. The number of losses caused by floods is also due to climate changes that have caused increases in rainfall in some parts of the Northern Hemisphere. (Natural Disaster Task Force, 2005). Floods can cause deaths, particularly when they arrive unannounced.

**Food Security**<sup>18</sup>: There is food security when all persons have, at all times, physical and economic access to sufficient safe and nutritious food to satisfy their food needs and preferences in order to lead an active and healthy life (World Food Summit, 1996). Food security includes the following measures regarding food: availability, access, stability and use. Food availability is having access to food, or to a farm, as well as having the capacity (the capital) needed to buy food that cannot be cultivated in the local or national environment. (Food insecurity is the opposite of food security).

Forest Fires<sup>19</sup>: These are threat to life and property and, often are connected to secondary effects, such as landslides, erosion and changes in the quality of water. Forest fires can be caused by nature, humans in agricultural exploitation or simply the result of human negligence.

Hurricanes (Tropical)<sup>20</sup>: Closed wide scale circulation system, in the atmosphere, with low pressure and strong winds that rotate anti-clockwise in the Northern hemisphere and clockwise in the Southern hemisphere. In the Indian Ocean and the Pacific Ocean they are called Cyclones; in Western Atlantic and Eastern Pacifica they are called Hurricanes.

**Impact of climate change**<sup>21</sup>: Information on climatic impact and variability is needed by communities and resource administrators in order to adapt and prepare for greater climatic fluctuations which are becoming more evident as a result of climate change. This information includes evidence of the changes that are caused due to climate change, such as the loss of eco-systems, ice melting, coastal degradation and severe droughts.

Landslides<sup>22</sup>: They are earth, rock and debris slides caused by heavy rains, floods, earthquakes, volcanoes and forest fires. Landslides cause thousands of millions of dollars in losses every year all over the world.

**Plagues**<sup>23</sup>: Plagues occur when animals produce economic damages, normally physical, and human assets (health, plants, domestic animals, materials or natural means).

**Resilience and Community Disaster Resilience:** "...the resilience of the system or community can be understood as: the capacity to absorb the pressure or destructive forces through resistance or adaptation; the capacity to manage or maintain certain basic functions and structures during contingencies; the recovery capacity of recovering after an event; Focussing on resilience means placing a greater emphasis on what it is that communities can do for themselves and how they can strengthen their capacities. A

<sup>&</sup>lt;sup>16</sup> Spanish Royal Academy Dictionary, http://www.rae.es

<sup>&</sup>lt;sup>18</sup> Organic agriculture Glossary, www.fao.org, page 63

<sup>19</sup> Ibid 1

<sup>&</sup>lt;sup>20</sup> Updated Glossary of terms for DRR, CEPREDENAC, http://www.sica.int/, page 45

<sup>&</sup>lt;sup>21</sup> Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 28

<sup>&</sup>lt;sup>22</sup> Grasso Veronica FUNEP, Early Warning System: State of art analysis an future directions, Page 23

<sup>23</sup> WIKIPEDIA, es.wikipedia

"Disaster resilient community" is ideal. No community can ever be completely safe from natural or man caused dangers. It can be useful to think that a community that is "disaster resilient" or disaster resistant" as a "community that is as safe as possible and has knowledge to design and construct in a natural threat context", lessening vulnerability by maximising the DRR measures. DRR is therefore the sum of actions taken or processes to attain "resilience." <sup>24</sup>

**Storm**<sup>25</sup>: Storms are produced by cumulonimbus clouds, and are short duration events within the micro-scale characterised by thunder, lightning, wind surges, turbulence, hail, ice, rainfall, moderate and severe up and down currents and in very severe conditions, tornados.

**Surges**<sup>26</sup>: Surges are generally produced through the action of wind on water surfaces producing waves with a 20 second separation one from the other with a maximum land invasion of 150 meters; these can be observed during storms or hurricanes.

**Tornado<sup>27</sup>:** Tornadoes are violent wind swirl that goes from the clouds to the ground. They travel fast and their winds can reach speeds of 400 kilometres per hour (250 miles per hour) or more, they change direction in an erratic manner and cause great destruction. Sometime they occur during an electric storm or hurricane.

**Tsunamis**<sup>28</sup>: Tsunamis are the series of waves produced by submarine earthquakes, landslides, volcanic eruptions or underwater explosions. Tsunamis can have devastating effects on coastal regions.

**Volcanic eruptions**<sup>29</sup>: Volcanic eruptions can be slight, expelling water vapour and gases or lava flow, or they can be violent explosions of ash and gases affecting the atmosphere. Volcanic eruptions can destroy land and the communities around them; they affect the air quality and even influence the earth's climate during a short time. Volcanic ashes can affect aviation and communications.

Twigg, John. Characteristics of a Disaster-resilient Community: Guidance Note. England. 2007. Page 6.

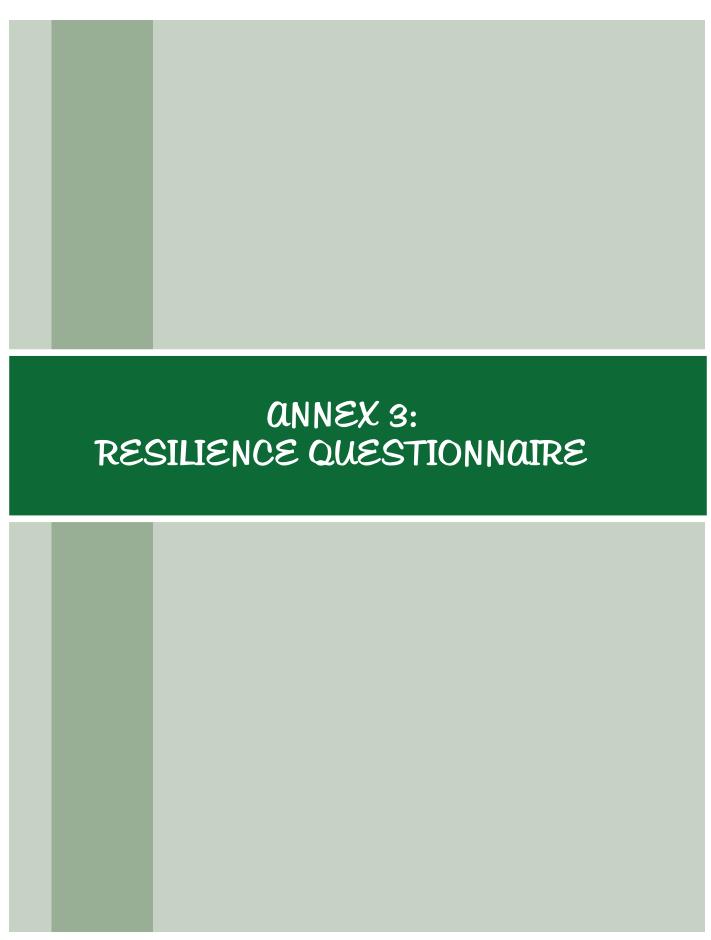
<sup>&</sup>lt;sup>25</sup> Updated Glossary of terms for DRR, CEPREDENAC, http://www.sica.int/, page 50

<sup>&</sup>lt;sup>26</sup> Updated Glossary of terms for DRR, CEPREDENAC, http://www.sica.int/, page 49

 $<sup>^{\</sup>it 27}$  Updated Glossary of terms for DRR, CEPREDENAC, http://www.sica.int/, page 51

<sup>&</sup>lt;sup>28</sup> Grasso Veronica F.UNEP, Early Warning System: State of art analysis an future directions, Page 21

<sup>&</sup>lt;sup>29</sup> Spanish Royal Academy Dictionary, http://www.rae.es



#### PART A: General Context of the Community

1. Location:		
Address Level 1: (e.g., Department)		
Address Level 2: (e.g., Municipality)		
Address Level 3: (e.g., District/Sector)		
Name of Community		
Indicate whether community is urban or rural		
2. Population:		
No. of girls (younger than 18 years)	No. of boys (younger than 18 years)	
No. of women aged 18-60 years	No. of men aged 18-60 years	
No. of women older than 60 years	No. of men older than 60 years	
Total community population	Total no. of households	
3. Population characteristics		
Ethnic groups/population origins		Number of people in each group
4. Identified Vulnerable Groups:		
4. Identified Vulnerable Groups:  Description	Number of Persons	Comment
	Number of Persons	Comment
Description  Extremely vulnerable Children and Youth:	Number of Persons	Comment
Description  Extremely vulnerable Children and Youth: (e.g., Child labourers, orphans, etc)	Number of Persons	Comment
Description  Extremely vulnerable Children and Youth: (e.g., Child labourers, orphans, etc)  No. of female headed households:	Number of Persons	Comment
Description  Extremely vulnerable Children and Youth: (e.g., Child labourers, orphans, etc)  No. of female headed households:  Persons with serious illness:  Persons with Physical Disability: Persons with difficulty to walk, run, ascend or descend	Number of Persons	Comment
Description  Extremely vulnerable Children and Youth: (e.g., Child labourers, orphans, etc)  No. of female headed households:  Persons with serious illness:  Persons with Physical Disability: Persons with difficulty to walk, run, ascend or descend staircases, maintain balance, etc.  Persons with Sensory Difficulty: Loss in capacity to perceive surroundings, e.g., impair-	Number of Persons	Comment
Extremely vulnerable Children and Youth: (e.g., Child labourers, orphans, etc) No. of female headed households:  Persons with serious illness:  Persons with Physical Disability: Persons with difficulty to walk, run, ascend or descend staircases, maintain balance, etc.  Persons with Sensory Difficulty: Loss in capacity to perceive surroundings, e.g., impairment in senses of sight, sound, taste and touch.  Persons with Intellectual Disability: Impairment in basic social interaction; Loss of ability to analyze, synthesize, conceptualize, understand, question,	Number of Persons	Comment

5. Hazards Identified Frequency: M: Monthly, S: Semi-annual, A: Annual, #: If it is less frequent than annual insert estimated number of years between events, e.g. If frequency is every 5 years insert "5".		Mark X	Indicate frequency (M,S, A, #) and comment if increasing due to climate change where relevant.
	Geological Hazards:		
	Earthquake		
	Tsunami		
	Volcanic Eruption		
	Landslide		
	Hydro meteorological hazards:		
	Flood		
	Large Storm		
Sudden Onset Hazards	Tropical Cyclone		
Παζαιας	Tornado		
	Storm surge		
	Epidemics:		
	Detail epidemic		
	Detail epidemic		
	Plagues:		
	Detail plague		
	Detail plague		
	Air Quality:		
	Industrial Contamination		
	Other please specify:		
	Chemical or biological residues		
Slow Onset Hazards	Desertification		
	Drought		
	Erosion along rivers or land		
	Food Insecurity		
	Other please specify:		
	Insecurity / violence		
	Chemical/radioactive/nuclear accidents		
Othor Horards	Fire spread (including forest fire)		
Other Hazards	Other please specify:		
	Other please specify:		
	Other please specify:		

PART B. Assessment of Community Disaster Resilience Characteristics

Thematic Area	Resilience Component	Weighting
meaning the compone	n the surveyor should insert the weighting value (0 or 1) assigned to each resilience nt is not relevant and 1 meaning it is relevant. The components having received a application of Section B of the survey.	
	1. Community leadership	
	2. Rights awareness and advocacy	
Thematic Area 1:	3. Integration with development planning	
Governance	4. Access to funding and partnerships	
	5. Inclusion of vulnerable groups	
	6. Women's participation	
Thomas a Augus 2	7. Hazard assessment	
Thematic Area 2:	8. Vulnerability / capacity assessment	
Risk Assessment	9. Local and scientific methods for risk awareness	
Thematic Area 3:	10. Public awareness, knowledge and skills	
Knowledge and	11. Dissemination of DRR knowledge	
Education	12. Cultural attitudes and values	
	13. Sustainable environmental management	
	14. Access to healthcare in emergencies	
	15. Health access and awareness in normal times	
	16. Food and water supplies	
Thematic Area 4:	17. Hazard-resistant livelihoods practices	
Risk Management	18. Access to market	
and Vulnerability	19. Social protection	
Reduction	20. Access to financial services	
Reduction	21. Income and asset protection	
	22. Infrastructure and basic services	
	23. Land use and planning	
	24. Operation of education services in emergencies	
	25. Capacities in preparedness and response	
	26. Early warning system	
Thematic Area 5:	27. Contingency planning	
Preparedness and	28. Emergency infrastructure	
Response	29. Emergency response and recovery	
	30. Volunteerism and accountability	

### THEMATIC AREA 1: GOVERNANCE

Resilience component Community leadership								
	Key Question Is the community leadership committed, eff			effect				
	Resilience	Characteristics			Suggested Guiding  Questions	Suggested Means of Verification		
	Level 1	they are <b>not effec</b>	lers in the community, or if there are, ctive, show no commitment, they are (do not share info, invite participation or ack).	0	Commitment:  • Do you see the community leaders act regularly for the community? Are they regularly	<ul> <li>Documentation of existence of community organization</li> <li>Documentation</li> </ul>		
	Level 2		ip commitment and effectiveness, with radic, piecemeal and short-term, <b>rarely</b>	0	effectiveness: Do the actions of leaders result in solving the problems? Can you give examples?  Accountability: Do leaders promote community participation and information (in decisions)? Examples?	of election process of community leadership  • Agreements/Notes taken in community		
1	Level 3		commitment and effectiveness, with and long-term actions; <b>accountable only</b> or issues.	0		<ul><li>assemblies</li><li>Completed projects/works</li><li>Assembly</li></ul>		
	Level 4		commitment and effectiveness, with and long-term actions, and <b>regularly</b>	0		photographs (if applicable)  Triangulation consultations to		
	Level 5		nmitted, effective (actions linked to an strategy) and is regularly accountable.	0	responsive to your complaints or recommendations? Examples?	verify commitment		
Comments								

Resilience component		Rights awareness and advocacy						
Key Quest	tion	Is the community aware of its rights and stakeholders that provide protection?	the leg	al obligations of goverr	nment and other			
Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification			
Level 1	· '	no awareness of its rights or legal overnment and other key actors that on.		• Do you know what rights you have? Can you name a few?	Local plans referencing rights and/or relevant legislation for protection in			
Level 2	awareness of lega	some awareness of rights but little to no lower and other provide protection.	0	Do you know legal obligations the government has towards citizens?  Can you name a few?	<ul> <li>Records of institutional visits</li> <li>Records of meetings with local governments</li> </ul>			
Level 3	legal obligations	some awareness of both its rights and of government and other stakeholders tion, but takes no action for their	0	Can you name key actors that provide protection (Civil Defense, Social				
Level 4	legal obligations of that provide prot	good awareness of both its rights and of government and other stakeholders section but only occasionally invokes acting/advocating with the government.	0	Services, Health, etc.)?  • Do leaders of your community				
Level 5 the legal obligati that provide pro		<b>good awareness</b> of both its rights and ons of government and other stakeholders tection and <b>invokes these regularly</b> when cating with the government.		advocate for funding or support before local government? Can you give an example?  • What was the motivation for this advocacy by the leaders of your community?				
	Comments							

	Resilience component  Key Question		Integration with development planning				
			Is DRR seen by the community as an integral part of plans and actions to achieve wider community goals (e.g., poverty alleviation, quality of life)?				
	Resilience Characteristics				Suggested Guiding  Questions	Suggested Means of Verification	
	Level 1	,	does not see DRR as an integral part of to achieve wider community goals.	0	Does your community have	Local development plans incorporating	
	Level 2	Community <b>sees importance of DRR</b> for achieving wider community goals, but this is <b>not documented</b> in their local development plan.			common goals for development? Is reducing risk part of	DRR  • Risk Management	
	Level 3	community goals	importance of DRR for achieving wider and has documented DRR actions to achieve wider development goals but ed or outdated.	0	• Has your	plan  • Project profiles	
3	Level 4	Community sees importance of DRR for achieving wider community goals and has <b>documented</b> DRR actions within local plans to achieve wider development goals but these are only <b>occasionally applied.</b>			documented these goals in a plan?	that include DRR measures  • Projects/works	
	Level 5	,	DRR as an integral part of plans and e wider community goals and these are apon.	0	Do you carry out the actions in these plans? With what frequency?      Projects/works completed		
		Comments					

	Resilience component									
	<b>Key Question</b> Are there clear, agreed and actors (local authorities, N									
	Resilience Characteristics				Suggested Guiding Questions	Suggested Means of Verification				
	Level 1	There are <b>no DRF</b> the community a	<b>R partnerships</b> between nd other actors.	0	<b>Note: DRR partnership:</b> Different actors either internal or external to the community	Written agreements				
	Level 2	There are agreed DRR partnerships between the community and other actors but these are <b>unstable</b> in frequency and <b>unclear</b> to the community. These partnerships provide <b>one-off and piecemeal</b> access to funds or resources for DRR and recovery.		0	working together for the continuous implementation of DRR actions. (Note these actors could include government agencies, private businesses, civil society groups, producer associations etc.). These partnerships can be documented in writing or based on a mutual understanding	between community organization and agencies internal and/or external to the community				
	Level 3	There are agreed DRR partnerships, between the community and other actors that are <b>unstable</b> in frequency and are <b>clearly understood by some</b> community members. These partnerships provide increased access to funds or resources for more <b>long term</b> DRR and recovery actions.			<ul> <li>established over a long period of time.</li> <li>Can you name external actors that your community has strong relationships with, whether for funding, resources, coordination, training or activity implementation for DRR?</li> </ul>	<ul><li>(municipal actors, NGOs, etc.)</li><li>Work and activities completed as a result of DRR</li></ul>				
4	Level 4	DRR partnerships degree of comm that are clearly ur community mem provide access to	stable and effective , developed with some unity participation, nderstood by most abers. These partnerships funds or resources that a long term strategy very.	0	<ul> <li>Have these partnerships been regular or irregular? Long-term or short-term? Have they only occurred once or many times?</li> <li>Were these partnerships explained to the community?</li> <li>Do you understand what the</li> </ul>	• Records of management of funds and resources				
	Level 5	There are agreed a DRR partnerships high degree of country that are clearly ur community memory provide access to	and stable and effective developed with a community leadership, aderstood by most abers. These partnerships all funds or resources ve a long term strategy	0	relationship is for and what these actors are doing in your community? Please explain.  • Effectiveness: What results have these partnerships had? Examples?  • Does the community ever seek support (funding & resources) from institutions or local government? How many efforts have been made before? Examples?					
				Comi	ments					

	Resilience	component	Inclusion of vulnerable groups					
Key Question			Are the vulnerable groups in the commur making and management of DDR?	nity in	cluded/represented in (	community decision		
	Resilience Characteristics							
	Level 1	Vulnerable group on DRR.	s <b>never participate</b> in decision-making	0	Do you know who the vulnerable groups are in your community?	List or census of vulnerable people and groups		
	Level 2	Some vulnerable groups occasionally participate/are represented in community decision-making on DRR, but usually as part of wider community meetings and do not occupy positions in the main decision-making body.			<ul><li>Examples?</li><li>Notes taken meetings</li><li>Are these vulnerable</li></ul>	Notes taken at meetings		
	Level 3	Some vulnerable groups participate/are represented regularly in decision-making meetings and in the decision-making body but do not occupy leadership positions.  or represented in community				Attendance lists of meetings      List of decision		
	Level 4	represented in de	groups regularly participate/are cision-making meetings and some ip positions in the DRR decision-making	0	often? making body members and the positions			
5	Level 5	All vulnerable gr making/are repres	roups regularly participate in decision- sented at meetings and some occupy ions in the decision-making body.	0	participate/are represented in the community DRR decision making- body?  • Do they occupy leadership positions in the decision- making body? How often?  • Do you think decisions and actions take into account the needs of vulnerable groups? Examples?			
		Comments						
				1				

	Resilience	component	Women's participation					
	Key Quest	tion	Do women participate in community dec	making and management of DRR?				
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification		
	Level 1	Women <b>never pa</b> on DRR.	articipate in decision-making meetings	0	Do women     participate in     the community     meetings?	Minutes of community meetings		
	Level 2	Women <b>occasionally participate</b> in community decision-making on DRR, but usually as part of community meetings and do <b>not occupy positions</b> within the main decision-making body.			How often?  • Do women	Attendance lists of meetings		
	Level 3	Women <b>participate regularly</b> in decision-making meetings and occasionally in the decision-making body though <b>not in leadership positions.</b>			participate in the DRR decision making-body?	<ul> <li>List of decision making body members and their positions</li> </ul>		
6	Level 4	Women <b>regularly participate</b> in decision-making meetings and always occupy positions within the main DRR decision-making body, though <b>only occasionally thigher-level leadership</b> positions.		0	• Do women occupy leadership positions in the decision making body?	Photos of assemblies and meetings, if available		
	Level 5		y participate in decision-making cupy high level leadership positions on-making body.	0	<ul> <li>What kind of positions do they usually occupy?</li> <li>Are their opinions/decisions taken into account? Examples?</li> </ul>	Ü		

## THEMATIC AREA 2: RISK ASSESSMENT Resilience component Hazard assessment Has the community carried out participatory hazard assessments, shared the findings and **Key Question** have human resources capable of conducting/updating these assessments? Suggested **Suggested Guiding Resilience Characteristics** Means of Questions Verification • Hazard Participatory hazard assessment Note: In this component the emphasis is on and/or hazard mapping has **never** hazard assessment rather than vulnerability/ assessment Level 1 been carried out in a structured and capacity assessment (VCA). VCA is addressed reports participatory way in the community. in the next component. Participatory hazard assessment **Participation:** • Hazard and/or hazard mapping has been mapping carried out in the community, • Has a hazard assessment been conducted in Level 2 findings were not shared and the the community? Who participated in it? document/mapping is currently • Evidence of • Has a hazard map been prepared for the outdated or not in use. information community? Was it done with high level of sharing: Photos Participatory hazard assessment community participation? of assemblies, and/or hazard mapping has been trainings, etc. 0 Level 3 carried out, is currently in use but Use: findings have only been shared • When was the assessment made? Is it still used? with some community members. • Minutes of Examples? Participatory hazard assessment meetings for and/or hazard mapping has been • Has the hazard assessment/mapping been info sharing carried out, is currently in use useful to the community? In what ways? 0 Level 4 and findings have been **shared** with most or all members of the • Triangulation Result sharing: community. consultations • Were the results published or communicated to verify A participatory hazard assessment to the community? In what ways? and/or hazard mapping has been carried out, is currently in use and • Are most people in the community aware findings have been shared with all of the main hazards that could impact the members of the community; the community? community has **human resources** Level 5 0 HR: capable of conducting/updating this assessment/mapping. • Are there people who currently monitor these assessments? • Are there people in the community who can carry out and update these assessments? Comments

	Resilience	component	Vulnerability / capacity assessment	ity / capacity assessment							
	Key Quest	cion	, , , ,	he community carried out participatory vulnerability and capacity assessments (VCA), d the findings and have human resources capable of conducting and updating these sments?							
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification					
	Level 1		been carried out in a structured and in the community.	0	Has a VCA been conducted in the community? Who participated in its	Tangible works carried out based on VCA analysis					
	Level 2	, , ,	<b>CA has been carried</b> out in the t is <b>outdated</b> and currently not in use.	0	<ul> <li>When was the assessment made?</li> <li>Has the VCA been useful to the community? In what</li> <li>Evidence</li> </ul>	• Lists of participation in VCA					
	Level 3		<b>CA has been carried</b> out but findings ared with the community.	0		<ul><li>VCA report</li><li>Evidence of information sharing:</li></ul>					
•	Level 4		CA has been carried out and findings d with most and/or all members of the	0	<ul><li>ways?</li><li>Were the results published or</li></ul>	Meeting notes, photos if available etc.					
8		have been <b>shared</b> the community h	CA has been carried out and findings d with all members of the community; has human resources capable of monitoring the assessment.		communicated to the community? How many members of the community know about them?	Triangulation     verification     consultations     with additional     community     members					
	Level 5			0	<ul> <li>Are there people who currently monitor these assessments?</li> <li>Are there people who can do these assessments?</li> </ul>						
	Comments										

Community has little or no local knowledge or perceptions of risk or scientific data or analysis.  Level 3  Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.  Level 4  Level 4  Level 4  Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by longer term and more numerous scientific data and analysis as part of a long-term strategy for risk awareness.  Community has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.  Questions  Verification  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you ancestral DRR practices in plans or assessments  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *What kind of practices have you traditionally practiced to reduce dangers in your community?  *Apart from local knowledge, has there been new scientific knowledge, has there been new scientific knowledge (from institutions or actors that work on these issues) or assessment done on disaster risk?  *Equipment/ instrumentation for monitoring hazards when assessing disaster risk? Explain why?  *Do people in the community?  *Do you act upon new scientific information or do you continue to use traditional practices? Or a combination of both?  *Community has high level of risk awareness based on local knowledge and perceptions of		Resilience	component	Local and scientific	meth	nods for risk awareness	
Community has little or no local knowledge or perceptions of risk or scientific data and analysis (e.g. in the case of refugee camp or recert unplanned urbanization).   Ommunity has some risk awareness based on local knowledge and perceptions of risk which is supported by scientific data or analysis.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is supported by longer term and more numerous scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Ommunity has high level of risk awareness based on local knowledge and perceptions of risk which is re		Key Quest	tion	1			vell as other scientific
Level 1   Level 2   Level 2   Community has some risk awareness based on local knowledge and perceptions of risk which is supported by or piecemeal scientific data aor analysis.   Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.   Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.   Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by longer term and more numerous scientific data or analysis.   Community has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.   Community financial traditionally practiced to reduce dangers in your community?		Resilience	esilience Characteristics				Suggested Means of Verification
Level 2 knowledge and perceptions of risk but this is not supported by scientific data or analysis.  Community has medium level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.  Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by longer term and more numerous scientific data or analysis.  Community has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.  Apart from local knowledge, has there been new scientific knowledge (from institutions or actors that work on these issues) or assessment done on disaster risk in your community? Can you name a few?  Do people in the community rely more on local knowledge or scientific analysis when assessing disaster risk? Explain why?  Do you act upon new scientific information or do you continue to use traditional practices? Or a combination of both?  Community has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.		Level 1	knowledge or perceptions of risk or scientific data and analysis (e.g. in the case of refugee camp or recent unplanned urbanization).  Community has some risk awareness based on local knowledge and perceptions of risk but this is not supported by scientific data or analysis.  Community has medium level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or			traditionally practiced to reduce dangers in your community?	ancestral DRR practices in plans or
Level 3  Level 3  Level 3  Level 3  Level 4  Level 4  Level 5  Community nas medium level of risk awareness based on local knowledge and perceptions of risk which is supported by one-off or piecemeal scientific data or analysis.  Community has high level of risk awareness based on local knowledge and perceptions of risk which is supported by longer term and more numerous scientific data or analysis.  Community has high level of risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.	9	Level 2				Apart from local knowledge, has there been new scientific knowledge (from institutions or actors that work on these	1
Level 4  Level 4  Level 4  Level 4  Level 5  Level 5  Level 5  Level 5  Level 5  Level 5  Level 6  Level 6  Level 6  Level 6  Level 6  Level 7  Level 7  Level 8  Level 8  Level 8  Level 9  Lev		Level 3				<ul><li>in your community? Can you name a few?</li><li>Do people in the community rely more on local knowledge or scientific analysis</li></ul>	instrumentation for monitoring hazards in the community
risk awareness based on local knowledge and perceptions of risk which is reinforced by comprehensive scientific data and analysis as part of a long-term strategy for risk awareness.		Level 4	risk awareness be knowledge and p which is supporte and more nume	pased on local perceptions of risk ed by longer term perous scientific	0	information or do you continue to use traditional practices? Or a combination of	
Comments		Level 5	risk awareness be knowledge and pof risk which is re comprehensive and analysis as p	pased on local perceptions inforced by scientific data part of a long-	0		
Commission			-			Comments	

## **THEMATIC AREA 3: KNOWLEDGE & EDUCATION**

	Resilience	component	Public awareness ar	nd kna	owledge	
	Key Quest	tion			within the community resulting in agreemen elating to disaster risk?	ts about problems,
	Resilience Characteristics  There is no onen debate within			Suggested Guiding  Questions	Suggested Means of Verification	
	Level 1	There is <b>no open debate</b> within the community about problems, solutions and priorities relating to disaster risks.		0	• Do you have open assemblies in the community to reach agreements about problems, solutions and priorities relating to disaster risk? How often?	Notes from open community meetings
	Level 2	There is some (infrequent) open debate within the community about problems, solutions and priorities relating to disaster risks, but there is a low level of community participation.  There is some (infrequent) open debate within the community about problems, solutions and priorities relating to disaster risks with a good level of community participation that usually results in agreements.		0	• Do all households participate in these open meetings?	<ul> <li>Participation list of open community meeting</li> <li>Agreements of</li> </ul>
10	Level 3			0	• Have you taken any actions to reduce disaster risk based on these agreements? Examples?	<ul> <li>Photos of community meetings, if available</li> </ul>
	Level 4	participatory op the community t in agreements abo	here is <b>frequent and articipatory open debate</b> with  ne community that <b>always results</b> n agreements about problems,  blutions, priorities relating to		• Does the community have a clear understanding on disaster risk and measures that can be taken to reduce this risk?	Triangulation     consultations for     verification
	Level 5	There is consistent and participatory open debate with the community that always results in agreements about problems, solutions and priorities relating to disaster risk that the community acts upon.		0		
				(	Comments	

	Resilience	component	Dissemination of D	RR kr	nowledge				
	Key Ques	tion	_		capacities being passed on to children form a oral tradition from one generation to the r	, -			
	Resilience Characteristics			Suggested Guiding  Questions	Suggested Means of Verification				
	Level 1	There is minimal to no dissemination of DRR knowledge and capacities in the community, whether through formal or informal transmission.		0	Is there discussion or transmission of DRR knowledge in the community? In what ways?	<ul><li>Records of teachers' training</li><li>Teaching materials</li></ul>			
	Level 2	Some DRR knowledge and capacities being passed on through oral tradition only; no knowledge and capacities being transferred through the local school system.  Some DRR knowledge and capacities being passed on through both oral tradition and local schools, however local teachers have not received formal training in DRR.			• Is the local school one of the channels?	incorporating DRR knowledge  • Photos of school DRR activities			
11	Level 3				<ul> <li>Have the teachers been formally trained in DRR?</li> <li>Are there DRR teaching materials? Is</li> </ul>	<ul><li>carried out, if available</li><li>Triangulation consultations with students for</li></ul>			
	Level 4	Some DRR knowledge and capacities being passed on through both oral tradition and local schools, with local teachers having received formal training on DRR.		0	DRR mainstreamed in the official school curriculum?	verification			
	Level 5		and capacities al tradition and teachers trained chool curriculum	0					
					Comments				

	Resilience	component	Cultural attitudes and values				
	Key Quest	ion	· · · · · · · · · · · · · · · · · · ·	and values (e.g. expectations of help/self- enable it to adapt to and recover from shocks and			
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification	
	Level 1	adaptation and rebeyond their co	s a <b>weak role</b> due to its belief that ecovery from shocks and stresses is <b>ntrol</b> and primarily the responsibility of deities, government, NGOs etc.).	0	What or who is the main cause of disaster in the community?	Plans or     assessments     making reference     to cultural values of	
	Level 2	adaptation to and cultural attitudes	eves they have a key role to play in drecovery from shocks and stress but and values contributing to lack of (prejudice, hostility) prevents them a that role.	0	After a disaster     happens, who     has the primary     responsibility to help	Additional consultations with external	
12	Level 3	recovering from s level of <b>social col</b> values contributir <b>of protection fo</b>	s a more active role in adapting to and hocks and stresses due to adequate hesion, however cultural attitudes and ng to gender inequality and/or lack r vulnerable groups in the community effectiveness of this role.	0	• Do neighbors help each other in an	key informants as verification of attitude trends in disasters	
	Level 4	recovering from s	s an <b>effective role</b> in adapting to and hocks and stresses due to cultural des which contribute to <b>high level of</b>	0	emergency? If not, why not?  • How well do		
	Level 5	adapting to and r due to cultural va	s a <b>proactive and effective</b> role in ecovering from shocks and stresses llues and attitudes which are conducive evel of social <b>cohesion and a shared</b>	0	you think you all work together as a community to cope with a disaster? Are there factors that prevent you from working together? Please explain.		
			Comments				

## THEMATIC AREA 4: RISK MANAGEMENT AND VULNERABILITY REDUCTION

	Resilience	component	Sustainable environmental manager	ment		
	Key Quest	tion	Does the community adopt sustain			ctices that
	Resilience	Characteristics	reduce disaster risk and adapt to ne	W risk	Suggested Guiding  Questions	Suggested Means of Verification
	Level 1		<b>deration</b> for sustainable anagement practices in the	0	Does your community use practices that are damaging to the environment and	• Existence of environmental management
	Level 2	management pr (environmental p off, piecemeal and	r no sustainable environmental actices utilized by the community rotection measures tend to be oned short-term) and thereare few or ten to adapt to new risks related to	0	<ul> <li>which increase disaster risk?</li> <li>Examples?</li> <li>Do you take any measures to reduce this environmental</li> </ul>	Hazard or vulnerability assessment
13	Level 3	management pr (environmental p numerous and lo	ustainable environmental actices utilized by the community rotection measures are more nger term) and there are some to adapt to new risks related to	0	<ul> <li>degradation?</li> <li>Have you perceived changes in the climate compared to years ago? How does this</li> </ul>	Seasonal mapping
	Level 4	are utilized by the community with	onmental management practices e majority of people in the medium adaptation capacity to to climate change.	0	affect you?  • Have you taken measures to	Tangible     evidence     reported/     observed of     measures
	Level 5	practices are uti	ronmental management lized widely throughout the high adaptation capacity to new mate change.	0	adapt to or reduce these new effects?  • How many people take these measures?	to adapt or reduce degradation
			Comments	S		

	Resilience	component	Access to healthcare in emergenc	es		
	Key Quest	cion	Does the community have access and trained to respond to physica hazard events, and supported by	l and r	mental health consequences of di	sasters and lesser
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	qualified to pract	n the community trained or ice healthcare and there is no care in the surrounding area.	0	Are there trained people who provide health services in your community?	Health center reports
	Level 2	community healt healthcare facility	onal visits from trained th workers and there is a available but access is very quality of service is poor.	0	Is there a health center in your community or within a	• Equipment inventory
	Level 3	visit and there is assisted by a train	ity health workers consistently access to a healthcare facility ned auxiliary nurse; however equipment are insufficient.	0	reasonable distance?  • In emergencies, does this	Medicine inventory      List of the
14	Level 4	<b>visit</b> and there is with a <b>physician</b>	ity health workers consistently an accessible healthcare facility and nurse, with the most nent, medicines and referral	0	health center have adequate supplies e.g. therapeutic food, water reserves, equipment and healthcare staff? Please explain.	health center staff and their qualifications
	Level 5	<b>visit</b> and there is completely equip	ity health workers consistently an accessible healthcare facility sped with all necessary staff, nedicines for health care and rgencies.	O	<ul> <li>In emergencies, has there been health service delivery in the community? What about the referral mechanisms?</li> <li>Does the health care structure in the community provide mental health services?</li> </ul>	Maps     to verify     accessibility of     health centers
			Commer			

	Resilience	component	Health access an	d awa	reness in normal times	
	Key Quest	tion	(through adequa	ate foo	pers maintain good health and physical ability in no od and nutrition, hygiene and health care) and have hy and life-protecting measures?	
	Resilience	Resilience Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	Level 1  Level 1  Level 1  Level 1  Level 2  Level 2  Level 3  Few community members maintain good health and physical ability in normal times and do not have awareness on staying healthy and life-protecting measures.  Some community members maintain good health and physical ability in normal times but have low awareness on staying healthy and life-protecting measures.  Most community members maintain good health and physical ability in normal times and have some awareness on staying healthy and life-protecting measures.			<ul> <li>Are there adequate sanitation facilities in the community?</li> <li>Do community members use good hygiene practices? (Name three basic good hygiene practices).</li> </ul>	Health center reports      Evidence
	Level 2				<ul> <li>Are there periodic health checks in the community carried out by health workers?</li> <li>In normal times does the community have access to a health center with adequate supplies, equipment and healthcare staff? Please explain.</li> </ul>	of sanitation facilities in the community  • Water quality sampling
15	Level 3				<ul> <li>Are children under 5 routinely vaccinated?</li> <li>Are there high levels of malnutrition in the community?</li> <li>Additional questions which could be asked</li> </ul>	Observations in relation in hygiene standards
	Level 4	Most community members maintain good health and physical ability in normal times and have an adequate level of awareness on staying healthy and life-protecting measures.  All community members maintain good health and physical ability in normal times and have a high level of awareness on staying healthy and life-protecting measures.		0	<ul> <li>separately to a sample of mothers of young children with assistance from health worker.</li> <li>Do mothers/carers know what to do if her child under 5 years has diarrhea?</li> <li>Do mothers/carers know how to reduce the</li> </ul>	in the community  • Triangulation consultations with health
	Level 5			0	risk of dengue/malaria?  • Are health services provided regularly to vulnerable groups (e.g. people with disabilities, elderly, children, pregnant and lactating women)?	workers
					Comments	

	Resilience	component	Food and water supplies			
	Key Quest	ion	Does the community have a secure sup distribution system during disasters?	pply of	food and water and ma	anages an equitable
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
16	Level 1	There is <b>frequent</b> adverse condition	s scarcity of food and water during ns/emergencies.	0	• Do households keep food reserves to be used in case of emergencies?	<ul><li>Resource inventory</li><li>Resource mapping</li></ul>
	Level 2		ds have a minimum food reserve; sto water is often disrupted during as/emergencies.	0	• Is there a collective food reserve to be used in case of	Distribution     and management reports
	Level 3	of adverse condit being taken to <b>re</b>	seholds have a food reserve in case ions/emergencies and measures are duce vulnerability of water supply, community storage but it is poorly	0	emergencies?  • Is there food scarcity in the	• Evidence of storage system either at household or community level
	Level 4	and water suppl	ganized to collectively store food y is secure for emergencies/periods of e distribution management system is	0	community during emergencies?  • Is water	community level
	Level 5	to manage an <b>eq</b> i	ganized to <b>collectively store food</b> and <b>uitable distribution system; water</b> for emergencies/periods of scarcity.	0	supply to the community likely to be interrupted/contaminated during emergencies?  • Is there an organization in place to manage distribution of collective food reserves and water supply fairly?	
			Comments			

	Resilience	component	Hazard-resistant	livelih	noods practices	
	Key Quest	tion	Does the commi	unity	employ hazard-resistant livelihoods practices for fo	od security?
	Resilience Characteristics				Suggested Guiding  Questions	Suggested Means of Verification
	Level 1	No hazard-resistant livelihoods practices are being employed in the community and there is food scarcity during certain periods of the year.			Are livelihood activities diversified in the community or is there dependence on a single or small number of livelihood activities? Describe livelihoods activities.	• Evidence of practices employed
	Level 2	Few community members employ hazard-resistant livelihoods practices but they are the exception.		0	Are livelihoods in the community regularly affected by disaster (e.g., once a year)?	
	Level 3	Some community members employ hazard-resistant livelihoods practices.		0	Are hazard-resistant livelihoods practices employed (e.g. hazard tolerant crops, soil and	
17	Level 4	Most community members employ hazard-resistant livelihoods practices.			water conservation)?	
		All community members employ hazard-resistant livelihoods practices and food supplies remain secure during emergencies as a result.			If the answer to the above is yes, are these measures applied by most of the community members?	
	Level 5			0	Are these measures sufficient to prepare or recover from disaster and to enhance your food security?	
					Comments	

	Resilience	component	Access to market			
	Key Quest	tion	Are the local trac protected agains		d transport links with markets for products, labouards and shocks?	ur and services
	Resilience Characteristics				Suggested Guiding Questions	Suggested Means of Verification
	Level 1	All local trade and that the communion are <b>extremely</b> hazards and exte	nity depends  vulnerable to	0	Are access routes to market likely to be interrupted or damaged during disaster situations?	PMSD survey or other market system study
	Level 2	Most of the local trade and transport links that the community depend on are extremely vulnerable to hazards and external shocks.			Are there business agreements or partnerships likely to be affected during disaster (e.g., access to financial services, services by intermediaries, suppliers, packaging	• Evidence of completed works to protect transport and communications
18	Level 3	Some of the local trade and transport links that the community depends on are vulnerable to hazards and external shocks but some measures are in place to protect them.			etc.)?  • Are demands from buyers for produce from the community likely to reduce significantly during disasters?	infrastructure against hazard
	Level 4	Most of the local trade and transport links that the community depends on are protected from hazards and external shocks.		0	Do you have a way of storing or processing and shelving produce?	
	Level 5	All local trade and transport links that the community depend on are protected from hazards and external shocks.		0	Is availability of labour necessary for livelihood activities likely to be significantly reduced during emergencies?	
					Comments	
	<u> </u>					

	Resilience	component	Social Protection	1					
	Key Quest	tion	reduction directl	y, thro	ty have access to social protection schemes to support risk hrough targeted DRR activities, or indirectly, through socioeconomic ties that reduce vulnerability?				
	Resilience Characteristics				Suggested Guiding Questions	Suggested Means of Verification			
	Level 1	The community has <b>no access to formal or informal social protection</b> schemes to support risk reduction.			Do community members generally help each other out during situations of emergencies? Examples?	Documented info on available formal social protection			
	Level 2	Social cohesion within community provides <b>informal social</b> protection arrangements that support risk reduction at a small scale, but there is <b>no access to formal mechanisms.</b>			Do community members carry out actions to protect vulnerable persons in your community during situations of emergencies?	schemes			
19	Level 3	Community has <b>limited</b> (inconsistent) access to formal social protection schemes that only indirectly support risk reduction.		0	Are there formal social protection schemes provided by central government or other agencies such as farmer associations or cooperatives available to the community?				
	Level 4	Community has access to formal social protection schemes that only indirectly support risk reduction.		0	Can these provide funds for disaster mitigation measures (e.g. house improvements or livelihoods protection)?				
	Level 5	Community has a social protection both directly an support risk redu	n schemes that d indirectly	0	Are these informal/formal social protection measures adequate to effectively prepare for and/or recover from disaster?				
					Comments				

	Resilience	component	Access to financ	al serv	vices	
	Key Quest	tion			nd flexible community savings and credit scheme, , whether formal or informal?	es, and/or access to
	Resilience	Characteristics		. , , , ,	Suggested Guiding  Questions	Suggested Means of Verification
	Level 1	Community men no access to fina providers, whether informal.	ncial service	0	Where do community members save or obtain loans from? Are these services in the community or external to the community?	Documentation evidencing existence and functioning of
	Level 2  Some community members can access only informal service providers, though their services are weak/unstable; no formal financial services available to the community.		rmal service their services le; no formal	0	<ul> <li>Do people know about these services?</li> <li>Are these services affordable and flexible for users?</li> </ul>	VSLAs (cajas rurales) or other credit schemes available to the community
20	Level 3	Only few community members can access formal and informal services in the community (due to unaffordability and/or lack of knowledge) and these are not sufficient to finance preparedness, response and recovery.		0	<ul> <li>Do people in the community use these services on a regular basis? If not, why not?</li> <li>Can these services provide funds to prepare</li> </ul>	
	Level 4	Most community access both forms services though to can finance only of preparedness, recovery.	al and informal heir capacity some aspects	0	for and/or respond to disaster?	
	Level 5	Most community members can access both formal and informal financial services which have sufficient capacity to finance preparedness, response and recovery.		0		
					Comments	

	Resilience	component	Income and asse	t prot	zection	
	Key Quest	tion		and d	mmunity asset bases (income, savings and conveliverse to support disaster coping strategies and a st disaster?	
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	Household/Comi bases <b>cannot sup</b> disaster coping st	pport any	0	• Do community members have savings either individual or collective which can be used to prepare for and/or recover from disaster?	• Evidence of collective savings schemes, e.g.
	Level 2	Household/Comit bases in the comit support coping small-scale emersignificant impart of life and income capacity.	munity can strategies in rgencies with ct on quality	0	Do community members have assets/ belongings which can be quickly sold/used to prepare for and/or recover from disaster?	• Insurance policies for the protection of asset bases
21	Level 3	asset bases can su coping strategie scale emergencie significant impa	ehold/Community coases can support g strategies in small- emergencies without icant impact on quality and income generation		• Do community members have relatives outside the community that can transfer money in an emergency? • Are funds that can be accessed quickly	• Evidence of measures in place to protect assets
	Level 4	Household/Comi bases can suppor strategies for sur disasters, with si impact on qualit income generatio	rt coping rvival in gnificant y of life and	0	either through savings and other incomes sufficient to prepare for and/or recover from disaster?  • Are measures in place to protect economic	
	Level 5	Household/Community asset bases can support coping strategies in disaster without significant impact on quality of life and income generation capacity and measures currently in place to protect them.		0	assets from disaster (e.g. insurance policies, physical protection measures etc.)?	
		-			Comments	
	<u> </u>					

	Resilience component Protection of infra				structure and basic services					
	Key Quest	tion		locate	building infrastructure and basic services resilient ed in safe areas, using hazard-resistant construction neasures)?					
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification				
	Level 1	Majority of housinfrastructure and in the communit in unsafe areas a mitigation meas taken.	d basic services y are located nd <b>no hazard</b>	0	What proportion of housing/infrastructure in the community is located in areas which are vulnerable to disaster?	<ul><li>Infrastructure works</li><li>Mitigation works</li></ul>				
	Level 2	Majority of housing, critical infrastructure and basic services in the community are located in unsafe areas but some hazard mitigation measures are being taken.			Are there schools, health centers and principal access routes to the community located in areas that are vulnerable to disaster?      Is water supply, electrical supply	<ul><li>Evidence of works</li><li>Works</li></ul>				
22	Level 3	Some housing, critical infrastructure and basic services in the community are located in unsafe areas and some hazard mitigation measures are being taken.			communication, drainage or other key basic services likely to be interrupted/contaminated during an emergency situation?  • Are construction methods used in the	execution reports				
	Level 4	Majority of housing, critical infrastructure and basic services in the community are located in safe areas and some hazard mitigation measures are being taken for infrastructure in unsafe locations.  Majority of housing, critical infrastructure and basic services in the community are located in safe areas and those in unsafe locations are adequately protected, through hazard-resistant construction and structural mitigation measures.			community that increase resistance to disaster?      Have mitigation works been undertaken to reduce risk to transport routes, water supply and/or to protect houses, schools, health					
	Level 5				centers located in unsafe areas?					
					Comments					

	Resilience	component	Land use and pla	anning						
	Key Quest	tion		unity decision-making regarding land use and management take hazard bilities into account?						
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification				
	Level 1	No community making process and planning.		0	Are there hazard maps available for the community?	Hazard maps				
	Level 2	Community land planning <b>does no</b> hazard risks and	ot consider	0	Are these taken into account when making decisions?	Community     land use plan     incorporating     DRR documented				
	Level 3	Community land use and planning considers hazard risks and vulnerabilities in the short-term.			• Is there a community land use plan?	or reported     Documentation				
23	Community lan planning consic and vulnerabiliti term (commun if applicable).		ers hazard risks es in the long-		Does it take into account hazards and vulnerabilities?	of land planning decisions if available  • Local authority				
	Level 5	Community land use and planning which considers hazard risks and vulnerabilities in the long-term (local land development plan if applicable), which is supported by local authority/central government land use policy and planning.		0	<ul> <li>Is land use planning short-term or long-term?</li> <li>Do community decision-makers use that plan?</li> <li>Does the community plan align with higher administrative level plans?</li> </ul>	or central government land use plans				
					Comments					

	Resilience	component	Operation of education services in eme	genci				
	Key Quest	tion	Do education services have the capacity during emergencies?	to cc	ontinue their operation	without interruption		
	Resilience	Characteristics		Suggested Guiding Questions	Suggested Means of Verification			
	Level 1	by disasters and s	ly impacted (at least once a year) shocks that result in suspension of School does not have a safety plan or nittee.	0	How often is the school impacted by emergencies?	<ul><li>School safety plan</li><li>Documentation</li></ul>		
	Level 2	disasters and sho activities. Interrup <b>month</b> before ac	d at least once every 5 years by cks that result in suspension of school ptions generally last for more than a trivities are resumed. School does not an or emergency committee.	0	Are school activities suspended as a result? For how long?	of the existence of a school emergency committee		
	Level 3	disasters and sho activities. Interrup activities are resu and some of the been implemente	d at least once every 5 years by cks that result in suspension of school otions last less than one month before med. A school safety plan is in place preparedness measures identified have ed. A school emergency committee d but it does not perform simulation	0	<ul> <li>Is there a school safety plan in place?</li> <li>Does it include measures to ensure the continuous</li> </ul>			
24	Level 4	disasters and sho activities. Interrup before activities a <b>in place</b> and mo- identified have be committee is in p	d at least once every 10 years by cks that result in suspension of school ptions are generally less than one week are resumed. A school safety plan is set of the preparedness measures een implemented. A school emergency place and at least one simulation drill ned in the last school year.	0	operation of the school in emergencies (protection of materials and supplies, teacher or substitute availability etc.)?			
	Level 5	(or impacts resul activities), a <b>scho the preparedne</b> A school emerge	on rarely impacted by emergencies t in minimum disruption to school ol safety plan is in place and most of ss measures have been implemented. In the committee is in place and regularly action drills and reviews/updates the an.	0	• Is there a school emergency committee? Does it perform simulation drills and periodic reviews of the plan?			
			Comments					

Resilience component Key Question  Does the community have a trained and operating organization in disaster preparedness and response?  Resilience Characteristics  The community does not have a trained organization responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills and its operational capacity is weak.  There is a community organization responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills but it only operates and response hit on DRR skills but it only operates and response hit on DRR skills but it only operates and response which cascades training to other community members and carries out preparedness and response, which cascades training to other community members and response and recovery and effectively coordinates with external agencies.  Comments  Resilience Characteristics  Suggested Guiding Questions  Is there is a community organization what topics (search and response) but only some of its members, been formally trained in DRR skills but it only operates in emergency preparedness and response, which cascades training to other community members and carries out preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  Do they respond effectively during emergency committees that provide ongoing support? Is there effective coordination between the two?  Comments	Posiliones comm				EDNESS & RESPONSE	
The community does not have a trained organization responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills and its operational capacity is weak.  There is a community organization responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills but it only operates in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response and its only operates in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community members and carries out preparedness activities and response and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  Suggested Guiding Questions  Is there a community emergency and certified or otherwise validated by higher bodies?  In what topics (search and rescue, first aid, management of emergency shelters, needs assessment, relief distribution, fire-fighting)?  Is the current training adequate to protect the community in disasters? If not, what other training is needed?  Do members of the local emergency committee carry out preparedness activities regularly?  Do members of the local emergency committee carry out preparedness activities regularly?  Do they have the necessary equipment to carry out their roles in first aid, search and rescue, damage assessment etc.?  Do they respond effectively during emergency situations?  Are there district/regional emergency ormittees that provide ongoing support? Is there effective coordination between the two?		Johent	Does the community have		· · · · · · · · · · · · · · · · · · ·	isaster preparedness
Level 1 preparedness and responsible for emergency preparedness and response.  There is a community organization responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills and its operational capacity is weak.  There is a community organization responsible for emergency preparedness and response and its members have been trained in DRR skills but it only operates in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response and its members have been training to other community members and carries out preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergency organization responsible for emergency organization responsible for emergency preparedness activities and response organization responsible for emergency organization responsible for emergency preparedness activities and response organization responsible for emergency organization responsible for emergency organization responsible for emergency preparedness activities and response organization responsible for emergency organization responsible for emergency organization responsible for emer	Resilience Char	acteristics			Suggested Guiding Questions	
responsible for emergency preparedness and response but only some of its members have been formally trained in DRR skills and its operational capacity is weak.  There is a community organization responsible for emergency preparedness and response and its members have been trained in DRR skills but it only operates in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response which cascades training to other community manders and carries out preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  There is a fully trained community organization responsible for emergency preparedness activities regularly?  • Do members of the local emergency committee carry out preparedness activities regularly?  • Do they have the necessary equipment to carry out their roles in first aid, search and rescue, damage assessment etc.?  • Do they respond effectively during emergency situations?  • Are there district/regional emergency committees that provide ongoing support? Is there effective coordination between the two?	l evel 1 organ	<b>nization</b> res	ponsible for emergency	0	emergency committee trained and certified or otherwise validated by higher bodies?	and records of meetings of the
Level 3  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization response in emergencies.  There is a fully trained community organization responsible for emergency preparedness activities and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  Level 5  Level 5  There is a fully trained community organization responsible for emergency organization responsible for emergency organization responsible for emergency preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively during emergency situations?  • Do they respond effectively during emergency situations?  • Are there district/regional emergency sommittees that provide ongoing support? Is there effective coordination between the two?  • Evaluation reports from simulation drills	Level 2 responsion and removed mem	onsible for er response <b>bu</b> t obers have be skills and its	mergency preparedness t only some of its een formally trained in	0	rescue, first aid, management of emergency shelters, needs assessment, relief distribution,	prevention or preparedness
organization responsible for emergency preparedness and response, which cascades training to other community members and carries out preparedness activities and response in emergencies.  There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  Level 5  Level 5  O members of the local emergency committee carry out preparedness activities regularly?  • Do they have the necessary equipment to carry out their roles in first aid, search and rescue, damage assessment etc.?  • Do they respond effectively during emergency situations?  • Are there district/regional emergency committees that provide ongoing support? Is there effective coordination between the two?  • Do they have the necessary equipment to carry out their roles in first aid, search and rescue, damage assessment etc.?  • Tangible evidence that shows knowledge acquired is put into practice (simulation drill reports), as applicable  • Evaluation reports from simulation drills	Level 3 responsible responsibl	responsible for emergency preparedness and response and its members have been <b>trained in DRR skills</b> but it <b>only operates</b>			to protect the community in disasters? If not, what other	and needs
There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively coordinates with external agencies.  O they respond effectively during emergency situations?  • Are there district/regional emergency committees that provide ongoing support? Is there effective coordination between the two?  days  • Tangible evidence that shows knowledge acquired is put into practice (simulation drill reports), as applicable  • Evaluation reports from simulation drills	Level 4 organ prepa train and c	There is a <b>fully trained community organization</b> responsible for emergency preparedness and response, which <b>cascades training</b> to other community members			emergency committee carry out preparedness activities regularly?	to training workshops
drills	There orgal prepa train perforesper	There is a fully trained community organization responsible for emergency preparedness and response, which cascades training to other community members, performs prevention, preparedness, response and recovery and effectively		0	equipment to carry out their roles in first aid, search and rescue, damage assessment etc.?  • Do they respond effectively during emergency situations?  • Are there district/regional emergency committees that provide ongoing support? Is there	• Tangible evidence that shows knowledge acquired is put into practice (simulation drill reports), as applicable • Evaluation reports
Comments						
			Co	mme	nts	

	Resilience component Early warning system					
	<b>Key Question</b> Is there an operational Early			y War	ning System in the community?	
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	people, the comr about the coming	al knowledge of some nunity <b>rarely</b> knows g of a hazard that could ct the community.	0	Are the community members aware of potential hazards and how these may affect their homes and livelihoods?	Early Warning     System community     operation manual/     plan
	Level 2	Due to <b>local knowledge sometimes</b> the community knows when a hazard that could be dangerous is approaching, but they <b>do not always take the appropriate measures.</b>			to monitor these hazards/threats (e.g. river flood level monitors). moni	Evidence of monitoring equipment and tools
	Level 3	Additional to local knowledge, the community has <b>tools for monitoring</b> hazards and established communication <b>channels for alert dissemination</b> , but these are not always effective.			Are people at risk alerted of an impending emergency with sufficient time in advance?	Communication and warning tools
26	Level 4	Additional to local knowledge, the community has effective tools to monitor hazards and communicate alerts. The operation and maintenance of this early warning system is supported by the regional/national risk management authorities. However simulation drills are not regularly carried out.			<ul> <li>Does the community have the capacity to evacuate persons rapidly from high risk areas in advance of an emergency?</li> <li>Have community members been trained in operation and</li> </ul>	Reports on dissemination the Early Warning System
	Level 5	Early Warning Someon hazard monitoring fully supported management aut	al knowledge, the uipped with a <b>functioning</b> ystem with <b>reliable</b> g and alert dissemination by regional/national risk horities. Simulation <b>drills</b> rried out and weaknesses	0	maintenance of the EWS for their community?	
			Co	mme	ents	

	Resilience	component	Contingency planning			
	Key Ques	tion	· · · · · · · · · · · · · · · · · · ·		ingency plan that is widely understo groups, and was prepared in a partic	
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	Community has	no contingency plan.	0	Does the community have a contingency plan for emergencies?	Contingency plan     Inventory of
	Level 2	was not prepare nor does it take of vulnerable gr	a contingency plan but this d in a participatory way, into account the needs oups. Few community its content and it is ing applied.	0	<ul> <li>Did a lot of the community members participate in the preparation of this plan?</li> <li>Is the plan known and</li> </ul>	resources to respond to emergencies  • Clearly signed evacuation routes
27	Level 3 was prepared in a takes into accoun vulnerable groups members know its		a contingency plan that a participatory way that ant the needs of some ps. Some community its content but it is only blied and updated.	0	understood by the majority of the community?  • Does this contingency plan include adequate measures for the protection of vulnerable	<ul> <li>Maps of alternative water sources</li> <li>If possible, perform an evacuation</li> </ul>
2,	Level 4	developed in a princlusive manne the needs of mo most communit	a contingency plan, articipatory and r that takes into account st vulnerable groups; y members know its r it is only occasionally lated.	0	• Are evacuation routes and (in case of drought) routes to alternative water sources mapped?	exercise
	Level 5	Community has a contingency plan, developed in a <b>participatory and inclusive</b> manner that takes into account <b>needs of most vulnerable groups; majority</b> of community members know its content and it is <b>regularly applied</b> and updated.			Are simulation drills carried out to test and update the Contingency Plan? How often? Are improvements made after simulations?	
			Co	mme	ents	
			-			

	Resilience component Emergency infrastructure					
	Key Quest	cion	Are emergency shelters (pu adequate facilities for all aff		e built or modified) accessible to cor population?	mmunity and with
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	All of community housing is unsafe for any emergency (small-scale and large-scale) and there is no physical space to evacuate to.			<ul> <li>Is housing infrastructure in the community adequately safe?</li> <li>In an emergency situation do</li> </ul>	Photos of buildings used for emergency shelters
	Level 2 In small scale emergencies, community members can house themselves in homes of relatives or neighbours in more secure conditions or using school buildings, but there is no other community building to function as an evacuation shelter.				community members stay in their homes? Or do they take shelter in community buildings, or in the homes of relatives/friends?  • Are schools used for emergency	<ul> <li>Manual for operating the shelter</li> <li>Inventory of the resources in the</li> </ul>
	Level 3	Additional to the homes of relatives and neighbours, the <b>community has a structure</b> (community center or other community building other than schools) that can serve as a <b>shelter</b> in emergencies but its <b>facilities are inadequate</b> to meet the basic needs of all affected persons.			<ul> <li>Are schools used for emergency shelters?</li> <li>Are there community buildings which have adequate conditions and equipment in terms of water supply, sanitation, first aid, sleeping, food storage for the</li> </ul>	1
28	Level 4	Additional to the homes of relatives and neighbors, the <b>community has a structure</b> (community center or other community			community members during the time necessary to recover from a disaster (e.g. Are they equipped with potable water, electric power, 3/5 square meters/person, and 1 latrine/ W.C., per 20 persons)?	
	Level 5	Additional to the homes of relatives and neighbours, the community has a purpose built emergency shelter in optimal conditions to meet all basic needs of affected persons and also to protect vulnerable groups in emergencies.			<ul> <li>Do these community buildings include access for persons with disability? Are latrines clearly signed for men and for women?</li> <li>How many people can these community buildings shelter?</li> <li>Does it cover the needs of the community?</li> </ul>	
			Со	mme	ents	

	Resilience	component	Emergency response and re	ecove	ry	
	Key Quest	tion			ling role in response and recovery ac y and that are prioritized according t	
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification
	Level 1	Community has response and rec	a <b>mainly passive role</b> in overy actions.	0	• In an emergency situation does your community wait for external help before responding or does the community begin responding	<ul><li>Contingency plan</li><li>Hazard and risk</li></ul>
	Level 2	Community <b>usually</b> plays an <b>active role</b> in response and recovery actions, but these actions <b>do not prioritize need</b> and <b>reach only few</b> of the affected community members.			using its own resources?  • Inverse resources resources?  • Does your community have the capacity to lead response and recovery actions or does it depend on external assistance to effectively respond to emergencies?  • In previous emergency emergencies did external agencies come to assist the community and if so did these actors make	<ul><li>Inventories of resources and equipment for</li></ul>
	Level 3	Community <b>usually</b> plays <b>a leading role</b> in response and recovery actions that can <b>reach most affected community members,</b> but the needs of vulnerable groups are still not prioritized.				emergency response     Evacuation routes
29	Level 4	Community always plays a leading role in response and recovery actions, reaches most of the affected members in the community and prioritizes the needs of some vulnerable groups.				
	Level 5	Community always plays a leading role in response and recovery actions, which can reach all of its affected members and needs of all vulnerable groups are prioritized and met.			the decisions or was it the community leadership or a combination of both?  • In an emergency situation do the community leaders ensure that the needs of the affected populations and vulnerable groups are met? Examples?	
			Co	mme	ents	

	Resilience	component	Volunteerism and account	ability			
	Key Quest	ion	Is there a high level of com and recovery; representativ		ry volunteerism in all aspects of prep Il sections of community?	paredness, response	
	Resilience	Characteristics			Suggested Guiding Questions	Suggested Means of Verification	
	Level 1	community volui preparedness, res	to negligible level of neerism in aspects of ponse and recovery dherence to relevant	0	• Are there volunteers in your community willing to participate in community projects for preparedness, response and recovery? Examples?	<ul><li>Volunteer inventory</li><li>Attendance lists</li></ul>	
	Level 2	There is <b>some level</b> of community volunteerism but <b>not in all</b> aspects of preparedness, response and recovery, and it is <b>not representative of all sections</b> of the community and there is <b>no adherence to relevant protocol.</b>			Do these volunteers come from a small group in the community or is there active participation	<ul><li>Photographic evidence</li></ul>	
30	Level 3	There is <b>high level</b> of community volunteerism but <b>not in all</b> aspects of preparedness, response and recovery and it is <b>not representative of all sections</b> of the community, with <b>limited adherence to relevant protocol.</b>		0	<ul> <li>Are they trained in DRR? Do they adhere to relevant protocols in preparedness, response and recovery?</li> <li>Do they ensure the protection of vulnerable persons such as the</li> </ul>	Evidence     of projects     implemented by     volunteers	
	Level 4	There is a <b>high level</b> of community volunteerism in all aspects of preparedness, response and recovery, but still is <b>not representative of all sections</b> of the community, with <b>limited adherence to relevant protocol.</b>		0	elderly/persons with disability?  • Is their participation adequate to meet the needs of your community?		
	Level 5	volunteerism <b>in a</b> preparedness, res which is <b>represer</b>	ponse and recovery, ntative of all sections of with full adherence to	0			
	•		mme	ents			

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Major hazards such as hurricanes, earthquakes, volcano eruptions, droughts, and landslides, among others, constantly threaten the lives and livelihoods of the most vulnerable populations across the world. In the context of accelerated climate change and population growth, the current trend of frequent major disasters is expected to increase in the foreseeable future.

To mitigate this trend, increased Disaster Resilience is essential to reduce the potential impact of humanitarian crises on the poorest communities who are disproportionately affected by these disasters.

This Toolkit for Measuring Community Disaster Resilience has been developed as a concise and user-friendly tool to measure the level of disaster resilience at community level through the assessment of a broad range of resilience components.



