MOMENTUM

Integrated Health Resilience

ANALYSIS OF RESILIENCE OF COMMUNITIES TO DISASTER (ARC-D) HEALTH TOOLKIT: USER MANUAL

September 2024

Submitted to:

United States Agency for International Development under
Cooperative Agreement # 7200AA20CA00005

Submitted by:

IMA World Health, with JSI Research & Training Institute, Inc.; Pathfinder International; Cooperative for Assistance and Relief Everywhere, Inc.; GOAL USA, Inc.; and the Africa Christian Health Associations Platform

Prepared by:

MIHR Resilience Technical Working Group

USAID FROM THE AMERICAN PEOPLE

MOMENTUM A Global Partnership for Health and Resilience

Disclaimer

MOMENTUM Integrated Health Resilience is funded by the U.S. Agency for International Development (USAID) as part of the MOMENTUM suite of awards and implemented by IMA World Health (IMA) with partners JSI Research &Training Institute, Inc. (JSI), Pathfinder International, GOAL USA, Inc., CARE, and Africa Christian Health Associations Platform (ACHAP), along with Premise Data, Harvard T.H. Chan School of Public Health Department of Global Health and Population, Johns Hopkins Bloomberg School of Public Health Department of International Health, and Brigham Young University as resource partners, under USAID cooperative agreement #7200AA20CA00005. For more information about MOMENTUM, visit www.USAIDMomentum.org. The contents of this guide are the sole responsibility of IMA World Health and do not necessarily reflect the views of USAID or the United States Government.

Contents

Tables

Figures

ACRONYMS AND ABBREVIATIONS

ARC-D	Analysis of Resilience of Communities in Disaster
CHW	Community health worker
CSO	Civil society organization
CSD	Community scoring dialogue
DFID	Department for International Development (UK)
DRR	Disaster risk reduction
EWS	Early warning system
F2C	Fragility, Crisis Sensitivity, and Complexity assessment
FAO	Food and Agriculture Organization (United Nations)
FCDO	Foreign, Commonwealth, and Development Office (UK), formerly DFID
FGD	Focus group discussion
FP	Voluntary family planning
HSS	Health systems strengthening
IDPs	Internally displaced persons
IFAD	International Fund for Agriculture Development (United Nations)
IFRC	International Federation of Red Cross and Red Crescent Societies
IPCC	Intergovernmental Panel on Climate Change
IRP	International Resource Panel
KII	Key informant interview
MERL	Monitoring, evaluation, research, and learning
MIHR	MOMENTUM Integrated Health Resilience
MNCH	Maternal, newborn, and child health
MOH	Ministry of Health
NGO	Nongovernmental organization
NHRP	NGO and Humanitarian Reform Project
NOAA	National Oceanic and Atmospheric Administration
PLWD	Pregnant and lactating women
R4S	Resilience for Social Systems
RH	Reproductive health
SBC	Social and behavior change
SFDRR	Sendai Framework for Disaster Risk Reduction
UNDP	United Nations Development Program
UNFCCC	United Nations Framework Convention on Climate Change
UNISDR	United Nations International Strategy for Disaster Reduction
UNDRR	United Nations Office for Disaster Risk Reduction
USAID	United States Agency for International Development
VSLA	Village Savings and Loan Associations model
WHO	World Health Organization

1. INTRODUCTION

PURPOSE OF THE ARC-D HEALTH TOOLKIT

MOMENTUM Integrated Health Resilience (MIHR) employs different tools to identify the health and well-being needs of individuals, households, communities, and health systems. The Analysis of Resilience of Communities to Disaster in Health (ARC-D Health) is an important tool in the process. It is designed for use by stakeholders to measure community health resilience, raise community awareness of the potential impact of shocks and stresses on individual and family health, and enhance community motivation in developing and implementing health resilience actions. ARC-D Health is particularly suitable as a resilience assessment and planning tool and is integrated into MIHR's monitoring, evaluation, research, and learning (MERL) activities. Findings from ARC-D Health assessments can be used as inputs to develop community health resilience plans to meet maternal, newborn, and child health (MNCH), voluntary family planning (FP), and reproductive health (RH) needs before, during, and after the occurrence of shocks and stresses. In addition, the tool provides critical information for community leaders, local authorities, local organizations, and development partners to design and implement strategies to mitigate, adapt to, and recover from shocks and stresses.

The ARC-D Health Toolkit has been developed to support MIHR country teams and their partners to conduct ARC-D Health assessments in target communities. Tailored to address MIHR's programmatic needs, the toolkit includes tools, templates, checklists, and instructions and tips for implementing ARC-D Health assessments. The toolkit will be supplemented by course materials for training and deploying data collection teams, processing data, and reporting on findings.

BACKGROUND TO THE DEVELOPMENT OF ARC-D HEALTH

The original Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit,[1] developed by GOAL, is a concise and user-friendly tool to assess community-level disaster resilience through a discussion-based questionnaire of 30 disaster resilience components, such as health access and awareness, disaster risk reduction in development planning, and participation of women. The components span four thematic areas corresponding to the four priorities for action of the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030:

1. Understanding disaster risk.
2. Strengthening disaster risk governance to manage disaster risk.
3. Investing in disaster risk reduction.
4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction.[2]

[1] GOAL. 2016. *Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit*. https://www.goalglobal.org/wp-content/uploads/2019/11/ARC-D-Toolkit-User-Manual-2016.pdf.
[2] Sendai Framework found at: https://www.undrr.org/implementing-sendai-framework/what-sendai-framework.

The SFDRR is the main international instrument for building the resilience of communities and countries to disasters.

The original ARC-D Toolkit builds on the disaster resilience work commissioned by the Inter-Institutional Group, funded by the United Kingdom's Department for International Development (DFID)[3] and documented in the 2009 publication *Characteristics of Disaster-Resilient Communities.*[4]

As a partner within MIHR, GOAL is leading resilience efforts to support the project's overarching goal to reduce maternal and child mortality by increasing the health resilience of individuals, households, communities, and health facilities in fragile settings at the humanitarian-development nexus. To measure health resilience at the community level, ARC-D has now been adapted into ARC-D Health. The 30 components of the original ARC-D toolkit were scrutinized; some were removed, new ones were created, and the rest were adapted to focus more on health, particularly MNCH/FP/RH. The new toolkit gives greater emphasis to community health needs to enable members to better understand their own vulnerabilities and strengthen their actions to prevent, mitigate, and adapt to shocks and stresses.

KEY CONCEPTS OF ARC-D HEALTH

Note that Appendix Four (starting on p. 88) is glossary of relevant terms used in this document.

The U.S. Agency for International Development's (USAID's) Bureau for Global Health defines health resilience as:

> *… the ability of people, households, communities, systems, and countries to mitigate, adapt to, and recover from shocks and stresses, in a manner that reduces acute and chronic vulnerabilities, and facilitates equitable health outcomes.*[5]

Health resilience exists at multiple levels: individual, household, community, and health system. ARC-D Health focuses on the community level. In this context, a **community** is *"a number of families residing in a relatively small area within which they have developed a more or less complete socio-cultural definition imbued with collective identifications and by means of which they resolve problems arising from the sharing of an area."*[6] An important aspect of ARC-D Health is that a community shares the same shocks and stresses within a given period. Health resilience and, more specifically, health preparedness at the community level focuses on ensuring pre-event (i.e., shock or stress) community awareness, continuity of access to health services, supplies, commodities, safe water, food, education, social services, social capital, financial resources, and information.

[3] Now known as the Foreign, Commonwealth, and Development Office (FCDO).
[4] Twigg, J. 2009. "Characteristics of a Disaster-Resilient Community: A Guidance Note." Version 2, November 2009." https://discovery.ucl.ac.uk/id/eprint/1346086/1/1346086.pdf.
[5] See USAID, 2021, p.3. https://www.usaid.gov/sites/default/files/documents/Blueprint_for_Global_Heatlh_Resilience.pdf.
[6] Bell, C., and H. Newby. 1971. *Community Studies: An Introduction to the Sociology of the Local Community* (1st ed.). Routledge. https://www.routledge.com/Community-Studies-An-Introduction-to-the-Sociology-of-the-Local-Community/Bell-Newby/p/book/9781032101255.

MIHR will use ARC-D Health to assess the health resilience of communities but with a strong emphasis on health preparedness, which is a major contributing factor to health resilience. Consequently, the ARC-D Health Toolkit uses the term "health resilience/preparedness" to indicate the principal objective of assessing health resilience but with a focus on health preparedness. (That is, preparedness with a specific focus on health systems and health outcomes; see Appendix Four for more detail.)

Shocks are *"external, short-term deviations from long-term trends that have substantial negative effects on people's current state of well-being, level of assets, livelihoods, safety, or their ability to withstand future shocks."*[7] Shocks can also affect systems, such as health systems, that people depend on for their well-being. Shocks can be slow onset, such as a drought, or relatively rapid onset, such as flooding, disease outbreaks, or market fluctuations. In all circumstances, shocks not only disrupt the public health system but also impact the socioeconomic and governance/security systems of a given setting.

In the country contexts where MIHR operates, the most likely shocks to affect health services and outcomes are conflict or outbreaks of violence and sudden displacement of populations. Additionally, disease outbreaks, flooding, droughts, and heatwaves also disrupt continuity of care and self-care for MNCH/FP/RH.

Stresses are *"long-term trends or pressures that undermine the stability of a community and increase the vulnerability within it."*[8] The most likely stresses to be encountered in MIHR settings are population pressures (e.g., due to high concentrations of internally displaced persons [IDPs] or refugees), insecurity, chronic diseases, food insecurity, constant water shortages, various types of environmental pollution and contamination, and climate change.

Health resilience, through the lens noted above as the *"… ability … to prepare for, mitigate, adapt to, and recover,"* covers different but complementary strengths, attributes, and resources available in a community to manage and reduce health-related risks and strengthen resilience in the face of shocks and stresses. These include individual and collective agency, behaviors, skills, knowledge, and resources, which may be categorized into three main types of resilience capacities: absorptive, adaptive, and transformative.[9]

Absorptive capacity is the ability to minimize exposure to shocks and stresses through preventative measures and appropriate coping strategies to avoid permanent, negative impacts.

Adaptive capacity is the ability to make proactive and informed choices about alternative health strategies based on an understanding of changing conditions.

---

[7] In USAID REAL, 2018. "Practical Guidance Note Series 2: Measuring Shocks and Stresses." https://fsnnetwork.org/resource/resilience-measurement-practical-guidance-series-guidance-note-2-measuring-shocks-and.

[8] Ibid.

[9] The three capacities are from USAID REAL, 2018. "Practical Guidance Note Series 3: Resilience Capacity Measurement." https://fsnnetwork.org/resource/resilience-measurement-practical-guidance-series-guidance-note-3-resilience-capacity.

Transformative capacity involves the governance mechanisms, policies/regulations, infrastructure, community networks, and formal and informal social protection mechanisms that constitute the enabling environment for structural change in the system.[10]

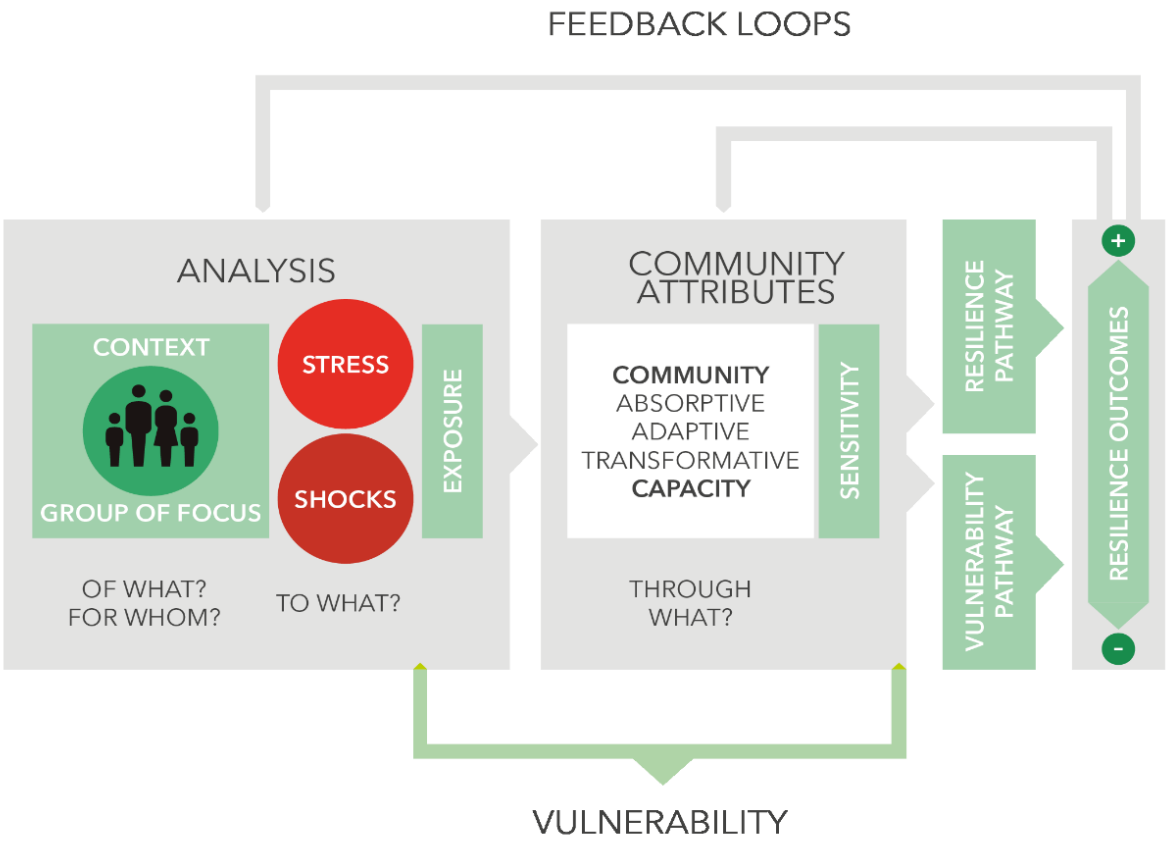
The three capacities are interrelated and mutually reinforcing, enabling communities to **mitigate** the impacts of shocks and stresses, **adapt to** changing conditions, and **recover and build forward better**.

The following two figures illustrate resilience conceptual frameworks with an emphasis on their cyclical nature: from analysis and preparedness *to* a shock or stress *to* a response *to* possible outcomes and *back to* a response analysis and preparedness. Figure 1 presents a general conceptual framework, which is useful for many sectors, while the framework depicted in Figure 2 focuses specifically on health resilience. Of important note for measuring resilience, both frameworks focus on three main elements:

1. The shocks and stresses within a context of fragility in the case of MIHR.
2. The resilience capacities, which may be assessed differently depending on the level or scale considered.
3. The health outcomes, which are measured using processes conventionally used for public health measurement.

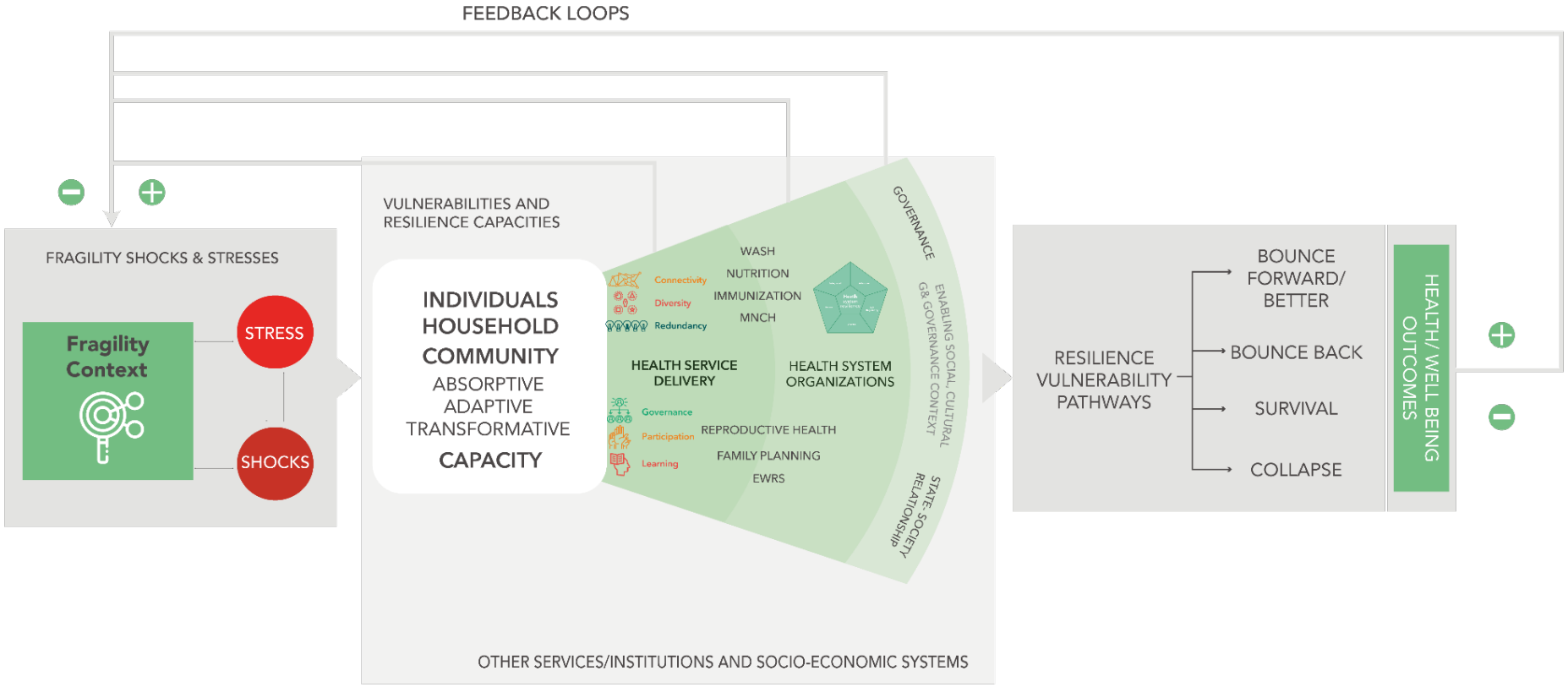
[10] Definitions are adapted from USAID/REAL. 2018. "Resilience and Resilience Capacities Measurement Options." https://fsnnetwork.org/resource/resilience-and-resilience-capacities-measurement-options.

Figure 1. Resilience Conceptual and Measurement Framework



Source: GOAL 2016

Figure 2. Health Resilience Conceptual Framework



Source: MIHR 2020

2. OVERVIEW OF THE ARC-D HEALTH TOOL

OBJECTIVES

ARC-D Health is a qualitative, participatory, resilience analysis tool. The main objectives of ARC-D Health are:

- To serve as a rapid participatory health resilience assessment at the community level.
- To help community members identify key health resilience gaps and needs.
- To promote and inspire action on health resilience at the community level (e.g., preparedness and adaptation planning).

The main output of ARC-D Health is a "snapshot" of the level of health resilience (capacity) at a point in time in a target community. Each community assessed receives an average resilience score (from 1 to 5) across the components assessed as well as individual scores for each component. The results can then be visualized through spider web graphs/radar charts. The individual components can also be grouped by health resilience capacities to obtain scores for each of the three capacities (absorptive, adaptive, transformative).

The data from the analysis/measurement will be used for:

- MERL data/baseline for monitoring.
- Inputs for MIHR program design and adaptation of activities.
- Inputs for community-based health resilience action plans.

WHO IMPLEMENTS ARC-D HEALTH?

Under MIHR, ARC-D Health assessments are facilitated by local partners (health facilities or local nongovernmental organizations [NGOs]) and supported by the MIHR in-country MERL team and the resilience advisor (when there is one in country), with backstopping support by MIHR core staff (the MIHR Resilience Lead) and GOAL resilience staff.

Local partners do not have to be resilience experts to apply ARC-D Health. However, they must have a solid understanding of the concepts and terminology related to resilience and health as well as the ability to interpret community answers in those terms; be familiar with the ARC-D Health guidelines, tools, and questionnaire (for use as their discussion guide); and have the facilitation and mediation skills necessary to conduct a participatory community scoring dialogue (CSD), which is a structured type of focus group discussion (FGD).

An assessment team should comprise at least two persons, preferably one male and one female. Both team members conduct desk reviews and key informant interviews (KIIs), but one member of the team should be responsible for facilitating the CSD while the other takes detailed notes and supports the facilitator when necessary.

Together, the team should have the following skill set:[11]

1. Knowledge and experience in community health and/or resilience, health preparedness, etc.
2. Training in the use of the ARC-D Health Toolkit.
3. Knowledge of the context of the community to be assessed (culture, customs, etc.).
4. Fluency in the language used by the community.
5. Skill and experience in facilitating discussion groups and participatory approaches for the CSD.
6. Knowledge and skills in qualitative data collection and analysis (preferably).
7. Adequate knowledge of English and/or French, as the ARC-D Health training workshops and guides are in those languages.

TIMING AND FREQUENCY OF ARC-D HEALTH

The ARC-D Health assessment can be used during multiple phases of a project life cycle, including assessment, implementation, and evaluation, and as part of baseline, interim, and end-line evaluations. The frequency depends on the context, budget, and how the ARC-D Health findings will be used. For example, tracking progress during a two-year grant will have a different application than a health ministry seeking overall trends over a 10-year period. However, as a general indication, the use of ARC-D Health every 2 years is considered good practice. ARC-D Health can be applied in "calm" times (i.e., non-disaster/non-acute crisis situations) as part of a health resilience program to ensure positive health outcomes are protected from shocks and stresses. It can also be applied in the aftermath of a crisis with a view to linking humanitarian and development programming and operationalizing a "building forward better" approach.

The timing for conducting ARC-D Health should consider seasonal calendars in terms of climate and livelihoods, as well as daily life schedules to optimize the accessibility to and availability of community members to participate in the assessment. The period that enables the participation of the most representative sections of a community is the best timing for ARC-D Health.

WHERE TO IMPLEMENT ARC-D HEALTH?

Understanding resilience at the community level is extremely important since communities are the first to face and respond to shocks and stresses. Communities are where collective local knowledge, capacities, and traditions are utilized, negotiated, and transformed. Also, in most countries, communities constitute the smallest local administrative units.

The number and selection of communities to be assessed will depend on the availability of resources, including time, human resources, budget, and the extent of both the geographic and technical scope of the project. These same factors will influence the sample size and sampling technique, which are important aspects of the process. In addition, it is vital that vulnerable groups within the community (such as the extreme poor, persons with disabilities, minority groups, women, elderly, and youth) are

[11] Adapted from the 2016 ARC-D Manual.

represented. In most instances, vulnerable groups are brought together to take part in the assessment by creating a welcoming and safe space for their voices to be heard.

When applied in some specific contexts (e.g., unplanned urban settlements, IDP camps), the following additional points need to be considered as defined in the original ARC-D Toolkit manual:[12]

- Take time to define "the community" that will be studied, especially in areas where these delineations may be unclear and dynamic, such as in informal settlements. Similarly, in larger urban populations, additional analysis may be required to identify a relatively homogenous target group that not only allows for measurement of community resilience but also for participatory action planning.
- Adapt community mobilization and engagement strategies since the urban or IDP social fabric can be more fractured, with limited social cohesion (and, in some cases, violence) compared to more rural areas.
- Information gathered in urban communities should often be complemented with information coming from higher-level institutions (e.g., local authorities) that have more control and knowledge over certain services (e.g., sanitation) and land use issues.
- Urban residents work a variety of jobs outside the defined settlement or "community," which could limit the time periods when all key informants are simultaneously available to participate in an assessment.

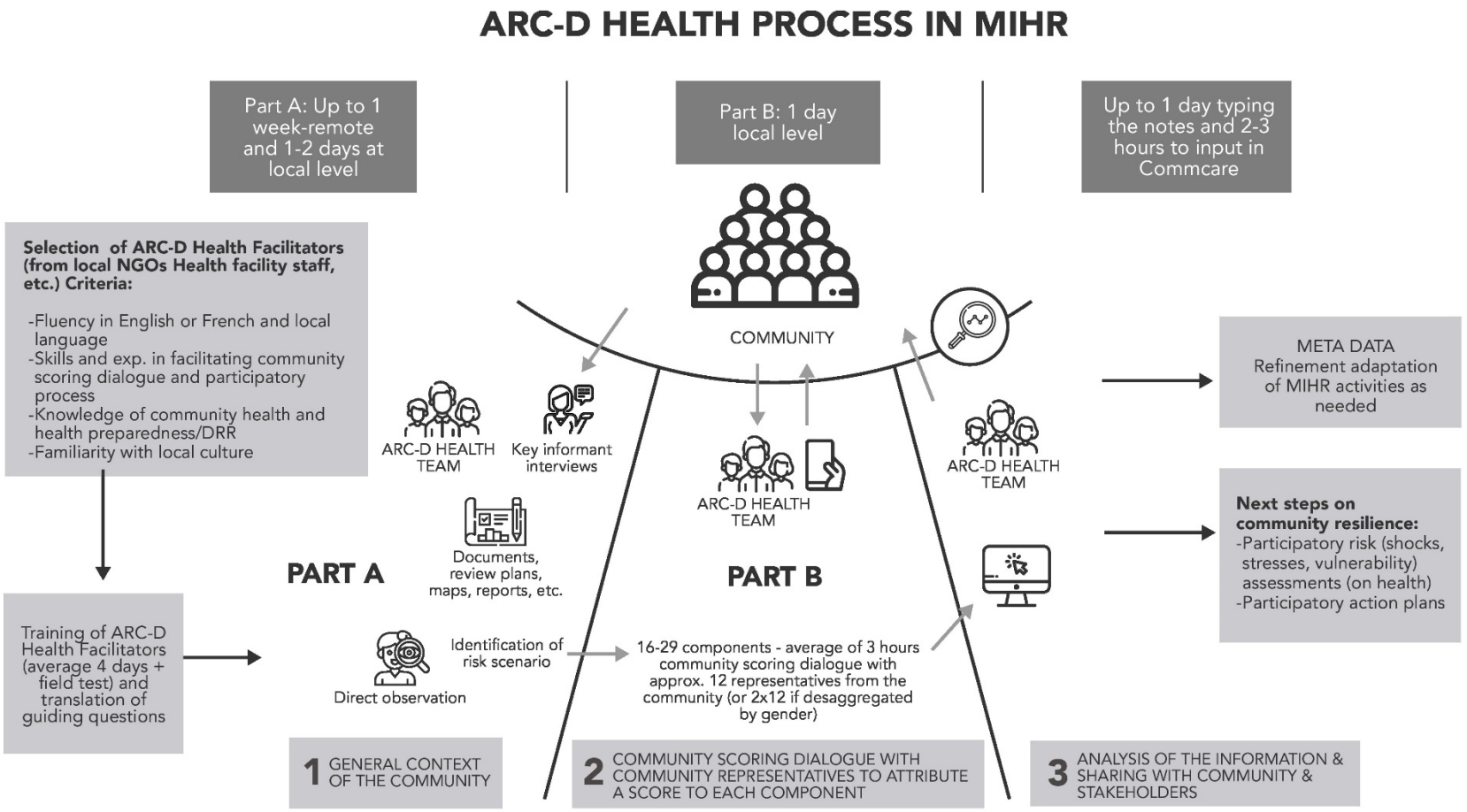
PROCESS OF CONDUCTING ARC-D HEALTH

Figure 3 below presents the different steps and time frames needed to conduct an ARC-D Health assessment in a community. The assessment starts with gathering information to understand the community context and identifying the main risk scenario. This is **Part A.**

Then one or more CSDs are organized to discuss each ARC-D Health component against the main risk scenario, and scores are given to each component being assessed. This is **Part B**. Facilitators then process the collected data into reports online (using a data management platform like CommCare) and disseminate the results of the assessment with community representatives and key stakeholders.

[12] GOAL. 2016. *Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit*. https://www.goalglobal.org/wp-content/uploads/2019/11/ARC-D-Toolkit-User-Manual-2016.pdf.

Figure 3. How ARC-D Health Works in the MIHR Context



Source: MOMENTUM Integrated Health Resilience 2022, adapted from GOAL Haiti

ACTIVITIES AND RESOURCES REQUIRED TO COMPLETE AN ARC-D HEALTH ASSESSMENT

Before working in the community, preparations for an ARC-D Health assessment include:

- Translating and adapting the CSD questionnaires into the local language (see the individual component sheets in Appendix 2).
- Arranging training for the facilitators and note takers; at least four days should be set aside, including one day of practice for the facilitators in a community.

Once in the community, the following resources and activities are needed to complete the assessment:

- At least a two-person research team (well-trained in ARC-D Health) to conduct Parts A and B of the assessment: one CSD facilitator and one note taker. Both team members will also conduct KIIs; collect secondary data; and manage logistics for their travel, food, and lodging in the communities.
- At least one CSD per community and per risk scenario (average 3 hours).
- Between 8 and 12 persons per dialogue. If needed, depending on the context, two separate CSDs can be organized by gender. In this case, the CSDs can be done simultaneously by two teams or back-to-back by one team, but this will double the time needed.
- A safe and comfortable location and refreshments are needed for the CSDs, as well as adherence to social and public health measures (e.g., COVID-19 prevention).
- Incentives for participants if/when needed.
- Consent forms.

Throughout this process, the assessment teams will receive continued support from the MIHR Resilience Lead, country-level Resilience Advisor, and in-country MERL team, along with representatives of the MIHR headquarters team as needed.

3. METHODOLOGY AND TOOLS

PART A. ANALYSIS OF THE COMMUNITY CONTEXT

The first part of the assessment serves as a preliminary analysis of the general context of the community. The information gathered in Part A is used to appropriately adapt the discussion questions for the CSDs conducted in Part B. Part A of the assessment is not specifically focused on health but aims to provide a comprehensive overview of the community context. Data collection methods for this part include a desk review, KIIs, and direct observation. Items explored in this section include basic population numbers and subgroups, the existence and activity of local governance groups, the existence and use of plans at the community level, descriptions of the natural and physical environment, identification of the most vulnerable groups, and the main shocks and stresses affecting the community. Finally, how these shocks and stresses interact and interrelate is analyzed to

identify the "risk scenarios" that most impact the community and, particularly, the health and well-being of MIHR's target groups.[13]

KEY INFORMATION TO COLLECT

The information collected in Part A is principally objective data, but some limited subjective data may also be gathered. Templates of the community data collection forms are included in Appendix 1.

- **Form 1: Location of community**: Name of community, all administrative levels, and GPS data.
- **Form 2: Population data**: To the extent possible, data should be disaggregated by gender and age brackets, as relevant for MIHR purposes, e.g., <5 years, 5-10 years, 11-14 years (very young adolescents), 15-19 years (adolescents), 20-24 years (young people), 25-49 years, and 50+ years. In many cases, these data may be difficult to obtain. Therefore, estimates based on higher-level data (municipality, district, etc.) are acceptable. Please note that the age categories can be adapted based on the country and community contexts where ARC-D Health is applied.
- **Form 3: Demographic characteristics**: Types of livelihoods, religious affiliation, types of land tenure, education attainment, ethnic groups, and any other category considered relevant for MIHR. As much as possible, an approximate percentage of the population for each category is needed.
- **Form 4: Community organizations and governance structures**: List and briefly describe the main organizations and groups (even informal groups) that exist in the community—e.g., water management committees, councils of elders, parent-teacher associations, cooperatives, village savings and loan associations (VSLAs), disaster risk reduction (DRR) committees, peace committees, health committees, religious groups (e.g., Dorkas society), and sports clubs.
- **Form 5: Available plans and documents at the community level**: List any existing and available plans and documents related to community development in general or by sector, such as health, infrastructure, DRR, economic recovery, peace, environmental management, and land use management. If no documents are found at the community level, higher administrative level documents and plans that clearly mention and include the community can be reviewed.
- **Form 6: Environmental description**, which is divided into two parts: the **natural environment** and the **built environment**. For the natural environment, the research team needs to describe the ecological zone: climate, seasons, ecosystems, and natural assets that the community depends on (water bodies, vegetation types, soil conditions, etc.) as well as existing and potential disease vectors. For the built environment, list the different elements of infrastructure and briefly describe their condition, including housing, latrines and sanitation, health facilities, schools, public buildings, religious buildings, roads, bridges, drainage systems, water systems, electricity, and communication systems.
- **Form 7: Most vulnerable groups**: To the extent possible, the research team should estimate percentages of the population falling under the following categories: extremely vulnerable children (e.g., child laborers, child soldiers, and orphans); children under the age of 5 years; pregnant and lactating women (PLW); female-headed households; child-headed households;

[13] GOAL. 2016. "Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit." https://www.goalglobal.org/wp-content/uploads/2019/11/ARC-D-Toolkit-User-Manual-2016.pdf.

persons with serious/chronic illness; persons with a physical disability; persons with a sensory disability; and persons with an intellectual disability. Please note that this list is not exhaustive; relevant data needs to be collected based on the individual community context.

- **Form 8: Identification of shocks, stresses, and risk scenarios**
    - **Shocks**: List and briefly describe the shocks that could occur in the community. **Form 8A of Appendix 1** provides a long list of potential shocks to help identify shocks to which the community could be exposed. The different shock categories include geological; hydro-meteorological; biological (epidemics, epizootic diseases, and crop infestations and diseases); human-induced shocks, such as conflict and outbreaks of violence; inter-/intra-communal conflict (cattle rustling, gang violence, disputes over natural resources); and economic/market crises. This list of shocks is not exhaustive; others may be added based on the community context.
    - **Stresses**: List and briefly describe the stresses currently affecting the community or those that could develop in the near future. **Form 8B of Appendix 1** includes a representative but not exhaustive list of potential stresses, which are broken down into three categories: environmental/biological, economic, and social.
    - **Risk scenarios**: For this part of the assessment, select up to three main shocks that have a strong potential impact on the health of MIHR target groups (e.g., children under 5, PLW, women of reproductive age) and their access to quality MNCH/FP/RH services. The identification of these main shocks should be done in consultation with the key informants and/or community health workers (CHWs).

Once the relevant shocks (up to three) are determined, identify which stresses could increase the vulnerability of MIHR target groups to the identified shocks and thus the overall magnitude of the potential impact.

Next, identify and describe the potential tangible and intangible effects on the community and the target group/s. Here, the research team should focus on the health effects for target groups, but additional impacts on the community—e.g., disruptions to essential services and physical and financial damages and losses—can be described.

Finally, the research teams should identify and briefly describe any coping mechanisms (positive and negative) that the community uses to deal with the risk scenario based on their knowledge from previous occurrences or the community's current preparedness status.

DATA COLLECTION METHODS AND SOURCES

For Part A, three data collection methods are recommended—desk review, KIIs, and direct observation—and should be used concurrently as far as possible to enable the triangulation of the captured data. Each method is described in the sections below, and Table 1 provides an illustrative summary of the recommended methods and sources that can be used to collect the different types of required community information.

Desk review/secondary data gathering

Sufficient preparation and data collection before the field assessment will enable a more targeted and efficient consultation with the community. This should include a review of local plans and reports (on, for example, health, livelihoods, and education) produced by government institutions and/or NGOs, as well as any studies and research documenting the specific community's socioeconomic status (main livelihoods, health status, etc.) and cultural context (religion, present ethnic groups, etc.). These data will inform the decision about which approaches are the most appropriate to adopt for the field assessment.

If data are unavailable at the community level, information may need to be sourced from a higher administrative level, such as the municipality or district. Importantly, secondary data collection at higher levels should be completed in advance of the KIIs and observations to both identify data gaps and enable the data to be validated/triangulated during field work. Findings from other context and fragility assessments are key inputs for the desk review.

Key informant interviews

The KII is the core method applied in Part A of the ARC-D Health assessment, assuming there is community leadership whose focal points can provide information on the governance structures, population data, livelihoods, vulnerable groups, and main shocks and stresses. Besides community leaders, representatives from government institutions at the local level (e.g., municipal authorities or ministries of health, education, and agriculture) and representatives from NGOs and civil society organizations (CSOs) working in the area/community could also provide valuable information, which may be less biased than the information provided by the community leaders.

Depending on the information needs/gaps, interviews with a minimum of three and up to eight key informants are recommended.

Questions should be tailored to each informant's knowledge of the community. For example, interviews with older community members, who have lived their whole life in the community, might focus on many issues, while an interview with a local representative from the Ministry of Education will likely focus on questions related to education, population, and maybe a few other areas, depending on his/her involvement with the community.

A **signed consent form** is required for all KIIs. All participants need to be advised that their names will be available only to the ARC-D Health team and will not be reported; however, their positions/roles may be reported. Additionally, the team needs to clearly explain that all information collected will be used in the overall assessment, but if someone does not wish to provide information, there will be no negative consequences for them.

Direct observation

While conducting the KIIs in the community, the research team should be actively observing and documenting the physical characteristics of the surroundings, including the condition of houses, roads, latrines, and water points, as well as the status of local vegetation, crops, soil, and bodies of water. In addition to the natural and built environment, the team should also observe and document

specific behaviors and practices, particularly those related to health, personal care, hygiene, sanitation, and the like.

Table 1. Summary of Methods and Sources/Informants for Each Category of Community Information Required

Required information	Recommended methods	Potential sources
Population	• Document review (e.g., census, municipal reports) • KIIs	• National data and statistics/census office (may be accessible online) • Local authorities • Local health office • Local leaders
Demographic characteristics (e.g., education level, religion, livelihood, land tenure, ethnicity)	• Document review • KIIs	• Local authorities • Online sources • Local agricultural department, chamber of commerce • Local education office, education centers • Religious leaders • Local leaders • NGOs
Community organizations	• Document review • KIIs	• Local authorities • Online sources • Local leaders
Plans and documents	• Document review • KIIs	• Local authorities • Online sources • Local leaders • NGOs
Natural environment	• Direct observation • Document review	• Online sources • Local authorities, e.g., environment office • Environmental NGOs
Built environment	• Direct observation • Document review • KIIs	• Online sources • Local authorities: infrastructure office • NGOs • Local leaders
Most vulnerable groups	• KIIs • Document review	• Local authorities • Local health office/health centers • Local education office, education centers • NGOs • Local leaders
Shocks/Stresses/ Risk scenario	• Conflict Sensitivity/Context and Fragility Assessments (MIHR) • Document review • KIIs • Direct observation	• Online sources • Local authorities • NGOs • Local leaders

IDENTIFICATION OF THE RISK SCENARIO(S)

The identification of the principal risk scenario is a key output of Part A of the assessment. This information is primarily collected through the KIIs, particularly with community leaders and health workers. If available, the information gathered from the KIIs should be triangulated with secondary data—e.g., existing risk assessments or risk maps and contingency plans. Importantly, after identifying the different shocks that could impact the community, key informants should be asked which shocks they think have the greatest impact on their community, particularly on the health and well-being of MIHR target groups.

Using the collected information, the research team will initially identify and describe up to three risk scenarios. From these, the risk scenario with the greatest impact on the health of the population, especially on MIHR target groups, will be chosen as the principal risk scenario and used in Part B to assess the health resilience of the target community.

Form 8C of Appendix 1 shows the format for developing risk scenarios.

For each scenario, the research team will need to capture data on:

- The shock(s): primary and secondary, if any.
- Existing stresses that would exacerbate the impact of the shock(s).
- The effects on the community—e.g., the damages, losses, and disruptions caused over the short- and long-terms—particularly the impacts on:
    - The health status (physical, mental) of the population.
    - Health behaviors/practices, adherence to treatment, and health care-seeking.
    - Access to, availability, quality, and utilization of health services for MIHR target groups.
- The coping capacities/mechanisms (both positive and negative) adopted.

Of note, there could be a **"multi-shock" risk scenario**, i.e., when a shock is causally interconnected to or compounded with other shocks. For example, a rapid influx of IDPs (primary shock) that leads to a disease outbreak (secondary shock) would be considered a multi-shock risk scenario. Similarly, a heavy storm (primary shock) that leads to flooding or mudslides, which would then lead to a disease outbreak (secondary shock), would also be considered a multi-shock risk scenario.

The principal risk scenario chosen to assess community health resilience in Part B should comprise up to a maximum of three shocks; otherwise, the CSD can become too long and difficult to manage. This, in turn, could affect the team's ability to properly assess resilience for all parts of the chosen scenario.

If a multi-shock scenario is selected as the principal risk scenario for assessment in Part B, several guiding questions for the CSD will need to be adapted. For example, when asking about contingency planning for a two-shock risk scenario, a separate plan for each of the shocks is not expected. Rather, the team should explore whether the local contingency plan addresses both shocks.

PART B. ASSESSMENT OF COMMUNITY HEALTH RESILIENCE

The second part of ARC-D Health assesses the community's level of health resilience to the chosen risk scenario(s) identified in Part A. This assessment is based on the responses of community representatives to key questions on up to 29 disaster resilience components, of which 16 components are compulsory for the purposes of ARC-D Health and 13 components are optional. At a minimum, the assessment should cover the 16 compulsory components plus any optional components considered by the MIHR partner country team to be relevant to the community context.

Dropping optional components should be done on a case-by-case basis and justified with one or several reasons—e.g., low relevance to the context, to the chosen risk scenario, and/or to the planned MIHR or Ministry of Health (MOH) activities in the area, or if a high level of cultural or political sensitivity exists around the component theme. However, the final decision about which optional components should be removed from the ARC-D Health assessment should be made by the in-country MIHR MERL and Resilience staff.

The assessment is conducted through one or more CSDs with groups of between 8 and 12 persons that include representatives of MIHR target populations and other key community players. A structured question guide is used to facilitate a discussion, and each component is ranked on a scale from 1 to 5 based on five potential answers/resilience characteristics to the key question for that component. A score of 1 point (Level 1) indicates weak community resilience for the component, while a score of 5 points (Level 5) indicates strong community resilience.

As with the original ARC-D components, the ARC-D Health components are grouped under four thematic areas aligned with the SFDRR priorities:

1. Understanding disaster risk.
2. Strengthening disaster risk governance to manage disaster risk.
3. Investing in disaster risk reduction for resilience.
4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction.

Table 2 lists the full set of components by thematic area along with key questions. It also denotes the type of resilience capacity measured, i.e., absorptive, adaptive, or transformative, for each component. The descriptions for compulsory components are shown in bold.

Table 2. List of Compulsory and Optional Components of ARC-D Health

SFDRR Thematic Area	ARC-D Health Component	Key Question	Resilience Capacities
Understanding Risk (related to health)	**1. Risk assessment**	Has the community been involved in a participatory risk assessment of the *[chosen risk scenario]* that combines local knowledge and perceptions of risk with technical and scientific knowledge, data, and assessment methods; has it shared the findings widely; and does it have human resources capable of conducting/updating such assessments?	Absorptive Adaptive

SFDRR Thematic Area	ARC-D Health Component	Key Question	Resilience Capacities
	2. Dissemination of health preparedness/ resilience information	Have community members been exposed to or participated in health preparedness/resilience awareness events in relation to the *[chosen risk scenario]* (campaigns, discussions, and trainings) and improved awareness and practices as a result?	Absorptive Adaptive
	3. Education of children on health resilience (optional)	Are health preparedness/resilience knowledge and capacities being passed on to children formally through local schools and informally via oral tradition from one generation to the next?	Adaptive Transformative
Strengthening Governance to Manage Risks (to Health)	4. Health resilience in development planning (optional)	Does the community see health preparedness/ resilience in relation to the *[chosen risk scenario]* as an integral part of plans/actions to achieve wider community goals (e.g., poverty alleviation, quality of life)?	Transformative
	5. Community decision-making	Is the community leadership committed, effective, and accountable?	Transformative
	6. Inclusion of vulnerable groups	Are the vulnerable groups in the community (specifically, IDPs, pregnant and lactating women, mothers with children under 5, youth, adolescent parents, and persons living with a disability) included/represented in community decision-making and management of health preparedness and recovery in relation to the *[chosen risk scenario]*?	Transformative
	7. Participation of women	Do women participate in community decision-making and management of health preparedness/ resilience in relation to the *[chosen risk scenario]*?	Transformative
	8. Rights awareness and advocacy (optional)	Is the community aware of its rights, relevant legal mechanisms, and responsible actors for their fulfillment, notably in terms of health preparedness/resilience in relation to the *[chosen risk scenario]* and does it advocate for these?	Transformative
	9. Partnerships for health resilience	Are there clear, agreed-upon, and stable partnerships between the community and other actors (e.g., local authorities, NGOs, businesses) that provide resources for health preparedness/resilience in relation to the *[chosen risk scenario]*?	Transformative
Reducing Vulnerability for Health Resilience	10. Sustainable environmental management (optional)	Does the community adopt sustainable environmental management practices that reduce health risks in general as well as the health impacts of the *[chosen risk scenario]*?	Transformative
	11. Water security and management (optional or see #15)	Does the community have access to a sufficient quantity and quality of water for domestic needs for the *[chosen risk scenario]*?	Adaptive

SFDRR Thematic Area	ARC-D Health Component	Key Question	Resilience Capacities
	12. Health awareness, behaviors, and practices ("calm"[14] times)	Do community members maintain good physical and mental health in "calm" times through appropriate awareness and practices (e.g., adequate nutrition, hygiene, and health-seeking behaviors)?	Adaptive
	13. Access to health services ("calm" times)	Do community members have access to health care services that meet their needs in "calm" times?	
	14. Quality of health care ("calm" times)	Do community members believe that they receive quality health care services in "calm" times?	
	15. Secure and nutritious food and water supply	Does the community have a secure, sufficient, and continued food supply and access to sufficient quantity and quality of water for domestic needs during the *[chosen risk scenario]*?	Absorptive Adaptive
	16. Shock/stress-resistant livelihoods practices (optional)	Does the community employ livelihood practices that are "resistant" to the *[chosen risk scenario]* for food and income security?	Adaptive
	17. Market access (optional)	Are the local market links for products (e.g., medicines), labor, and services protected against the *[chosen risk scenario]*?	Transformative
	18. Access to financial services	Do community members have access to affordable and flexible financial services (e.g., mobile money, savings and credit schemes, microfinance), whether formal or informal?	Absorptive
	19. Income and asset protection (optional)	Are household asset bases (income, savings, and convertible property) sufficiently large, diverse, and protected to ensure reduced vulnerability to the *[chosen risk scenario]*?	Adaptive
	20. Social protection (optional)	Does the community have access to informal and/or formal social protection schemes, specifically for health, that support health preparedness and resilience?	Absorptive Transformative
	21. Social cohesion and conflict prevention (optional)	Is there a sense of peace/security and are there effective conflict prevention/mitigation mechanisms both within the community and with other communities?	Absorptive Transformative
	22. Critical infrastructure	Are the community's critical infrastructure and basic services resilient/resistant to the *[chosen risk scenario]*?	Absorptive Transformative
	23. Housing (optional)	Are the community's houses and sanitation facilities resilient/resistant to the *[chosen risk scenario]*?	Absorptive

[14] As MIHR works in fragile settings, the term "calm" times is very subjective. In the context of ARC-D Health, the term is used to contrast with an acute crisis.

SFDRR Thematic Area	ARC-D Health Component	Key Question	Resilience Capacities
Enhancing Preparedness for Effective Response and to "Build Forward Better"	**24. Contingency planning and capacities in health preparedness and response**	Does the community have a trained and operating health preparedness and resilience organization that uses a communally developed contingency and recovery plan(s) that is widely understood and includes measures to protect vulnerable groups for the *[chosen risk scenario]*?	Absorptive
	25. Surveillance and Early Warning System	Is there an operational surveillance and/or early warning system in the community for the *[chosen risk scenario]*?	Absorptive
	26. Health services in emergencies	Does the community have access to health care facilities and health workers equipped and trained to respond to the physical and mental health consequences of the *[chosen risk scenario]*?	Absorptive
	27. Education services in emergencies (optional)	Do education services have the capacity to continue operating during the *[chosen risk scenario]*?	Absorptive
	28. Emergency infrastructure (optional)	Are emergency shelters (purpose-built or modified) accessible to the community and do they have adequate facilities to meet the basic needs of all the affected population?	Absorptive
	29. Leadership and volunteerism in health response and recovery	Does the community play a leading role in coordinating health preparedness, response, and recovery, reaching all affected persons (including the most vulnerable: For ARC-D Health, the most vulnerable groups include orphans and vulnerable children and youth [e.g., child laborers]; children under age 5; PLW; female-headed households; child-headed households; adolescent parents; persons with serious/chronic illness; and persons with a physical, sensory, or intellectual disability) through an organized and trained group of volunteers during the *[chosen risk scenario]*?	Absorptive

Each component should be thoroughly explored with the group using questions to stimulate discussion as well as the recommended means of verification if needed. See the "Suggested Guiding Questions" and "Suggested Means of Verification" sections in the Individual Component sheets in Appendix 2. At the end of the discussion for each component, the facilitator makes an informed judgment on the community's resilience level from 1 to 5. The facilitator then paraphrases (in non-technical language) the description of the chosen resilience characteristic as it appears in the assessment tool or alternatively (if not an exact fit) summarizes the group's discussion regarding that component. The focus group participants then validate the facilitator's assessment by either confirming or contradicting the description of their resilience level. In the latter case, the facilitator must probe further until consensus within the group is reached.

DATA COLLECTION METHOD: COMMUNITY SCORING DIALOGUE

As mentioned above, Part B of the ARC-D Health assessment collects qualitative data and information on community resilience in the context of the risk scenario selected during Part A of the assessment. These data are based on the perceptions and opinions of community members around the 16 compulsory and 13 optional resilience components listed in Table 2. Data are collected through one or more CSDs with between 8 to 12 community representatives per dialogue.

Who conducts the CSD?

At least two persons trained in ARC-D Health should conduct the CSD: one facilitator and one note taker. The facilitator's role is to introduce the components, facilitate the discussion, and propose the scores for each component. The note taker's role is to take detailed notes of the discussions and, when relevant, capture the non-verbal expressions of the participants. It is advisable to include a third person as a backstop in case one team member is unavailable and to provide logistical support for the dialogues, including the registration of participants, the provision of incentives, and serving food and beverages during the activities.

Who are the participants? Number and profile

Participants should be carefully selected and scheduled several days prior to conducting the CSD to ensure the availability of key community representatives who are able to provide valuable perspective on the wide range of resilience topics covered in the dialogue.

The selection, invitation, and mobilization of participants should be done by the ARC-D Health team with the support of one or more local CHWs and/or community leaders, potentially during the field visit when Part A of the assessment is being completed.

Invitations should be sent to at least 12 key community representatives who have the following profiles:[15]

- Members of pertinent local committees (e.g., health; water, sanitation, and hygiene (WASH); and environment) and women's groups.
- Teachers (but only if residents of the community).
- Health workers, including traditional workers such as traditional birth attendants and "healers," but only if residents of the community.
- Mothers of children aged 0–5 years.
- People belonging to vulnerable groups (as identified in Part A).
- Representatives of the main livelihoods groups (e.g., farmers, pastoralists, fishermen, business owners, laborers).
- Youth (but over 18 years old to avoid complications with consent).

[15] Adapted from: GOAL. 2016. "Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit." https://www.goalglobal.org/wp-content/uploads/2019/11/ARC-D-Toolkit-User-Manual-2016.pdf.

Importantly, the research team should aim to achieve a balance of gender and diversity of age groups. If it is not culturally or socially appropriate to hold mixed gender dialogues, the team will need to organize separate CSDs with men and women (and other minority groups, if required). Arranging separate discussions will typically enable participants to speak more openly but may increase the time and budget of the ARC-D Health assessments. See the sub-section "Promoting inclusivity" in the section "Steps and Tips for Conducting a Community Scoring Dialogue" below.

Order of discussion of the components

The ARC-D Health components in Table 2 above are listed in the order of the components in the original ARC-D Toolkit. However, to ensure a more logical flow of discussion from one component to another, it is recommended that the research team members follow the order presented in Table 3 for the discussion of the 16 compulsory resilience components.

Table 3. Recommended Order of Components for Discussion in CSD

Recommended order for discussion in CSD	Components
1	12. Health awareness, behaviors, and practices ("calm" times)
2	13. Access to health services ("calm" times)
3	14. Quality of health care ("calm" times)
4	1. Risk assessment
5	24. Contingency planning and capacities in health preparedness and response
6	25. Surveillance and EWS
7	2. Dissemination of health preparedness/resilience information
8	26. Health services in emergencies
9	15. Secure and nutritious food and water supply
10	18. Access to financial services
11	22. Critical infrastructure
12	5. Community decision-making
13	7. Participation of women
14	6. Inclusion of vulnerable groups
15	29. Leadership and volunteerism in health response and recovery
16	9. Partnerships for health resilience

Introducing, discussing, and scoring a component

Each resilience component is introduced by reading out the title of the component. When necessary, the facilitator can also give a general explanation of what is being assessed under that component. The facilitator then asks the group a series of relevant questions for that component, and the participants' responses are used to determine the community's **specific resilience characteristic** on a scale of Level 1 to Level 5, where Level 1 indicates minimal resilience and Level 5 indicates a resilient community.

Appendix 2 includes component sheets for each of the 29 ARC-D Health components. As an example, Table 4 below shows the discussion sheet for Component 7, "Participation of women," which shows the key question, generic resilience levels/scores, descriptions of the specific resilience characteristic for each level, suggested guiding questions, and suggested means of verification.

Table 4. Example of ARC-D Health 5-Level Scale for Community Resilience Characteristics/Scores

Component 7: Participation of women		**Key question:** Do women participate in community decision-making and management of health preparedness/resilience in relation to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Women **never participate** in health preparedness/resilience awareness decision-making and management. Community **decisions and actions never address** their needs and priorities.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Women have some awareness of the issues but have limited opportunities to participate** and limited representation in community health preparedness/resilience awareness decision-making and management. Community **decisions and actions rarely address** their needs and priorities.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Women have good awareness and occasionally** participate/are represented in community health preparedness/resilience awareness decision-making and management. Community **decisions and actions sometimes address** their needs and priorities.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	**Women have good awareness and regularly and actively** participate/are represented in community health preparedness/resilience awareness decision-making and management and **occupy leadership positions** within the decision-making body**.** Resulting decisions and actions **frequently address** their needs and priorities.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Women regularly and actively** participate/are represented in community health preparedness/resilience awareness decision-making and management and **occupy high-level leadership positions** within the decision-making body. Resulting decisions and actions **always address** their needs and priorities.

Suggested guiding questions	**Suggested means of verification**
• In what ways do women participate in the decision-making process including decision-making on health at the household and community level? (When relevant: in polygamous family, is there a difference between decision-making power between first, second, third wives? What is the influence of mothers-in-law and grandmothers, adult women, young women, adolescent women)? • How would you describe their participation? Is it active or inactive? Frequent or infrequent? • How many women participate/are represented within decision-making body on management of health preparedness and particularly DRR decision-making-body for the *[chosen risk scenario]*? And health-related bodies and committees?	• Meeting minutes. • Meeting attendance lists. • Photos of meetings/ assemblies. • List of members of decision-making body and their positions.

• What kind of positions do they usually occupy? Do they occupy leadership positions? • How often do the resulting decisions and actions take into account the opinions and needs of vulnerable groups? Can you give examples?	

Both the characteristic descriptions and the key questions are formulated for the facilitators, not for the participants in the CSDs, as these are more technical. Instead, the facilitator should use the "Suggested Guiding Questions" listed on each component sheet. These short and direct questions are designed to break the key question down into more manageable discussion segments and enable an easier selection of the characteristic (from Level 1 to Level 5) that is the best fit for the interviewed community, with the emphasis on "best fit."

At times, the answers by CSD participants will be practically identical to one of the five resilience characteristic descriptions listed in the discussion sheet for that component, making it easy to select the appropriate resilience level. Other times, the answer will not fully align with any of the descriptions. This is not a problem. In this case, the facilitator can summarize the situation, exactly as described by the community, and use his/her informed judgment to assign the community's resilience level. The level assigned should always be validated with the group before moving on to the next component.

Interpreting the scoring terminology

The descriptions of resilience characteristics in the individual component scoring sheets feature the following technical terms that should be appropriately tailored to the context and chosen risk scenario.

- "Health preparedness/resilience" refers to actions that reduce the chances of the chosen risk scenario to worsen the health status, access, and quality of care of the target group.
- "One-off, piecemeal actions" are usually found at a Level 2 resilience description. These actions are unsustainable, incomplete measures that do not improve resilience over the long term.
- "Long-term actions" are typically found at a Level 3 resilience description. These actions are positive measures of a long-term nature that are nevertheless insufficient in their number and/or nature to adequately enhance resilience and are not supported by broader planning and external systemic factors.
- "Tied to a long-term strategy" is usually found at a Level 4 resilience description. This denotes a long-term vision of the leadership and/or the community members, which can take the form of a documented common plan or any indication of commitment or vision for positive measures to be sustained and scaled up (often in accordance with higher-level planning).

For some components, the five ascending resilience characteristics are expressed in terms of increasing quantities or a critical mass of households, community members, or target populations (e.g., children under 5), such as "few community members," "some," "most," and "all." These terms should be interpreted as follows:

- Few: up to approximately one-quarter of the community population (0-25 percent).

- Some: approximately one-quarter to one-half of the community population (25-50 percent).
- Most: approximately 50 to 90 percent of the community population.
- All: 90 to 100 percent of the community population.

STEPS AND TIPS FOR CONDUCTING A COMMUNITY SCORING DIALOGUE

Attention!

The guiding questions are **SUGGESTIONS** only. They need to be reviewed and tailored to the specific context as needed and based on information captured during Part A of the assessment.

Promoting inclusivity

Like all participatory approaches, ensuring that everyone's voice is heard and that discussions reflect the community's shared understanding is not easy. Stronger individuals or groups may represent their private interests as public concerns, and marginal or stigmatized groups may not speak up or even mobilize. Similarly, the perspectives of some participants or community groups may be censored or obscured by gender dynamics, power disparities, or other factors that prevent free expression and debate. The challenges inherent in mixed CSDs as well as traditional FGDs apply to ARC-D Health assessments.

Therefore, when and where required, the involvement and empowerment of marginalized or vulnerable groups may be enhanced through holding separate CSDs for men and women and/or different groups in the community. Additionally, the facilitator's capacity to create a safe space for conversation is vitally important, as well as making an ongoing effort to consult widely and create non-threatening opportunities for less powerful groups and persons to express their perspectives and challenge prevailing views. There are no shortcuts for getting this process right.

Before opting to organize disaggregated CSDs, consider whether the facilitator can act as a "first line of defense" to ensure everyone's full engagement and participation in the mixed CSD. This approach has been found to work in communities where certain groups may be more marginalized but will respond positively to the facilitator's invitation to participate more fully or the facilitator's ability to create a safe environment for marginalized persons to voice their concerns freely and safely. In contrast, in areas where cultural norms on open public expression in a mixed setting are deeply entrenched, segregated CSDs are a better option.

Time, sensitivity, and a solid understanding of local social relations are needed to organize the community dialogues successfully. When organizing disaggregated CSDs, an important point to consider is the consolidation/aggregation of findings, as the CSDs will produce two or more resilience scores per community. In such cases, the ARC-D Health team should convene a meeting with the MIHR core Resilience Advisor or Resilience Lead and agree on the community-wide score (based on analysis, not a mathematical averaging of scores).

Familiarization with and adaptation of the questionnaire

All ARC-D Health facilitators must familiarize themselves thoroughly with the tool's questions and discussion plan before field application. The key question and suggested guiding questions for each component are the vehicles for moving the discussion in the desired direction. They have been designed to provide sufficient understanding of the community context to enable a confident selection of the appropriate resilience level. However, they remain suggestions only and should still be carefully reviewed and modified according to the context, particularly from the information obtained in part A, or any specific needs of the assessment.

Modifications can include changes in terminology or rephrasing or adding guiding questions, if necessary. Context-specific adaptation also applies to the Suggested Means of Verification.

We recommend that facilitators use role-playing to practice hosting the dialogue and determine the best ways to present questions in a community setting.

Translation of the questionnaire

A standardized translation of the adapted questionnaire into the local language is essential to ensure coherent and consistent use of language among different facilitators and to reduce disparities in the data collected and their interpretation. Therefore, before undertaking any assessment, the research team will need to develop an accurate and commonly agreed-on translation. For this process, back translation can help identify words and phrases that are interpreted differently by different facilitators.

Conducting one CSD for two different risk scenarios

The assessment of two different risk scenarios simultaneously may arise from the need to ensure that the ARC-D Health assessment reflects the complexity and variety of risk scenarios faced by a given community in a way that is cost-efficient in terms of field trips and community effort. Although this option can prolong an individual assessment, it will typically be shorter than the time, expense, and effort required to conduct two or more separate assessments, given that some of the 16 mandatory components are not shock-sensitive (e.g., participation of women, health care in "normal" times) and need only be captured once for a variety of risk scenarios.

However, this option should remain **an exception**, agreed to by the MIHR MERL and Resilience staff in advance and then well-planned and rehearsed.

Selection of location for the CSD, provision of refreshments, and deciding on incentives

Typically, a CSD will take approximately 2 to 3 hours, if not longer for novice facilitators. Therefore, it is essential to carefully choose the locations where participants feel safe, are protected from the elements (sun, rain, wind) and potential noise (children playing outside), and can be seated comfortably in a culturally appropriate manner with sufficient space (e.g., on stools, chairs, benches, or straw mats that cover the floor). Locally acceptable and nutritious lunches or snacks, as well as water or other acceptable beverages, are also needed. Ideally, food and beverages should be procured and prepared within the community and be "trash-free." If any trash or waste is generated, the ARC-D Health team is responsible for collection and proper disposal. The provision of incentives for participants will be decided on a case-by-case basis by the MIHR team and local partners.

How to introduce the CSD?

To start the CSD, the facilitator introduces the research team, the organization(s) they work for, some information about MIHR and its activities in the local area, and the reasons for conducting the present discussion. The text in Box 1 below provides facilitators with a suggested CSD introduction/opening.

Box 1. Suggested Introduction for the CSD

[Introduce yourself and your colleagues to the group.] [Give a brief introduction of your agency/organization and how long it has been working in the region and in what areas, as well as some information about MIHR.]

Today we are going to talk about health resilience, the ability of your community to prepare for and recover from a crisis, and its impact on your health and your access to quality health care.

[Confirm/validate the priority risk scenario identified in Part A and the groups who are most vulnerable in case of such a scenario.]

We will discuss what you do, how you plan, and how you organize to protect your community against [selected risk scenario]—and more particularly, how you prepare and protect your families, your health, and your access to health care. This discussion will help us see more clearly your current capacities to overcome [selected risk scenario] and identify clearly the factors that help or prevent you from doing so.

We will discuss [number of components selected; this should be at least the 16 key components] topics together, and at the end of each topic, we will agree on a description of your community's current situation. We would like you all to participate and pay close attention to what your fellow community members are saying so that we can create the most accurate picture possible.

Please understand that this is a conversation, not an audit.

There are no right or wrong answers, and names or any information that comes up in our conversation today and that you deem sensitive will not be shared without your consent. The more openly you express yourselves, the better understanding we will all have of the areas that need to be improved.

[Give an overview of the CSD layout, breaks, etc., and manage expectations regarding the support that will follow the assessment.]

Thank you for giving us your valuable time to answer these questions.

Source: Adapted from GOAL 2016.

During the introduction, it is also important to obtain participants' consent to record the discussion in writing. *Please refer to the MIHR consent guidelines/procedures for this element.* Additional consent will need to be obtained if the research team wishes to record the audio of the discussion or take photographs or video footage.

Tips for conducting a successful CSD[16]

- Arrange participant seating in a circle or semicircle, ensuring that everyone can see each other.

[16] Adapted from: GOAL. 2016. "Analysis of the Resilience of Communities to Disasters (ARC-D) Toolkit." https://www.goalglobal.org/wp-content/uploads/2019/11/ARC-D-Toolkit-User-Manual-2016.pdf.

- Consider the use of name tags (when socially acceptable and feasible) for better rapport between the facilitator and participants, and among participants if they do not all know each other.
- Maintain good eye contact to encourage participation.
- Use short "energizers" when you notice attention or energy in the group waning.
- Pace yourself as a facilitator; this is a long conversation. To complete the discussion in about 3 hours, you will need to spend an average of 8-12 minutes on each component. However, some components may take a lot less time and others a lot more time.
- Announce each component number and title clearly so that participants are fully aware and engaged in the process. Participants are more likely to keep their answers short if they know they still have, for example, 12 more components to discuss.
- Do not finish people's sentences or rush to fill the silence. Count to 5 before rephrasing a question.
- Be flexible with the order of components and guiding questions to remain responsive to the course of the conversation.
- Avoid interrogative techniques and endeavor to facilitate a conversation that triggers authentic replies.
- Provide lunch or snacks as per the schedule for breaks recommended in the facilitator's introduction to the group.
- When one person answers on behalf of the group, do not forget to inquire whether everyone else agrees. If more dominant personalities tend to monopolize the discussion, gently encourage other members to share their thoughts.
- In questions that explore knowledge (e.g., rights, hygiene practices), inquire whether the knowledge presented characterizes the participants in this focus group only or the whole community.
- Always frame the questions in terms of the chosen risk scenario (i.e., not as a "crisis" or "problem").
- At the end of each component, synthesize the situation as it has been discussed, or if it mostly or fully matches the provided level characteristic description in the questionnaire, paraphrase it for validation.
- Manage participants' expectations regarding support after the assessment (see the suggested introduction in Box 1 above and the suggested conclusion in Box 2 below).
- Relax and enjoy the discussion. Stay interested and focused on gaining insight into each of the components. Experience shows that facilitators who believe in the value of this exercise are more likely to carry out a meaningful discussion than those who are nervous and just want to get it over with quickly.

How to conclude the CSD?

At the end of the CSD, the facilitator should thank the participants; invite questions, concerns, or comments about the discussion that may not have been captured during the session; and let the group know when they can expect feedback on the findings of the assessment. The results of the

assessment should be shared with all relevant stakeholders, including communities, authorities, and CSOs, as appropriate. The text in Box 2 provides facilitators with a suggested conclusion to the CSD.

Box 2. Suggested Conclusion for the CSD

Thank you for your valuable time and participation in this discussion. Do you have any questions or comments about the discussion we have just completed?

We hope this has helped you see more clearly your abilities to prepare for, adapt and respond to, and recover together from a crisis, as it has helped us to understand these better. All the topics we discussed here today are key in understanding and improving these abilities.

[State when communities can expect feedback or a presentation of the assessment findings.]

[Manage expectations on the probability of your agency/MIHR supporting communities in the action planning process.] [If you are planning to share the information with other actors such as the government and NGOs, state this now.]

On behalf of myself and the other facilitators, thank you for your time.

Source: Adapted from GOAL 2016.

Of important note, the ARC-D Health assessment does not necessarily ensure appropriate interventions will be forthcoming to the participating communities. Communication and consultation with communities to explain the scope and purpose of the assessment are essential to facilitate accountable programming and manage community expectations. Communities should be aware of how the data will be used, understand that their participation will not necessarily lead to an intervention (which may support responses more reflective of reality), and be informed of how they can seek external support and/or facilitate changes internally.

CHECKLIST OF TASKS BEFORE GOING TO THE COMMUNITY

Careful planning and preparation are essential for the successful completion of the CSD. The research team needs to ensure that the tasks in the checklist below are completed before going to the community to host the discussion. The checklist is also relevant prior to conducting the analysis of the community context in Part A of the assessment.

Task	Completed
Preparation and Planning <u>Adapting and Testing Materials</u> • Have you adapted your question guide based on your knowledge of the community? • Have you translated the question guide (if needed) and tested it? • Have you learned and practiced the (translated) question guide with your peers? • Do you have a printout of the translated/adapted (if applicable) question guide and scoring scales/characteristics? <u>Team Roles and Responsibilities</u>	

• Have you clearly designated who will be the lead facilitator, note taker, and, if applicable, any other assistant facilitators? • Are the facilitators wearing appropriate visibility clothing, if needed? <u>Risk Scenario and Context</u> • Have you clearly identified and detailed the chosen risk scenario? • Have you conducted a thorough analysis of the community context (Part A)? **Logistics** • Have you made the lunch/snack arrangements for participants? • Have you arranged transportation for the team and materials to the community location? • Have you confirmed the venue/location for the community scoring dialogue and ensured it is accessible and appropriate for the session? **Community Engagement** • Have you informed or engaged with local leaders or representatives to ensure their support and involvement (where possible)? **Documentation and Materials** • Do you have a printout of the translated/adapted (if applicable) question guide and scoring scales/characteristics? • Have you taken enough note paper for the note taker? • Have you taken a participant attendance sheet and consent forms? • Have you taken any necessary visibility items (MIHR and USAID visibility materials)? • Have you taken recording equipment/a camera for documenting the session? **Safety and Security** • Have you assessed and mitigated any potential security risks in the area?	

DAILY TASKS DURING THE ASSESSMENT PROCESS

The assessment is an iterative process that continues throughout data collection with each community. During the data collection process, daily end-of-day debriefs with the Team Lead and CSD facilitators are highly recommended. Debriefs will enable timely corrective actions to be taken when needed, such as reassigning tasks within the team, further adjusting the question guide, and determining if additional information or means of verification are needed. In this way, team members can also share points of view on component scoring as well as record interesting highlights of the day. As much as possible, notes and scores should be digitalized daily by the team, in a Word document and/or in an Excel spreadsheet.

4. DATA ANALYSIS AND REPORT WRITING

At the end of the data collection process, the information on the community context (Part A) and the scores and notes taken during the CSDs (Part B) should be digitalized if not already done during the time in the field.

DATA ENTRY AND CALCULATION OF COMPONENT SCORES

To facilitate the analysis, individual component scores should be entered in an Excel spreadsheet with data disaggregated by community and gender as shown in the example in Table 5. Be sure to carefully match each score with the correct component, as the order of components discussed during the CSD may differ from the order in the data tables.

Table 5. Example of a Data Table of Individual Component Scores for Three Communities in Wau County, South Sudan

Component number and description		Wau County					
		Hai-Dinka		Hai-Kosti		Lokloko	
		Men	Women	Men	Women	Men	Women
1	Risk assessment	2	1	2	1	2	2
2	Dissemination of health preparedness resilience information	2	1	1	1	3	2
3	Community decision-making	2	2	2	1	2	3
4	Inclusion of vulnerable groups	2	1	3	2	3	2
5	Participation of women	3	2	3	2	4	3
6	Partnerships for health resilience	3	3	3	2	3	1
7	Health awareness, behaviors, and practices (“calm” times)	3	2	4	3	4	3
8	Access to health services (“calm” times)	3	2	3	1	3	2
9	Quality of health care (“calm” times)	4	3	3	2	3	3
10	Secure and nutritious food and water supply	3	2	3	1	2	1

The ARC-D Health scores and the scores for the three resilience capacities are calculated using the following formulas:

ARC-D Health score: Add the scores for each component and then divide by the total number of components assessed.

Absorptive capacity score: Add the scores of the specific components that contribute to absorptive capacity[17] and then divide by the number of components that contribute to absorptive capacity.

Adaptive capacity score: Add the scores of the specific components that contribute to adaptive capacity[18] and then divide by the number of components that contribute to adaptive capacity.

[17] See Table 2.
[18] Ibid.

Transformative capacity score: Add the scores of the specific components that contribute to transformative capacity[19] and then divide by the number of components that contribute to transformative capacity.

Note that some components contribute to two different capacities. The scores of those components are included in the calculation of both capacities.

The resulting resilience scores can then be interpreted based on the resilience levels described in Table 6.

Table 6. Description of Levels for Resilience Scores

Score range	Level of resilience	Level description
1–1.5 points	Very low resilience	Little awareness of issues and no action.
1.5–2.5 points	Low resilience	Some awareness and motivation, some action, but action is piecemeal and short-term.
2.5–3.5 points	Medium resilience	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.
3.5–4.5 points	Close to resilience	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.
4.5–5 points	Resilience	Actions are long-term, linked to strategies, address all aspects of the issues, and are embedded in society and sustainable.

To facilitate the analysis of community resilience, individual and/or average ARC-D Health component scores can be presented in data tables or illustrated using spider web and/or bar charts, as shown in the Figure 4 examples below.

Figure 4. Various Examples for the Presentation and Analysis of Resilience Scores

Figure 4a. Data Table

Region	Community	Risk Scenario	Average score	Resilience level
Timbuktu	Toya	Flood	2.34	Low
	Ber	Armed conflict and violence	2.19	Low
	Hondoubomo-koina	Armed conflict and violence	2.41	Low
	Abaradjou	Flood	2.09	Low
	Teherdjé	Armed conflict and violence	2.03	Low
Average Timbuktu score			2.21	Low
Gao	Bagoundié	Armed conflict and violence	1.47	Very low

[19] See Table 2.

	Berrah	Armed conflict and violence	1.42	Very low
	Wabaria	Armed conflict and violence	1.53	Very low
	Sossokoira	Armed conflict and violence	1.91	Low
	Boulgoundié	Armed conflict and violence	1.72	Low
Average Gao score			1.72	Low
Average resilience score, Mali			**1.91**	**Low**

Figure 4b. Spider Web Diagram

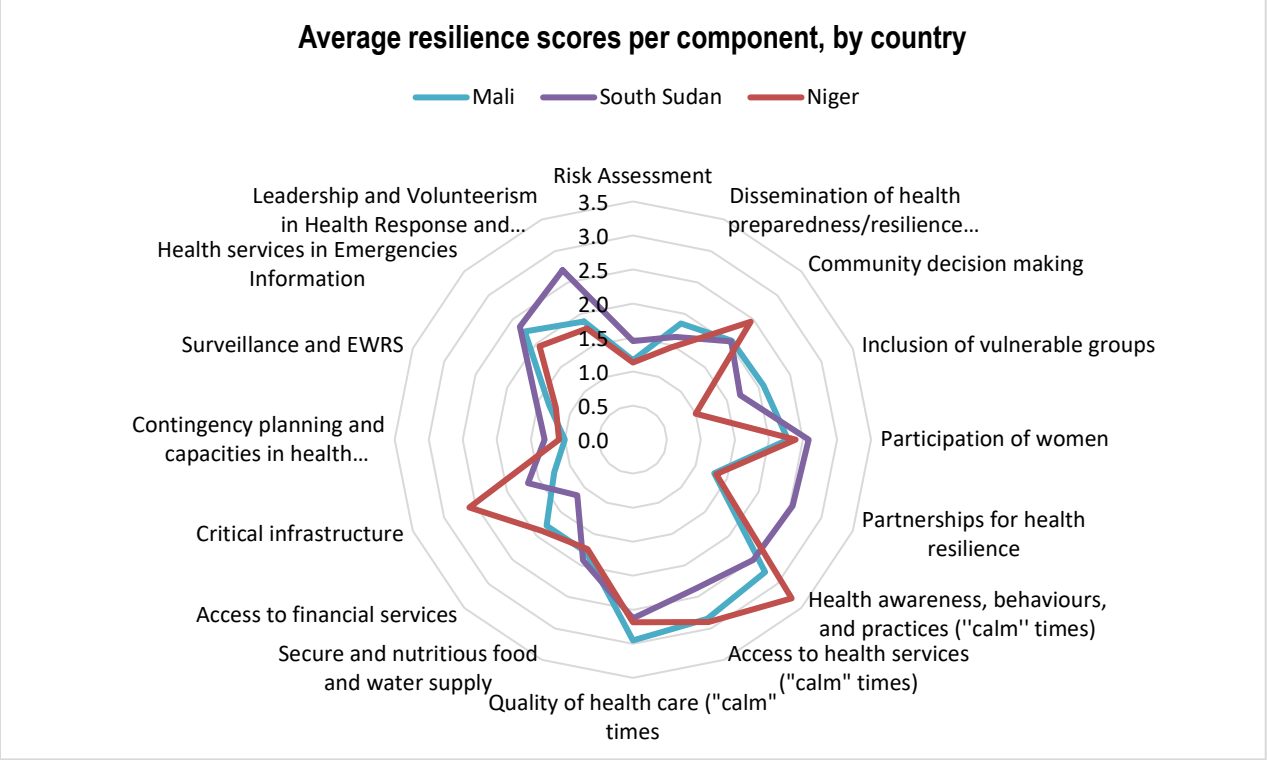
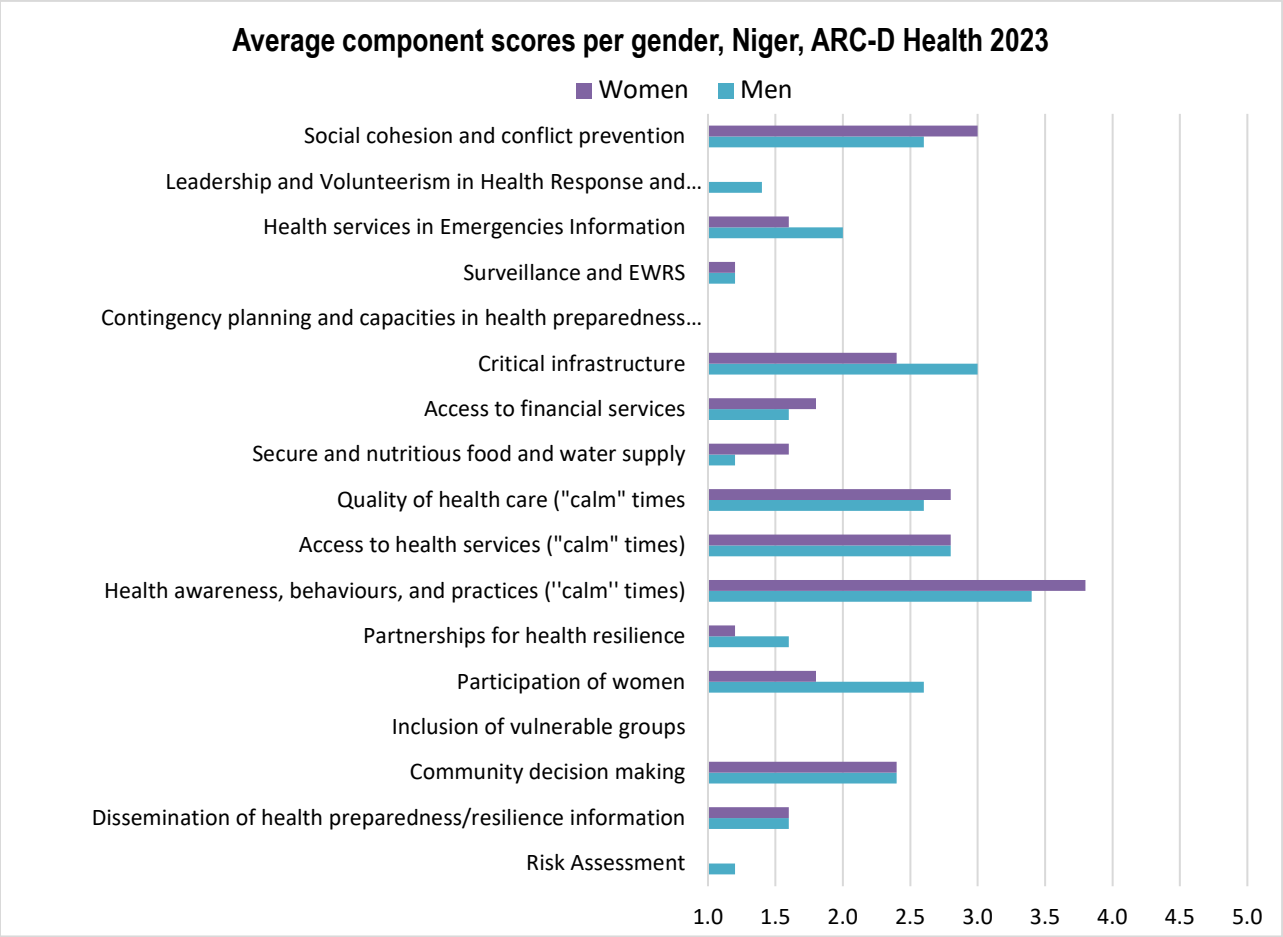


Figure 4c. Bar Chart



DATA ANALYSIS/REVIEW

Data analysis can be performed by the ARC-D Health assessment team alone and/or through a data review workshop with carefully selected stakeholders including health department officials, CHWs, community leaders, and representatives from local organizations. Of note, an individual's involvement in the assessment process (as a facilitator, key informant, or CSD participant) should not be a criterion for participating in the workshop. Instead, the choice of external stakeholders should be based on their knowledge and familiarity with the local health system, current health issues, and risk landscape in the assessment area.

ORGANIZING A DATA REVIEW WORKSHOP

The objectives of a data review workshop are to co-analyze and interpret data obtained through the ARC-D Health assessments and identify recommendations for programming, advocacy, and/or further research.

Allow approximately 4 hours for the workshop, divided into three main parts:

- **Presentation of the assessment process and the scores**. This part of the workshop should take 45 minutes or less depending on the knowledge and familiarity of the participants with ARC-D Health.

- **Review of the data**. This is the most critical part of the workshop and should take about two hours. Dividing participants into small groups is recommended to enable in-depth discussion of the assessment data. The groups can be divided based on their geography or the type of risk scenario chosen for the assessments. Once organized, the groups are then tasked with discussing the data. Up to one hour should be allowed for this activity. Then a representative from each group presents the group's main conclusions. The other groups can validate or debate the analysis presented.

  The following guiding questions are recommended to facilitate discussion in the small groups:

  - What are the communities with the highest scores? What are the communities with the lowest scores? What do you think are the main factors/conditions that contribute to "high" or "low" resilience in those communities?
  - Which components received the highest scores? Which components scored the lowest? What do you think are the main factors/conditions that contribute to these differences?
  - Same question as above but for the three resilience capacities: Which capacity scored highest? Which scored lowest? Why? What does that tell you?
  - Can you identify common themes and trends across the communities and/or the components?
  - Are there any interesting contrasting stories to highlight? Within communities and within components, e.g., components with very low or very high scores? Is there any positive deviance that could be taken as a model?

In the plenary, the facilitator can also ask the following questions to the whole group:

  - What does the data/evidence tell us?
    - Does the data align with what you expected?
    - Is there anything else we should know, and can we get this information?

- **Identification of recommendations.** Small groups are also recommended for the final part of the workshop. Suggested guiding questions are as follows:

  - Is the project addressing the right issues?
  - Does the project need to make adjustments? If so, what adjustments are needed?
  - If adjustments are needed, what does this mean for project management, including the project's work with the MOH and USAID?
  - What information did you use?
  - What other information is needed?

Alternatively, the groups can work on identifying specific recommendations to provide to different actors using the Table 7 template.

Table 7. Template for Listing Recommendations

	Type of recommendation	Direct program intervention	For implementation by partners	Advocacy	Further research
Health	Quick win/ short-term				
	Medium-term/ long-term				
Non-health	Quick win/short-term				
	Medium-term/ long-term				

For a more detailed example of a full data review workshop, see Appendix 5. For more information on a data review workshop/meeting in general, see https://usaidmomentum.org/resource/adaptive-learning-toolkit/, p. 55.

ORGANIZING AN AFTER-ACTION REVIEW (ARR)

Additionally, the assessment team can organize an After-Action Review (AAR), which is a shorter tool to facilitate reflection and learning following completion of an important activity or event. AARs are meant to yield information on managerial and organizational processes specific to that event or activity. AARs should be conducted immediately after the activity ends, while the experience is still fresh in participants' minds.

The key to a successful AAR is the active and constructive participation of all participants. To achieve this outcome, AARs should be facilitated in a safe and trusting environment where successes and challenges can be jointly discussed, and no individual should feel that they are being specifically criticized. AARs help to structure reflections on the experience of individuals involved in a specific activity. AARs are also useful for establishing a shared narrative about the activity and developing recommendations for how the activity could be improved in the future.[20]

Only the people who were directly involved in the organization and implementation of the ARC-D Health assessments are required to participate in this workshop. The estimated time for an AAR is between 1 hour and 90 minutes. Given that the participants will already know each other, it is recommended to directly start discussions either in small groups or in plenary.

Suggested discussion questions:

1. What was supposed to happen? What were the purpose and objectives? Who was the audience? What was the initial timeline? Who was involved? What outcomes and outputs were intended? What products were to be produced? What facilitators and barriers were expected?

[20] https://usaidmomentum.org/resource/adaptive-learning-toolkit/, p.51.

2. What actually happened? For this specific question, it could be interesting to draw a timeline with the different steps.

3. What went really well and why? What successful steps were taken toward achieving your objective?

4. What can be improved and how? What could have been done better? What can we do differently in similar situations in the future to ensure success? What would be your advice to future project teams?

For more information on how to conduct and report an AAR see https://usaidmomentum.org/resource/adaptive-learning-toolkit/, page 51.

PRE-WORKSHOP SURVEY (OPTIONAL)

Additionally, the research team may wish to develop a pre-workshop/AAR survey for individuals who contributed to the organization of the ARC-D Health assessments. Survey responses will help to identify relevant questions/issues to examine during the workshop or AAR. The survey questionnaire can be developed using online tools, e.g., Google or Microsoft Forms. This step is optional.

Suggested questions for the pre-workshop survey:

1. Overall, how would you characterize your satisfaction with the ARC-D Health assessment [using a Likert scale]?
2. From your perspective, what (in part A, in part B) worked particularly well?
3. From your perspective, what (in part A, in part B) did not work well?
4. Is there anything specific you would like to discuss during the AAR?

REPORTING

The objective for reporting on ARC-D health activities is to share findings and evidence-based recommendations with the communities involved, as well as with local, national, and international NGOs; district health officials; and government authorities. The report aims to support programmatic decisions and strengthen health resilience across MNCH/RH/FP services. Additionally, the findings will be shared with donors, including USAID and other funding partners. Feedback from stakeholders will be crucial in refining the recommendations to ensure that they are relevant and effective. The recommended structure for an ARC-D Health report is provided in Box 3 below.

Box 3: Recommended Structure of an ARC-D Health Report

Executive summary (optional)
Introduction
ARC-D Health assessment objectives and methodology
- Objectives
- Sampling/selection of communities
- Methodology
  - -Part A
  - -Part B
  - -Data analysis and report writing
- Limitations of the ARC-D health assessment

ARC-D health assessment findings
- PART A: Context of the community
  - -General context
  - -Demographic composition and characteristics of the population
  - -Governance and community organizations
  - -Plans and documents
  - -Description of the natural and built environment
  - -Shocks, stresses and risk scenarios
- PART B: Community resilience analysis
  - -Health resilience scores at the community level
  - -Health resilience capacity scores at the community level
- Discussion
  - -Common themes
  - -Contrasting stories (within communities or between communities)
  - -Comments on the assessment process and learning

Conclusions and recommendations for action
- Recommendations for MIHR
- Recommendations for the Ministry of Health
- Recommendation for other stakeholders

Appendices
- Appendix 1: Data on community and component scores
- Appendix 2: Pictures

5. APPENDICES

APPENDIX 1. DATA FORMS TO COMPLETE PRIOR TO COMMUNITY ACTIVITY

Date:	
Names of ARC-D Health team members:	

FORM 1. LOCATION OF COMMUNITY

Administrative division level 1 (e.g., Department)	
Administrative division level 2 (e.g., Municipality)	
Administrative division level 3 (e.g., District/Sector)	
Name of community	
Indicate whether community is urban, peri-urban, or rural	

FORM 2. POPULATION DATA

Age range	Female	Male	Total
Under 5 years			
5–10 years			
10–14 years			
15–19 years			
20–24 years			
25–49 years			
50+ years			
Total population of community			
Total number of households			

FORM 3. DEMOGRAPHIC CHARACTERISTICS

Demographic characteristic (Please list all relevant characteristics)	**Approximate percentage of population in this category**	**Additional information/comments**
Ethnic group		
Religious affiliation		
Christian		
Muslim		
Traditional belief		
No religion		
Educational attainment		
No education		
Some primary		
Primary completed		
Secondary+		
Type of livelihood		
Type of land tenure		
Displaced status		
IDP		
Refugee		
Other characteristics		

FORM 4. COMMUNITY ORGANIZATIONS AND GOVERNANCE STRUCTURES

List organizations at the community level (NGOs, CBOs, FBOs, health committees, council of elders, parent-teacher associations, youth groups, death review committees, health-related groups, water management committees, etc.)	**Number of members**	**Active?** (Y/N; if not, explain)	**Comments** (including functions, meeting frequency, etc.)

FORM 5. AVAILABLE PLANS AND DOCUMENTS AT COMMUNITY LEVEL

Type of plan or document	**Mark "X"** (if plan/ document exists at community/ local level)	**Is the plan still valid/ has been updated recently** (Y/N; if not, explain)	**Comments**
Risk assessment report (e.g., hazard map, vulnerability and capacity assessment [VCA], loss analysis)			
Local development plans			
Disaster risk reduction plans			
Health plan			
Contingency plan			
Recovery plan			
Emergency health plan			
School safety/continuation plan			
Other (specify):			
Other (specify):			
Other (specify):			

FORM 6. ENVIRONMENTAL DESCRIPTION

Please describe: **A) Natural environment:** The ecological zone in which the community is located, including the climate, seasons, ecosystems, and environmental assets the community depends on—e.g., bodies of water, vegetation types, soil conditions, and other elements.
B) Built environment: The condition of existing built infrastructure, such as housing, school, health facility, water and sanitation, and public buildings and spaces.

FORM 7. MOST VULNERABLE GROUPS

Vulnerable group	Number of persons		Comments
	Male	Female	
Orphans and vulnerable children and youth (e.g., child laborers)			
Children under the age of 5 years			
Pregnant and lactating women			
Pregnant adolescents (or estimated percentage of adolescent pregnancy in the community)			
Female-headed households			
Child-headed households			
Adolescent parents			
Persons with serious illness			
Persons living with a disability (e.g., physical, sensory, or intellectual disability)			
Other most vulnerable group (please specify)			
Other most vulnerable group (please specify)			
Other most vulnerable group (please specify)			

FORM 8. IDENTIFICATION OF SHOCKS, STRESSES, AND RISK SCENARIOS

Form 8A. Shocks Sudden events that have an impact on the vulnerability of a system and its components		Mark "X" if the shock has ever occurred in the community or close by	Frequency (if relevant) (e.g., 1 earthquake in 25 years or a flood every rainy season)	Comments (e.g., date of latest event, geographical extent)
Geological shocks	Earthquake			
	Tsunami			
	Volcanic eruption			
	Landslide			
	Other (please specify)			
Hydro-meteorological shocks	Flood			
	Cyclone/Hurricane/ Typhoon			
	Tornado/Twister			
	Storm surge			
	Severe winter weather			
	Drought			
	Heatwave			
	Other shock (please specify)			
Biological shocks	Human disease epidemic (please specify)			
	1.			

	2.			
	3.			
	Animal disease epidemic (please specify)			
	1.			
	2.			
	Crop infestation/disease (please specify)			
	1.			
	2.			
	Other biological shock (please specify)			
Human-caused shocks	**Economic/market crisis (e.g., severe price fluctuation, severe market disruption)**			
	Conflict/outbreak of violence			
	Inter- or intra-communal conflict (e.g., cattle rustling, gang violence,			

	disputes over natural resources)			
	State-involved conflict			
	Nuclear/radioactive accident			
	Chemical accident			
	Fire (including forest fires)			
	Other human-caused shock (please specify)			
	1.			
	2.			

Form 8B. Stresses **Long-term trends that undermine the potential of a system and increase the vulnerability of actors within it**		**Mark "X" if the stress is currently occurring in the community**	**Comments**
Environmental or biological stresses	**Environmental degradation (e.g., erosion, desertification, soil fertility depletion, water and air pollution)**		
	Negative effects of climate change		
	Public health concerns (HIV, malaria, malnutrition, etc.)		
	Other stress (please specify)		
Economic stresses	**Economic instability (e.g., food and fuel price fluctuation) and/or decline**		
	Unemployment		

	Other stress (please specify)		
Social stresses	**Unplanned urbanization**		
	Rapid population growth		
	Food insecurity and/or income insecurity		
	Gender-based violence		
	Gender inequality		
	Discrimination		
	Substance abuse		
	Insecurity		
	Child labor/child soldiers		
	Early marriage/teenage pregnancy		
	Other stress (please specify)		
Political stresses	**Protracted conflict**		
	Political Instability and/or tension		
	Land disputes		
	Other stress (please specify)		

Form 8C. Identification of Risk Scenario/s Based on the information completed above, please identify and analyze the risk scenarios that affect this community.	
Risk scenario 1	**Description of risk scenario 1**
	Shock: Which shock is the most devastating and, if applicable, how does it lead to other (secondary) shocks?
	Stresses: In what ways is(are) the identified shock(s) exacerbated by the identified stresses?
	Impact: What is the extent of impact (damage, loss, etc.) from this risk scenario (i.e., the shocks and stresses identified above)?
	Impact on health
	1. What is the impact on people's immediate and long-term health (physical, mental)?
	2. What is the impact on health behaviors/practices, adherence to treatment, and health care seeking?
	3. What is the impact on the access to and availability, quality, and utilization of health services (including workforce, infrastructure, equipment, and medicines, and especially on FP/RH/MNCH?
	Coping Mechanisms What coping mechanisms (both positive and negative) does the community use to deal with this risk scenario? And specifically, in relation to FP/RH/MNCH?
	1.

	2.
Risk scenario 2	**Description of risk scenario 2**
	Shock: Which shock is the most devastating and, if applicable, how does it lead to other shocks?
	Stresses: In what ways is(are) the identified shock(s) exacerbated by the identified stresses?
	Impact: What is the extent of impact (damage, loss, etc.) from this risk scenario (i.e., the shocks and stresses identified above)?
	Impact on health
	1. What is the impact on people's immediate and long-term health (physical, mental)?
	2. What is the impact on health behaviors/practices, adherence to treatment, and health care seeking?
	3. What is the impact on the access to and availability, quality, and utilization of health services (including workforce, infrastructure, equipment, and medicines, and especially on FP/RH/MNCH?
	Coping mechanisms What coping mechanisms (both positive and negative) does the community use to deal with this risk scenario? And specifically, in relation to FP/RH/MNCH?
	1.
	2.

Where necessary, use Form 8C to document additional scenarios.

APPENDIX 2. INDIVIDUAL COMPONENT SHEETS FOR THE COMMUNITY SCORING DIALOGUES

Component 1: Risk assessment		**Key question:** Has the community been involved in a participatory risk assessment of the *[chosen risk scenario]* that combines local knowledge and perceptions of risk with technical and scientific knowledge, data, and assessment methods; has it shared the findings widely; and does it have human resources capable of conducting/updating such assessments?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	A risk assessment has **never been carried out** in a structured and participatory way in the community. Or, if it has, it is **outdated or not in use** and community members **do not know** about it.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	A risk assessment has been carried out with limited technical/scientific input (and the health aspect was not well covered); it is **used occasionally**, but only a **few community members** know about its findings. **There are no trained human resources** to monitor and update this assessment in the community. Community has **limited access** to technical and scientific data and analyses.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	A risk assessment has been carried out (some aspects of health have been covered) with some community members; it integrates **some technical/scientific analysis**, is **used regularly,** and **some people know its findings**. However, there are **no trained human resources** to monitor and update this assessment.
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	A risk assessment has been carried out in a participatory manner (most aspects about health have been covered); it integrates **robust, up-to-date technical and scientific analysis with local knowledge,** is used regularly, and **most community members know its findings**. There are **trained human resources capable of monitoring and updating this assessment.**
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	A participatory risk assessment **combining scientific and local knowledge** is regularly used and **embedded in planning; all community members know its findings**, and there are **trained human resources** capable of monitoring and updating this assessment, **supported by the national health and/or a disaster/risk management system.**

Suggested guiding questions	**Suggested means of verification**

• For the [chosen risk scenario], do you know if there is/are some assessment/s such as the following that cover your community:
  ○ "Shock" from the *[chosen scenario]* analysis/map?
  ○ Vulnerability and capacity assessment (VCA) related to the "shock," and specifically on aspects of the health system (e.g., human resources, infrastructure/facilities, supplies)?
• Projected loss/impact assessment? And particularly the impact on health aspects: people's health and health actors, health facilities,
	• Local development and/or health plans, including assessments and maps.
	• Local disaster risk management plan, including assessments and maps.
	• Local contingency plan.

supplies/equipment. And, in particular, accessibility and utilization of specific health services, e.g., MNCH, FP/RH, immunization, nutrition, WASH, behavior change messages. ● When was the assessment done? Who participated in this/these process/es? Were community people involved? Were community health workers/volunteers involved in the process/es? ● Was/Were the assessment/s based on local knowledge of the *[chosen risk scenario]*? And/or was it based on technical/scientific data or studies about the *[chosen risk scenario]*? ● In the community, have you had access to risk assessment data or studies (and specifically, on scientific health aspects of the risk)? ● In what ways are the findings from these risk assessments used? ● How many community members know about them? ● Do you as a community and/or the community health workers have the capacity to update the risk assessment regularly? ● Is/Are the assessment/s linked to the local/national disaster risk management system and/or the health system/MOH?	● Copies of scientific studies/reports. ● Hazard monitoring equipment. ● Consultation with relevant technical/ scientific institutions.

Component 2: Dissemination of health preparedness/resilience information		**Key question:** Have community members been exposed to or participated in health preparedness/resilience awareness events in relation to the *[chosen risk scenario]* (such as campaigns, discussions, and trainings) and have health awareness and practices improved as a result?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**No one** in the community has been exposed to/participated in health preparedness awareness events. Community believes health crisis and disasters are **beyond their control** and measures for risk reduction or recovery are the responsibility of external actors (deities, government, NGOs, etc.).
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Few community members have** been exposed to/participated in health preparedness awareness events. These have had **little impact** in improving awareness and practices.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some community members** have been exposed to/participated in health preparedness awareness events. These have resulted in improving **some practices** and awareness.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Most community members** have been exposed to/participated in health preparedness awareness events. These have sometimes resulted in **substantial improvements in practices and awareness**.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**All community members** have been exposed to/participated in health preparedness awareness events. These have resulted in **substantial improvements in practices and awareness**.

Suggested guiding questions	**Suggested means of verification**

• Who or what is responsible for the occurrence of the *[chosen risk scenario]*? Do you think people can control how bad the *[chosen risk scenario]* gets? If yes, in what ways? If no, why not?
• What awareness campaigns for the *[chosen risk scenario]* preparedness, adaptation, and/or recovery have happened in this community or have reached you? Any that consider preparing for health impact of the *[chosen risk scenario]*?
• Have there been open discussions and debates within the community on crisis/disasters? Specifically:
  ○ On the *[chosen risk scenario]* and how to reduce it and how to reduce its impact on health?
  ○ On lessons learned from previous incidences of the *[chosen risk scenario]*? And impact on health from previous disaster?
• What trainings have community members received on health preparedness for the *[chosen risk scenario]* (excluding the one given to the emergency committee)? On health issues related to the *[chosen risk scenario]*?
• Do community health workers or health facility staff play any role in dissemination of preparedness information for the *[chosen risk scenario]*?
• How effective have these activities been? How many community members have an improved understanding of health preparedness and risk reduction, specifically on health, as a result of these activities? Can you give some examples of this improvement?
	• Documentation of open community meetings (e.g., photos, minutes, attendance lists).
	• Documentation of trainings (e.g., photos, attendance lists).
	• Documentation of awareness campaigns, including those by health workers or community health workers/volunteers (posters, flyers, etc.).
	• Agreements, works, photos, or other evidence of community actions.
	• Consultations to triangulate data.

Component 3: Education of children on health resilience (optional)		**Key question:** Are health preparedness/resilience knowledge and capacities being passed on to children formally through local schools and informally via oral tradition from one generation to the next?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There is **minimal to no dissemination of health preparedness and resilience knowledge** and capacities to children, whether through formal or informal transmission.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Some health preparedness and resilience knowledge** and capacities are being passed on **through oral tradition only**; **no knowledge** and capacities are being transferred **through the local school**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some health preparedness and resilience knowledge** and capacities are being passed on through **both oral tradition and local schools**. However **local teachers are not formally trained** in health preparedness and resilience.
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Substantial transmission of health and resilience knowledge** and capacities occurs **through both oral tradition and local schools,** with local teachers formally trained in **health preparedness and resilience.** However, these efforts are **not fully supported** by the education system.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Substantial transmission of health and resilience knowledge** and capacities occurs through both oral tradition and local schools, with local teachers formally trained in **health preparedness and resilience** and with education system support, including **health preparedness and resilience mainstreamed in the school curriculum.**

Suggested guiding questions	**Suggested means of verification**

• Is knowledge of *[chosen risk scenario]* health preparedness and response transmitted to children in the community? Do the children receive information/knowledge on how to protect their health during a *[chosen risk scenario]*?
• Who is transmitting this knowledge (parents, teachers, health workers)? And how?
• In what ways are *[chosen risk scenario]* health preparedness and/or recovery knowledge transmitted to children in the community?
• Is oral tradition (stories, songs, arts) one of the channels?
• Is the local school one of the channels? If so:
  ○ What formal *[chosen risk scenario]* health preparedness and recovery training have teachers received? Any other disaster risk reduction (DRR) training available on other risks?
  ○ Are there health preparedness and recovery teaching materials?
  ○ Are health preparedness and recovery mainstreamed in the official school curriculum?
	• Record of teachers' training.
	• Teaching materials incorporating knowledge related to DRR.
	• Photos of school DRR activities.
	• Consultations with students.

Component 4: Health resilience in development planning (optional)		**Key question:** Does the community see health preparedness/resilience in relation to the *[chosen risk scenario]* as an integral part of plans/actions to achieve wider community goals (e.g., poverty alleviation, quality of life)?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community has **very limited to no awareness** on the links between health resilience and development. There is **no integration of the two in planning**
2	Some awareness and motivation, some action, but action is piecemeal and short-term.	Community **sees the importance of health resilience** for achieving wider community goals but **has not documented** health resilience building actions in its local development plan. Or has **health resilience building actions documented** in a local development plan, but these are **not used or are outdated.**
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community sees the importance of health resilience for achieving wider community goals and **occasionally implements health resilience building actions** documented in local development plan(s). However, these health resilience actions **address only some aspects of the problem.**
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	Community sees health resilience as an integral part of plans and actions to achieve wider community goals and **regularly implements health resilience building actions** documented in local development plan(s), which address most aspects of the issue.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community sees health resilience as an integral part of plans and actions to achieve wider community goals and **regularly implements health resilience building actions** documented in local development plan(s), which **address all aspects** of the issue.

Suggested guiding questions	**Suggested means of verification**

• What common goals do you have for the well-being and development of this community? Does that include health?
• Are these documented in a plan (or otherwise available to community members)?
• What impact do you think actions to reduce *[chosen risk scenario],* specifically related to health risks, will have on these goals?
• Are actions to reduce the *[chosen risk scenario]* documented in your development plan? If yes:
  ○ How often do you carry out these actions?
  ○ Are they sufficient? If not, why and what else is needed?
	• Local development plans incorporating health resilience measures.
	• Local disaster risk management plan.
	• Local health plan.
	• Local contingency plan.
	• Project profiles that include health resilience measures.
	• Projects/works completed.

Component 5: Community decision-making		**Key question:** Is the community leadership committed, effective, and accountable?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community leaders are **not effective**, show **no commitment**, and are **not accountable** (i.e., do not share information, invite participation, or respond to feedback).
2	Some awareness and motivation, some action, but action is piecemeal and short-term.	**Limited leadership commitment and effectiveness**, with actions being infrequent, piecemeal, and short-term. Leaders are **rarely accountable**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Medium level of commitment and effectiveness**, with more **numerous and long-term actions**, but these **do not address all aspects** of the problem and **do not form part of a long-term strategy**. Leaders are **occasionally accountable** to their constituents (e.g., only on big problems).
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	Community leadership is **committed, effective, and regularly accountable**. Actions are more long-term and **linked to an agreed, long-term strategy**, but there are **still constraints** in its effective implementation.
5	Long-term actions ae linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Leadership is **committed, effective, and regularly accountable,** with actions **addressing all aspects** of the problem and linked to **an agreed upon and supported long-term strategy**.

Suggested guiding questions	**Suggested means of verification**

To examine commitment of leadership:
● How are decisions made in the community? Does that include decisions on public health as well? And, if yes, what is discussed? (Prompt: FP/RH, MNCH, immunization, etc.)
  ○ Who makes the decisions?
  ○ Through what process?
  ○ How often does this process happen?
To examine accountability of leadership (e.g., participation, information sharing, complaints response):
● Do other community members participate in making decisions? How?
● Does everybody know about the decisions and usually agree?
● What happens when people do not agree, or when they have complaints or feedback?
● Is the community also holding health facilities and district health officials accountable for quality of care (QoC)? How do you complain to them as a community?
● Is the community engaged in supporting local QoC improvement efforts (including community resource mobilization to address some QoC barriers, e.g., local taxis for timely referral, renovation of ward, water for health facility)?
To examine effectiveness of leadership:
● Do the decisions and actions taken result in solving the problems? If not, what limitations are you faced with?
	● Documentation of existence of community organization.
	● Documentation on election process of community leadership.
	● Documentation of meetings and assemblies (minutes, attendance lists, photos).
	● Completed projects/works based on community decisions.
	● Evidence of accountability (e.g., public announcements on how funds have been managed).
	● Triangulation consultations to verify commitment.

Component 6: Inclusion of vulnerable groups		**Key question:** Are vulnerable groups in the community (specifically, IDPs, pregnant and lactating women, mothers with children under 5, youth, adolescent parents, and persons living with a disability) included/represented in community decision-making and management of health preparedness and recovery in relation to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Vulnerable groups **never participate** in health preparedness and recovery decision-making and management. Community **decisions and actions never address** their needs and priorities.
2	Some awareness and motivation, some action but action is piecemeal and short-term	**Vulnerable groups occasionally** participate/are represented in community health preparedness and recovery decision-making and management. Community **decisions and actions rarely address** their needs and priorities.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed	**Vulnerable groups regularly and actively** participate/are represented in community health preparedness and recovery decision-making and management. Resulting decisions and actions **sometimes address** their needs and priorities.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	**Vulnerable groups regularly and actively** participate/are represented in community health preparedness and recovery decision-making and management, and **some occupy leadership positions** within the decision-making body**.** Resulting decisions and actions **frequently address** their needs and priorities.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Vulnerable groups regularly and actively** participate/are represented in community health preparedness and recovery decision-making and management, and **some occupy leadership positions** within the decision-making body. Resulting decisions and actions **always address** their needs and priorities.

Suggested guiding questions	**Suggested means of verification**
Reiterate the vulnerable groups agreed upon at the beginning of the discussion. (*Do not include women)* • In what ways do vulnerable groups, particularly PLW, participate or are represented in this decision-making process discussed before (relating to component 5 on decision making)? • How would you describe their participation? Is it active or inactive? Frequent or infrequent? • How many vulnerable groups participate/are represented within the bodies that make decisions regarding health preparedness and recovery for the *[chosen risk scenario]*? • In what ways do decisions and actions take into account the opinions and needs of vulnerable groups, particularly PLW and children under 5 years? Can you give examples?	• List or census of vulnerable people and groups. • Meeting minutes. • Meeting attendance lists. • Photos of meetings/assemblies. • List of members of decision-making body and their positions. • Evidence of measures taken to protect and include vulnerable groups (e.g., disabled access ramps to community buildings).

Component 7: Participation of women		**Key question:** Do women participate in community decision-making and management of health preparedness/resilience in relation to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Women **never participate** in health preparedness/resilience awareness decision-making and management. Community **decisions and actions never address** their needs and priorities.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Women have some awareness of the issues but have limited opportunities to participate** and limited representation in community health preparedness/resilience awareness decision-making and management. Community **decisions and actions rarely address** their needs and priorities.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Women have good awareness and occasionally** participate/are represented in community health preparedness/resilience awareness decision-making and management. Community **decisions and actions sometimes address** their needs and priorities.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	**Women have good awareness and regularly and actively** participate/are represented in community health preparedness/resilience awareness decision-making and management and **occupy leadership positions** within the decision-making body**.** Resulting decisions and actions **frequently address** their needs and priorities.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Women regularly and actively** participate/are represented in community health preparedness/resilience awareness decision-making and management and **occupy high-level leadership positions** within the decision-making body. Resulting decisions and actions **always address** their needs and priorities.

Suggested guiding questions	**Suggested means of verification**
• In what ways do women participate in the decision-making process including decision-making on health at household and community level? (When relevant: in polygamous family, is there a difference between decision-making power between first, second, third wives? What is the influence of mothers-in-law and grandmothers, adult women, young women, adolescent women)? • How would you describe their participation? Is it active or inactive? Frequent or infrequent? • How many women participate/are represented within decision-making body on management of health preparedness and particularly DRR decision-making-body for the *[chosen risk scenario]*? And health-related bodies and committees? • What kind of positions do they usually occupy? Do they occupy leadership positions? • How often do the resulting decisions and actions take into account the opinions and needs of vulnerable groups? Can you give examples?	• Meeting minutes. • Meeting attendance lists. • Photos of meetings/ assemblies. • List of members of decision-making body and their positions.

Component 8: Rights awareness and advocacy (optional)		**Key question:** Is the community aware of its rights, relevant legal mechanisms, and responsible actors for the fulfillment of those rights, notably in terms of health preparedness/resilience in relation to the *[chosen risk scenario],* and does it advocate for these?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community has **little to no awareness** of its rights, relevant legal mechanisms, and responsible actors. Community **never advocates** for its rights before duty-bearers.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community has **some awareness** of its rights, relevant legal mechanisms, and responsible actors, **but takes little to no advocacy action**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community has **good awareness** of its rights, relevant legal mechanisms, and responsible actors. It **advocates for these occasionally** through its leaders, but this is **usually insufficient**.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation	Community has **good awareness** of its rights, relevant legal mechanisms, and responsible actors. Leaders **advocate for these rights regularly** when interacting with government actors and these efforts are **sometimes successful**.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community has **good awareness** of its rights, relevant legal mechanisms, and responsible actors. Leaders **advocate for these rights regularly** when interacting with government actors and these efforts **always grant them the desired and necessary support.**

Suggested guiding questions	**Suggested means of verification**
• What rights do you have as citizens of this country that serve to protect or help you cope with a *[chosen risk scenario]* and specifically, on health-related issues and rights? • What regulations and procedures are in place for these rights to be fulfilled (including the right to access quality health care and reproductive health rights at all times and during *[chosen risk scenario]*? • Who are the government actors responsible for the fulfillment of these rights? • How often do leaders of your community advocate for funding or support before local or central government? • Were these advocacy efforts rooted in a discussion of your rights and their legal obligations as duty bearers (or were you "just asking for support")? • What was the outcome of this advocacy? Please give examples.	• Local plans referencing rights and/or relevant legislation. • Evidence of public awareness of rights (posters, flyers). • Records of meetings with local governments. • Photos of works or services resulting from rights-based advocacy efforts.

Component 9: Partnerships for health resilience		**Key question:** Are there clear, agreed-upon, and stable partnerships between the community and other actors (e.g., local authorities, NGOs, businesses) that provide resources for health preparedness/resilience in relation to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There are no **partnerships between** the community and external actors that can provide funds/resources for health preparedness and resilience.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**There are partnerships** with external actors, but these are **unstable, in frequency** and provide only **piecemeal and short-term** funds/resources for health preparedness and resilience.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	There are partnerships with external actors that provide **funds/ resources for long-term** health preparedness actions. However, these are **unstable in frequency** and **not linked to a long-term plan** for health preparedness and resilience.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	There are **stable and effective** partnerships that provide funds/resources for long- term health preparedness actions, **linked to a long-term strategy/vision** for health preparedness and resilience. However, there are **still constraints** in its full implementation.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	There are **stable and effective** partnerships with external actors that **provide all funds/resources required to achieve a long-term strategy** for health preparedness and resilience.

Suggested guiding questions	**Suggested means of verification**
• What external actors does your community have strong relationships with, whether for funding, resources, coordination, training, or activity implementation for *[chosen risk scenario]* health preparedness/resilience? Please list these partnerships and their nature. Any specific partner on issues related to FP/RH, MNCH, immunization, nutrition, etc.? To examine the stability of partnerships: • Have these partnerships been regular or irregular? • Short duration or long duration? To examine the effectiveness of partnerships: • What benefits have these partnerships brought in reducing *[chosen risk scenario]* and recovery, and specifically for health? Please give specific examples. • Have these benefits been sufficient to support all necessary actions to reduce risk and recover? If not, what else is needed?	• Written agreements between community leadership and external actors (municipal actors, NGOs, etc.). • Work and activities completed as a result of partnership. • Records of management of funds and resources, work plans, etc.

Component 10: Sustainable environmental management (optional)		**Key question:** Does the community adopt sustainable environmental management practices that reduce health risks in general as well as the health impacts of the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There is **little to no consideration** for sustainable environmental management practices in the community and **little to no awareness** about its impact on people's health. The environment is highly degraded.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community employs **one-off and piecemeal environmental management** measures that have **limited impact** in protecting the environment from degradation and people's health. Community has **little awareness** of its impact on health.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community employs **more long-term environmental management** measures to protect the environment from degradation and people's health. However, these measures **address only some aspects of the problem** and **do not form part of a long-term strategy.**
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Community employs **numerous and long-term** environmental management measures **linked to an agreed long-term strategy** to protect the environment from degradation and people's health. However, there are **still some constraints in its full implementation.**
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community employs numerous and long-term sustainable environmental management measures linked to a long-term strategy, which is **fully implemented** and **embedded in community behavior and practices.**

Suggested guiding questions	**Suggested means of verification**
• Have you noticed any loss or depletion of environmental resources over the years? Why do you think this has happened? • What community practices do you think damage the environment and increase the *[chosen risk scenario]*? And what are their impact on people's health? • Do you think population growth is contributing to strain on natural resources in this community and, if so, how could this be mitigated? • What changes have you perceived in the climate, compared to years past? • How have changes in the climate affected the environment? And people's health? • What measures do you take to reduce environmental degradation and protect the environment? Do these measures have an impact on people's health? • What proportion of people in the community take these measures? • Are these measures enough to reduce risks to people's health and livelihoods? What else is needed?	• Existence of environmental management committees. • Hazard or vulnerability assessment reports. • Seasonal mapping. • Tangible evidence reported/observed of measures to adapt or reduce environmental degradation.

Component 11: Water security and management (optional or see Component 15)		**Key question:** Does the community have access to a sufficient quantity and quality of water for domestic needs during the *[chosen risk scenario]?*
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There are significant **water shortages** both in normal times and during emergencies. Community shows **little motivation or awareness** in protecting and restoring water sources/supply.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community is **motivated and aware**, but has **limited capacity** (skills, knowledge, resources) to protect and restore water sources/supply. **Actions are piecemeal, short-term, and largely insufficient** in preventing **disruption/contamination** of water sources/supply during a crisis.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community takes **more long-term measures** to protect and restore water sources/supply. However, these are **still insufficient** to ensure adequate water access/quality for all and are **not connected to a water source management strategy**. Significant **post-crisis impact** on the quality and/or quantity of water is likely.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Community takes long-term measures to protect and rehabilitate water supply in line with a **water source management strategy.** Water access/quality is **mostly adequate** during normal times and during a crisis. However, there are still **constraints to its full implementation.**
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community can **access sufficient quality and quantity of water** both in normal times and during a crisis because practices and actions are tied to a **long-term strategy, fully supported by water authorities.**

Suggested guiding questions	**Suggested means of verification**
• What are the sources from which you obtain water, whether for drinking or domestic use? Please list the sources or water supply. • In what ways are these water sources/supply channels affected during the *[chosen disaster scenario]*, in terms of quantity and quality? Are they affected seasonally also? • What measures do you take to protect these water sources before a *[chosen risk scenario]*? • What measures do you take to rehabilitate these water sources after a *[chosen risk scenario]*? • Which group or which people lead these measures? Is there a trained local water management committee? How does it operate? Do community members pay fees? • To what degree are these measures enough to ensure adequate quantity and quality of water before, during, and after *[chosen risk scenario]*? And particularly for PLW and children under 5 years of age? What is still needed? • Do these measures form part of a local water source management plan? Is this plan aligned and supported by local water authorities?	• Water quality sampling. • Photos/observation of improved water sources. • Local water management plan. • Documentation of water management committee activity (meeting minutes, etc.). • Records of water management training. • Health statistics on waterborne diseases. • Report or investigation on water sources and water availability (compared with acceptable standards e.g., Sphere or water authority). • Triangulation consultations.

Component 12: Health awareness, behaviors, and practices ("calm" times)		**Key question:** Do community members maintain good physical and mental health in "calm" times through appropriate awareness and practices, for example, adequate nutrition, hygiene, and health-seeking behaviors?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**None or very few people** employ appropriate practices to **enhance health and protect life from the health risks** affecting the community. **Health status** is generally **very poor in** the community.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Few people** employ appropriate practices to enhance health and protect life from the health risks affecting the community. Health status is generally **poor** in the community.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some people** employ appropriate practices to enhance health and protect life from the health risks affecting the community. Health status is generally **somewhat good** in the community.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Most people employ appropriate practices to enhance health and protect life** from the health risks affecting the community. Health status is generally **good** in the community.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**All people employ appropriate practices to enhance health and protect life** from the health risks affecting the community. Health status is generally **very good** in the community**.**

Suggested guiding questions	**Suggested means of verification**
<u>Health awareness</u> • What are the most prevalent diseases in your community during normal times? • How do you reduce the risk of the most prevalent diseases during normal times? • What are the most prevalent diseases threatening children under the age of 5? • What can mothers/caregivers do to reduce the risk of contracting these diseases? • Name three basic good hygiene practices. • How do you store and keep water safe for consumption? • How do you reduce the risk of malnutrition? • What is the biggest health risk to mothers in this community? • How do you reduce the risk to health of mothers and infants during childbirth? <u>Health practices during normal times</u> • Are children under 5 routinely vaccinated? • Are children under 5 routinely monitored for malnutrition? • Are infants under 6 months exclusively breastfed?	• Evidence of sanitation facilities. • Evidence of handwashing facilities with clean water and soap. • Evidence of functioning waste management system. • Water quality sampling. • Health worker/health facility reporting and records. • Consultations with health workers, CHWs and CHW supervisors to triangulate data. • Triangulation of data with District Health Information System (DHIS) and Community Health Information System (CHIS). • Child health card (vaccination and nutrition status). • Antenatal care card. • Evidence of family planning method used.

● Do pregnant women go to the health facility for antenatal care? ● Do pregnant women go to the health facility for delivery? Are they attended by a skilled birth attendant? ● Do women and adolescent girls use family planning and reproductive health services? ● Do family members routinely sleep under a long-lasting insecticide-treated net (LLITN)? ● Who in the family makes decisions about seeking health care? ● Do household members use latrines? ● Do household members wash hands with soap and water at critical times? <u>Services of community health workers (CHWs)</u> ● Have you received health messages from a CHW? Which messages? ● Have you received family planning commodities from CHWs or any other medication or tests? Please list. ● Have you been referred by a CHW to a health facility? ● Have you received any other service from a CHW?	● Evidence of mosquito nets.

Component 13: Access to health services ("calm" times)		**Key question:** Do community members have access to healthcare services that meet their needs in "calm" times?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There is **no access to trained/qualified health care services** in the community or the surrounding area to respond to the health needs.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	There is a health care facility in the area, but **access is poor/fragmentary.**
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	There is an **accessible** health care facility staffed with **basic trained health staff, medicines, and equipment**. Services (including referrals) are **not sufficient** for all health issues and community health needs.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	There is an **accessible** health care facility staffed with **all the necessary** trained personnel, equipment, and medicines. Services (including referrals) are **coherent with the relevant national strategy**, though there are **still constraints** in implementation.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	There is an **accessible** health care facility staffed with **all the necessary** trained personnel, equipment, and medicines. Services (including referrals) are **highly coherent** with the relevant national strategy and **adequate** to deal with the health needs of the community.

Suggested guiding questions	**Suggested means of verification**
<u>Health access during normal times</u> Note: access barriers can include geographic/distance, unavailability of health infrastructure (facilities, equipment, supplies) and services, financial, social/cultural constraints, e.g., men must give permission. Also, workloads can be a barrier, e.g., women do not have time to attend. ● Does the community have access to a health facility with adequate supplies, equipment, and trained staff? Please explain. ● Do health services provided meet the FP/RH/MNCH needs of the community? ● Does the health facility provide routine integrated services for the treatment of moderate acute malnutrition (MAM) and severe acute malnutrition (SAM)? ● Do health workers carry out periodic health checks in the community, e.g., health outreach, nutritional screening, etc.? ● Do community health workers operate in this community? What services/support do they provide? ● Are women, men, and adolescents able to access contraception? <u>Distance/transport</u> ● Do community members have trouble reaching the health facility, e.g., long walking distance, poor roads, no transport? ● In case of an emergency referral, how do you reach the hospital? <u>Financial barriers</u> ● Can community members afford to go to the health facility for services? ● Can community members afford to pay for services and medicines in the health facilities. What about specific groups, such as adolescents, IDPs, etc.? <u>Social/cultural constraints</u> ● Are there any social, religious, or traditional reasons why people do not go to the health facility?	● Health center reports. ● Equipment inventory. ● Medicine/supply inventory. ● List of health center staff and their qualifications. ● Records of training for health center staff and community health staff. ● Evidence of referral system (vehicles, referral protocol, etc.) ● Maps to verify accessibility of health centers. ● List of community health workers. ● DHIS data on utilization rates.

Component 14: Quality of health care ("calm" times)		**Key question:** Do community members believe that they receive quality health care services in "calm" times?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Quality of health services is perceived to be **very poor** and is a deterrent to uptake.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Quality of health services is generally **poor,** but community members sometimes use the services.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Quality of health services is **somewhat good,** and community members mostly use the services.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Quality of health services is generally **good,** and community members regularly use the services.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Quality of health services is **very good,** and community members always use the services.

Suggested guiding questions	**Suggested means of verification**
<u>Quality of health care in "normal" times</u> • Do community members feel the local health services are of good quality, especially RH/FP/MNCH services? • Are health care workers respectful and supportive? • Are waiting times acceptable? • Are supplies of medicines, therapeutic foods, and family planning commodities available at the health facility all/most of the time? • Do community health workers provide a useful service in the community? Explain. • Do community health workers provide good quality services that meets your need and the needs of your community? • What are the main causes of illness and death in this community?	• Health center reports including morbidity and mortality data. • Medicine/supply inventory and dispensing records. • List of health center staff and their qualifications. • Records of training for health center staff and community health staff. • Maps to verify accessibility of health centers. • List of community health workers. • DHIS data on clinic utilization. • CHIS data on CHW service provision

Component 15: Secure and nutritious food and water supply		**Key question:** Does the community have a secure, sufficient, and continued food supply and access to sufficient quantity and quality of water for domestic needs during the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There are **significant water shortages** both in normal times and during emergencies. Community shows **little motivation or awareness** in protecting and restoring water sources/supply. **No one** in the community has or can access a secure and sufficient food supply in normal times or during a crisis.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community is **motivated and aware**, but has **limited capacity** (skills, knowledge, resources) to protect and restore water sources/supply. **Actions are piecemeal, short-term, and largely insufficient** in preventing disruption/contamination of water sources/supply during crisis. **Few households** have or can access a secure and sufficient food supply in a crisis.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community takes **more long-term measures** to protect and restore water sources/supply. However, these are **still insufficient** to ensure adequate water access/quality for all and are **not connected to a water source management strategy**. **Some households** have or can access a secure and sufficient food supply during a crisis.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Community takes long-term measures to protect and rehabilitate water supply, in line with a **water source management strategy.** Water access/quality is **mostly adequate** during normal times and during a crisis. However, there are still **constraints to its full implementation. Most households** have or can access a secure and sufficient food supply during a period of crisis.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community can **access sufficient quality and quantity of water** both in normal times and during a crisis, as a result of practices and actions tied to a **long-term strategy, fully supported by water authorities. All households** have or can access a secure and sufficient food supply during crises as well as normal times.

Suggested guiding questions	**Suggested means of verification**
<u>Food and nutrition security</u> • What proportion of the population can access enough food during *[chosen risk scenario]*? Are the food needs of PLW, infants, and children under 5 met during *[chosen risk scenario]*? • Through what actions (individual and/or communal) are they able to secure their food supply in *[chosen risk scenario]* (e.g., stockpiling reserves, preserves, communal grain bank, purchasing power, etc.)? • Are these actions sufficient? What else is needed? • Does this food supply during *[chosen risk scenario]* contain the staple foods you usually consume (context-specific)? Including staple foods for PLW and children under 5?	• Emergency resource inventory. • Evidence of food storage system either at household or community level. • Water quality sampling. • Photos/observation of improved water sources. • Local water management plan.

Water security ● What are the sources from which you obtain water, whether for drinking or domestic use? Please list the sources or water supply channels you use. ● In what ways are these sources/supply channels affected in *[chosen risk scenario]* in terms of quantity and quality? Are they also affected seasonally? ● What measures do you take to protect these before a *[chosen risk scenario]*? ● What measures do you take to rehabilitate these after a *[chosen risk scenario]*? ● Which group or which people lead these measures? Is there a trained local water management committee? How does it operate? Do community members pay fees? ● To what degree are these measures enough to ensure adequate quantity and quality of water before, during, and after *[chosen risk scenario]*? And particularly for PLW and children under 5? What is still needed? ● Do these measures form part of a local water source management plan? Is this plan aligned and supported by local water authorities?	● Documentation of water management committee activity (meeting minutes, etc.). ● Records of water management training. ● Health statistics on waterborne diseases. ● Report or investigation on water sources and water availability (compared with acceptable standards, e.g., Sphere or water authority). ● Consultations to triangulate data.

Component 16: Shock/stress-resistant livelihood practices (optional)		**Key question:** Does the community employ livelihood practices that are "resistant" to the *[chosen risk scenario]* for food and income security?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Most community members show **little motivation or awareness** to pursue livelihood practices that are resistant to the *[chosen risk scenario]*. There is severe food and income insecurity during periods of crisis.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Most community members are **motivated and aware** but have **limited capacity to adopt** livelihood practices that are resistant to the *[chosen risk scenario]*. These practices are **piecemeal and insufficient** to ensure food and income security during a crisis.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Most community members adopt **more numerous and long-term** livelihood practices that are resistant to the *[chosen risk scenario]*, **though these are still insufficient** and/or **do not form part of a long-term strategy**. Significant post-crisis impact on livelihoods is still likely.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Most community members adopt livelihood practices that are resistant to the *[chosen risk scenario]*, as part of a **long-term strategy to protect livelihoods** during a crisis. However, there are still **constraints to the full implementation** of this strategy.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**All community members** livelihood practices that are resistant to the *[chosen risk scenario]*, as part of a **long-term strategy to protect livelihoods** during a crisis. **Food and income security remain protected** during a crisis as a result**.**

Suggested guiding questions	**Suggested means of verification**
• What are the main livelihoods that people (men and women) in your community engage in? Please list them. • In what ways are your livelihoods affected by *[chosen risk scenario]*? • What measures do you employ to ensure that your livelihoods can resist the *[chosen risk scenario]*, e.g., hazard-tolerant crops, soil and water conservation, risk diversification, etc.? • What proportion of the community applies these measures? Are these measures applied by most of the community members? • Are these practices sufficient to protect your livelihoods and to ensure your health, food, and income security in *[chosen risk scenario]*?	• Evidence of practice employed.

Component 17: Market access (optional)		Key question: Are the local market links for products (e.g., medicines), labor, and services protected against the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**All** local market links that the community depends upon are **extremely vulnerable** to the *[chosen risk scenario]* and are often cut off and slow to recover when *[chosen risk scenario]* occurs.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Most** of the local market links that the community depends on are **extremely vulnerable** to the *[chosen risk scenario]*. Measures for their protection and restoration in the face of the *[chosen risk scenario]* are **piecemeal and insufficient**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some** of the local market links that the community depends on are **vulnerable to** the *[chosen risk scenario]*. **Some measures are in** place **to protect and restore** market links in such a crisis. Considerable disruption in the face of the *[chosen risk scenario]*.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Most** of the local market links that the community depends on **are sufficiently protected** to absorb the *[chosen risk scenario]* and/or **quickly recover** from the crisis.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**All** local market links that the community depend on **are sufficiently protected** to absorb the *[chosen risk scenario]* and/or **quickly recover** from the crisis.

Suggested guiding questions	Suggested means of verification

• Which are the main products or services that community members sell in the market? List these products and services.
• Which are the main products or services that community members procure in the market? List these products and services, including specific foods for babies, children, PLW, and health products (e.g., hygiene products, medicine).
• In what ways is the market affected by the *[chosen risk scenario]*? What happens to:
  ○ Physical access routes?
  ○ Demand from buyers?
  ○ Support services (e.g., intermediaries, suppliers, packaging, transport, information networks, etc.)?
• What measures do you or other actors put in place to protect these market relations from stopping or deteriorating during *[chosen risk scenario]*?
• Are these enough? Why not and what else is needed?
• What measures are in place to ensure that these market relations can recover quickly if affected by the *[chosen risk scenario]*?
• Are these enough? Why not and what else is needed?
	• Physical works to protect transport and communications infrastructure necessary for markets.
	• Market system studies, if available.
	• Purchasing agreements including provisions for emergencies.

Component 18: Access to financial services		**Key question:** Do community members have access to affordable and flexible financial services (e.g., mobile money, savings and credit schemes, microfinance), whether formal or informal?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community has **no access to financial services**, either formal or informal. Existing mechanisms are **unaffordable and/or exploitative.**
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Financial services are available** to the community but are **difficult to access** due to unaffordability, lack of knowledge, or limited or no presence of financial institutions in the local area. . These services are **not sufficient** to finance health costs.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Community members** can access financial services, but they can finance **only some necessary aspects** of health costs.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Community members** can access both formal and informal financial services that have capacity to finance **most necessary aspects** of health costs.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Community members** can access both **formal and informal financial services** that have **sufficient capacity** to finance **all necessary** aspects of health costs.

Suggested guiding questions	**Suggested means of verification**
• Where do community members save or obtain loans from? • Are these services organized by the community or are they provided by external actors, or both? • Do people know about formal financial services? • What interest rates and conditions/guarantees apply to these services? • Are these services affordable and flexible? • Do people in the community use these services whether on a regular basis, or in *[chosen risk scenario]* and/or for health emergencies? If not, why not? • Can these services provide sufficient funds to prepare, respond, and/or recover from *[chosen risk scenario]*? And for health-related needs? Please explain. • Is the community aware of any public or private health insurance options? Would community members be willing to pay into such schemes? • Other than out of pocket, what other ways do community members pay for health services (e.g., family loans, voucher system)? • What happens when a community member is unable to afford to access health services?	• Documentary evidence of the existence and functioning of VSLAs or other credit schemes available to the community. • Records from financial institutions.

Component 19: Income and asset protection (optional)		**Key question:** Are household asset bases (income, savings, and convertible property) sufficiently large, diverse, and protected to ensure reduced vulnerability to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**No household** in the community has an **asset base that is sufficiently large, diverse, and protected** to reduce vulnerability to the *[chosen risk scenario]*.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Few households** in the community have an **asset base sufficiently large, diverse, and protected** to reduce vulnerability to the *[chosen risk scenario]*.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some households** in the community have an **asset base sufficiently large, diverse, and protected** to reduce vulnerability to the *[chosen risk scenario].*
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Most households** in the community have an **asset base sufficiently large, diverse, and protected** to reduce vulnerability to the *[chosen risk scenario].*
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society and are sustainable.	**All households** in the community have an **asset base sufficiently large, diverse, and protected** to reduce vulnerability to the *[chosen risk scenario].*

Suggested guiding questions	**Suggested means of verification**
• What are your sources of cash (e.g., salary/revenue, savings, remittances, things you can sell or trade)? • Do you use these income (and/or) assets to access health care during normal times? If yes, how and how much? • How do you use these assets to cope during the *[chosen risk scenario]*? And for health-related issues during the *[chosen risk scenario]*? • What measures do you take to diversify these assets so that you can cope during the *[chosen risk scenario]*? • Are there any obstacles that prevent you from diversifying these assets? • What measures do you take to protect these assets (e.g., insurance policies, physical protection measures, etc.) to be able to cope during the *[chosen risk scenario]*? • Are there any obstacles that prevent you from protecting these assets?	• Evidence of collective savings schemes, e.g., VSLAs. • Insurance policies for the protection of asset bases. • Evidence of measures to protect assets.

Component 20: Social protection (optional)		**Key question:** Does the community have access to informal and/or formal social protection schemes, specifically for health, that support health preparedness and resilience?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community has **limited informal social protection** (mutual assistance systems) and **no access to formal social protection** schemes that can support health access and recovery for the *[chosen risk scenario]*.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Social cohesion/solidarity within the community provides **informal social protection arrangements** that support health access and recovery on a **small scale**. **Few** community members can access **formal social protection schemes** that support health access and recovery, but these schemes are **inconsistent, piecemeal, and short-term**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Community** members can access **both informal and formal** social protection schemes, but these schemes **can support only some necessary aspects** of health access and recovery for the *[chosen risk scenario]*.
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Community** members can access both informal and formal social protection schemes that can support **most necessary aspects** of health access and recovery for the *[chosen risk scenario]*.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**Community members** can access both informal and formal social protection schemes that can support **all necessary aspects** of health access and recovery for the *[chosen risk scenario]*.

Suggested guiding questions	**Suggested means of verification**
• In what ways do community or (extended) family members help each other out during the *[chosen risk scenario]*? In what ways are the most vulnerable persons helped (particularly PLW and children under 5)? • What formal social protection schemes provided by central government or other agencies (such as farmers' associations) are available to the community members who need them? Is there a scheme that targets PLW and/or families with children under 5? Is there a scheme for people with specific health conditions? Are primary health care services free of charge? • Are these informal/formal social protection measures adequate to support *[chosen risk scenario]* mitigation measures (e.g., continuity of health access and care during crisis, house improvements, or livelihoods protection)? If not, why not, and what else is needed? • Are these informal/formal social protection measures adequate to effectively prepare for and/or recover from *[chosen risk scenario]*? If not, why not, and what else is needed?	• Photos of informal social protection arrangements. • Documentation of existing formal social protection schemes. • List of vulnerable groups benefiting from formal social protection schemes. • Photos, works, or resources showing benefit from such schemes. • Details of any free health care initiatives.

Component 21: Social cohesion and conflict prevention (optional)		**Key question:** Is there a sense of peace/security and are there effective conflict prevention/mitigation mechanisms both within the community and with other communities?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There are **low levels** of **peace and social cohesion, widespread sense of insecurity,** and **frequent violence** within the community and/or with other communities. **No actions to mitigate/prevent violence** and **little to no motivation** to establish these.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	There is **some social cohesion and peace** but **frequent tensions (threats of violence)** within the community and/or with other communities often **escalate to violence**. Conflict prevention and mitigation **actions are piecemeal and one-off**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	There is a **good level of social cohesion and peace** within the community and/or with neighboring communities. **Some tensions occasionally escalate into violence**. There are more **long-term actions** to prevent and mitigate conflict, however, these are **not always effective or sufficient to address all tensions.**
4	Actions are long-term, linked to a strategy, and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	There is a **sense of security and peace** among community members, with **occasional tensions** within the community and/or with other communities, **rarely escalating to violence** and **resolved peacefully** and in **a timely manner**.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	There is a **widespread sense of security and peace** in the community. There are **rarely tensions** within the community or with other communities, and these **never escalate to violence**. There are **effective mechanisms** in place **to prevent violence outbreak** within and between communities.

Suggested guiding questions	**Suggested means of verification**
• Do community members generally feel safe here? If not, why not? • How frequently do disputes or tensions emerge in the community and/or with other communities? • Do these disputes/tensions escalate to violence? • What measures do you take to ensure these disputes do not escalate to violence (prevention)? Are these effective? • In what ways do you react and resolve incidents of violence when they do break out (mitigation)? Are these effective?	• Evidence of violence prevention measures. • Evidence of violence mitigation and resolution measures.

Component 22: Critical infrastructure		**Key question:** Are the community's critical infrastructure and basic services resilient/resistant to the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**All critical infrastructure and basic services** in the community are **highly exposed and vulnerable to the *[chosen risk scenario]*. None of them are adequately protected** from the *[chosen risk scenario]* via hazard-resistant construction, structural mitigation, and/or being located in low-risk areas.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Most critical infrastructure and basic services** in the community are **highly exposed and vulnerable to the *[chosen risk scenario]*. Few of them are adequately protected** via hazard-resistant construction, structural mitigation, and/or being located in low-risk areas.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some critical infrastructure and basic services** in the community are **highly vulnerable to the *[chosen risk scenario]*.** The **remaining structures are adequately protected** via hazard-resistant construction, structural mitigation, and/or being located in low-risk areas.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Few critical infrastructure and basic services** in the community are **vulnerable to the *[chosen risk scenario]*. Most of them are adequately protected** via hazard-resistant construction, structural mitigation, and/or being located in low-risk areas.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**No critical infrastructure and basic services in the community are vulnerable to the *[chosen risk scenario]*. All of them are adequately protected** via hazard-resistant construction, structural mitigation, and/or being located in low-risk areas.

Suggested guiding questions	**Suggested means of verification**
• What is the public social infrastructure in your community? For example, list **schools, health facilities**, **access routes**, electrical supply, telecommunications, drainage, and other key basic services. • What proportion of this infrastructure is located in areas that are exposed and vulnerable to *[chosen risk scenario]*? • What is the effect of *[chosen risk scenario]* on this infrastructure? How does this affect your access to critical/health services? Are some structures more vulnerable than others? • Have mitigation works been undertaken to reduce risk to the infrastructure located in unsafe areas? • Are construction methods used in the community that increase resistance to *[chosen risk scenario]*?	• Hazard maps. • Infrastructure works. • Evidence of hazard mitigation works. • Works execution reports.

Component 23: Housing (optional)		**Key question:** Are the community's houses and sanitation facilities resilient/resistant to *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**All housing structures** in the community are **highly vulnerable to *[chosen risk scenario]*. None of them are adequately protected** via access to housing insurance, quality hazard-resistant construction and repair services, structural mitigation measures, and/or being located in low-risk areas.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Most housing structures** in the community are **highly vulnerable to *[chosen risk scenario]***. **Few of them** are **adequately protected** via access to housing insurance, quality hazard-resistant construction and repair services, structural mitigation measures, and/or being located in low-risk areas.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**Some housing structures** in the community are **highly vulnerable to *[chosen risk scenario]***. **The remaining structures** are **adequately protected** via access to housing insurance, quality hazard-resistant construction and repair services, structural mitigation measures, and/or being located in low-risk areas.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	**Few housing structures** in the community are **vulnerable to *[chosen risk scenario]*. Most of them** are **adequately protected** via access to housing insurance, quality hazard-resistant construction and repair services, structural mitigation measures, and/or being located in low-risk areas.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	**No housing structures** in the community are **vulnerable to *[chosen risk scenario]*. All of them** are **adequately protected** via access to housing insurance, quality hazard-resistant construction and repair services, structural mitigation measures, and/or being located in low-risk areas.

Suggested guiding questions	**Suggested means of verification**
• What proportion of housing infrastructure (including toilet/latrines, washing areas) is located in areas that are exposed and vulnerable to *[chosen risk scenario]*? • What is the effect of *[chosen risk scenario]* on housing and hygiene facilities? • What construction methods are used to increase the resistance of your houses/facilities to *[chosen risk scenario]*? • What mitigation works are used to reduce risk to housing located in unsafe areas? • Who carries out or has carried out these works? • How many people in the community know how to build, maintain, and repair their houses? • Have they been formally trained? Are their services sufficient? • Do households have any form of home insurance policy to repair or rebuild their house if damaged?	• Hazard maps. • Inspection reports of housing structures. • Evidence of hazard mitigation works. • Training records/certification of community members in house reparation.

Component 24: Contingency planning and capacities in health preparedness and response		**Key question:** Does the community have a trained and operating health preparedness and resilience organization that uses a communally developed contingency and recovery plan(s) that is widely understood and includes measures to protect vulnerable groups from *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community has **no contingency (and recovery) plan** or, if it does, very few community members know about it and/or the plan is **outdated and not in use**. In addition, the community does not have an organization responsible for/capable of implementing the plan, or the organization is **inactive**.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community **has a contingency (and recovery) plan,** but it is **not aligned** with higher-level contingency planning or an EWS and it **poorly** addresses health response and the unique needs of vulnerable groups. **Few community members** know its content and the plan **has never been applied** (in a simulation) and updated. And/or there is an organization responsible to implement the plan and health preparedness activities, but its **operational capacity is weak,** and few members are trained in health preparedness and response.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community has a **communally developed contingency (and recovery) plan, partially including health preparedness**. It is **somewhat aligned** with higher-level contingency planning and with the EWS. It **somewhat addresses** the unique needs of some vulnerable groups, and some community members know its content. It **is rarely applied** (in simulations) **and updated**. And/or there is an organization responsible to implement the plan and health preparedness activities, and **most of its members** have been trained. However, operations are **not always consistent** with the contingency plan and **address only some aspects** of the issues.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Community has a communally developed contingency (and recovery) plan that is **mostly aligned with EWS and higher-level contingency planning** and **mostly addresses the unique needs of vulnerable groups. Most community members know its content, however, it is only occasionally applied and updated.** There is a **fully trained** community organization that **regularly carries out health preparedness activities** in **line with the contingency plan**. However, there are **still constraints** to fully carrying out its role.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community has a communally developed a contingency and recovery plan, **fully aligned with EWS and higher-level contingency planning,** and it **fully addresses** unique needs of vulnerable groups. All community members know its content and it is regularly applied and updated. There is **a fully trained** community organization that **regularly carries out** preparedness activities and can perform response/early recovery **in line with the local contingency plan** and **effectively coordinates with/is supported by external agencies and government.**

Suggested guiding questions	Suggested means of verification
<u>Contingency Planning</u> ● Does the community have a disaster contingency plan for *[chosen risk scenario]*? If yes, does it include a health section on health contingency, health continuity, and protection of health services? What is included in the health section? ● Do you have a recovery plan? Does your contingency plan include recovery activities? If yes, does it include a health section? ● Who participated in the preparation of this/these plan(s)? ● What proportion of the community knows and understands the plan(s)? ● What activities does the plan(s) include to protect vulnerable groups in your community? And particularly regarding health needs of PLW and children under 5? ● Does the plan align with any existing EWS? ● How often do you carry out simulation drills to test and update this plan? Are improvements made after simulations? <u>Organization</u> ● Is there a community emergency committee trained and certified (or otherwise validated by higher bodies)? Are community health workers/ volunteers part of the committee? ● Are the committee members trained to attend and respond to *[chosen risk scenario]*? Or other emergencies? Which ones? ● What topics are committee members trained on (e.g., IPC, search and rescue, first aid, management of emergency shelters, needs assessment, including health needs assessment, relief distribution, firefighting, debris clearing, reconstruction)? ● Are these skills adequate for the committee to fulfill its role? If not, what other training is needed? ● Do committee members have the necessary equipment to carry out their roles in emergency response and early recovery for the *[chosen risk scenario]*? And for health response? ● What regular preparedness activities does the emergency committee carry out? Are these in line with the contingency/recovery plan? And for the *[chosen risk scenario]*? ● How effective has the committee been (or is likely to be) in health response and early recovery? ● In what ways does this committee coordinate with/receive support from district/regional emergency committees or other actors? And particularly with the health department/ and/or other health actors?	● The plan aligns with higher-level contingency planning. ● Recovery plan (or mention of recovery actions in the contingency plan). ● Evidence that content of contingency plan has been shared with wider community. ● Clearly signed evacuation routes. ● Maps of alternative water sources. ● Photos and/or reports of simulation drills. ● Meetings minutes of local emergency committee. ● Documentation of constitution and membership of local emergency committee. ● Tangible prevention or preparedness actions. ● Equipment inventory for preparedness and response. ● Damage analysis and needs assessment reports. ● Evidence of relevant training for local emergency committee (attendance list, photos). ● Evidence that shows knowledge acquired is put into practice, as applicable.

Component 25: Surveillance and Early Warning System (EWS)		**Key question:** Is there an operational surveillance and/or early warning system in the community for the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Despite the local knowledge of some people, the community **rarely knows about the coming of a main shock from the *[chosen risk scenario]*** that could significantly impact the community.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	**Due to local knowledge,** the community **often knows when a main shock of the *[chosen risk scenario]*** may occur, but they **do not (or cannot) take the appropriate measures** (e.g., alert dissemination, evacuation, response to warning) to protect themselves, their health, and livelihoods.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	**In addition to local knowledge**, the community has **monitoring and alert dissemination tools for the main shock from the *[chosen risk scenario]*** and **trained personnel in their operations and maintenance.** However, these tools are **not always effective/reliable** and the EWS and/or surveillance system is **not fully harmonized with the local contingency plan** or with **higher-level EWS/surveillance system. No simulation drills** are conducted to test the effectiveness of the EWS.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	In addition to local knowledge, the community has **effective and reliable tools to monitor the main shock from the *[chosen risk scenario]*** and communicate alerts. The EWS/surveillance system is **integrated** in the **local contingency plan and higher-level EWS.** The EWS is **supported by higher-level risk authorities** (including for operations and maintenance). However, there are **still constraints** to its functioning. There are only **occasional simulation drills** with poor follow-up and review of the EWS.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	The community is equipped with a **functioning EWS/surveillance system** for the main shock from the ***[chosen risk scenario]*** with **reliable and effective monitoring and alert dissemination mechanisms**, **fully integrated with the local contingency plan**, and **supported by regional/national** risk management authorities (including for operations and maintenance). Simulation **drills** are **regularly** carried out and **weaknesses are addressed.**

Suggested guiding questions	**Suggested means of verification**
• What mechanisms does the community have in place to monitor the *[chosen risk scenario]*? • If the *[chosen risk scenario]* is not about disease outbreak, ask about disease surveillance system at the community level. • What tools are used to (receive and) disseminate alerts in this community? Are these effective? What else is needed? (Include disease surveillance.) • Are people at risk alerted with sufficient time in advance? • Have community members been trained in operation and maintenance of the EWS for their community? (Include disease surveillance.) • Is the EWS system integrated into your contingency plan? In what ways? (Include disease surveillance.) • Do the alert messages include specific information about potential health issues and/or provide specific recommendations for PLW and children under 5?	• EWS community operation manual/plan. • Evidence of monitoring equipment and tools. • Communication and warning tools. • Reports on dissemination the EWS.

Component 26: Health services in emergencies		**Key question:** Does the community have access to health care facilities and health workers equipped and trained to respond to the physical and mental health consequences of the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	There is **no access to trained/qualified health care services** in the community or the surrounding area to respond to the health consequences of crisis.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	There is a health care facility in the area, but **access** and/or **quality of service** (including extension services and referrals) **is poor/fragmentary.**
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	There is an accessible health care facility staffed with **basic trained health staff, medicines, and equipment**. Services (including extension services and referrals) are **not sufficient** for all health issues during emergencies and only **partially coherent with the relevant national strategy** for health in emergencies (if applicable).
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	There is an accessible health care facility staffed with **all the necessary trained personnel, equipment, and medicines.** Services (including extension services and referrals) are **coherent with the relevant national strategy**, although there are **still constraints** in implementation.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	There is an accessible health care facility staffed with **all the necessary trained personnel, equipment, and medicines**. Services (including extension services and referrals) are **highly coherent** with the relevant national strategy and **adequate** to deal with the health consequences of shocks.

Suggested guiding questions	**Suggested means of verification**
• What are the most prevalent diseases or injuries or other reasons for accessing health care during *[chosen risk scenario]*? • Is there a health center that you can access (in terms of distance, safety, and cost)? • In *[chosen risk scenario]*, does this health center have adequate supplies (e.g., therapeutic food, water reserves), medicines, equipment, and trained staff? Please explain. • What kind of health services does this center provide during *[chosen risk scenario]*? And during other emergencies? Does it include: MNH services? Child health services? FP/RH services? SGBV services? Referral mechanisms? Extension services (community health workers)? Outreach services (mobile health and nutrition services)? • How would you describe the quality of health services during *[chosen risk scenario]* or other emergencies? • Do these comply with national health guidelines for *[chosen risk scenario]* and other emergencies? If not, what are the main gaps?	• Health center reports. • Equipment inventory. • Medicine/supply inventory. • List of health center staff and their qualifications. • Records of training for health center staff and community health staff. • Evidence of referral system (vehicles, referral protocol, etc.). • Evidence of mobile health and nutrition services. • Maps to verify accessibility of health centers. • List of community health workers.

Component 27: Education services in emergencies (optional)		**Key question:** Do education services have the capacity to continue operating during the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Education services are **always suspended** as a result of *[chosen risk scenario]*. Community shows **little awareness or motivation** to plan/organize for ensuring their continuation.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Education services **usually experience extended disruption** as a result of *[chosen risk scenario]*. The community is **aware and motivated** to act, but measures to ensure continuation of education services are **sporadic and piecemeal.**
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Education services **sometimes experience short disruption** in the face of *[chosen risk scenario]*. Community takes more **long-term actions** to ensure education is not disrupted by *[chosen risk scenario]*. However, these **do not address all aspects** of the problem, and there is **no school safety/continuation plan in place** or a responsible body to oversee its implementation (**or these do exist** but are inactive or operate fragmentarily).
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Education services in the community are **rarely disrupted** as a result of *[chosen risk scenario]*. The community implements **long-term measures** to ensure continuous education as part of an agreed-upon **school safety/continuation plan, overseen by a school emergency committee**, but there are still constraints in its full implementation.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Education services in the community are **never disrupted** as a result of *[chosen risk scenario]*. The community **fully implements** an agreed-upon **school safety/continuation plan, overseen and periodically reviewed and updated by a responsible committee.**

Suggested guiding questions	**Suggested means of verification**
• How often is the school impacted by *[chosen risk scenario]*? • In what ways are school activities affected? • What measures do you take to ensure the continual operation of education activities in *[chosen risk scenario]* (e.g., protection of materials and supplies, teacher or substitute availability, mobile education services)? • Are these measures enough? If not, what else is needed? • Do these form part of a school safety or school continuation plan? • Which group oversees the implementation of this plan? • If applicable: Are these simulation drills and periodic reviews of the plan?	• School safety and/or continuation plan. • Documentation of the existence of a school emergency committee. • School emergency committee meeting minutes.

Component 28: Emergency infrastructure (optional)		**Key question:** Are emergency shelters (purpose-built or modified) accessible to the community and do they have adequate facilities to meet the basic needs of all the affected population?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	**All community housing is unsafe** for *[chosen risk scenario]* and there is **no physical space to evacuate** to.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	In small-scale *[chosen risk scenario]*, community members can house themselves in **homes of relatives/neighbors** or use **school buildings**. There is **no other community building** to serve as an evacuation shelter. **Conditions are inadequate** to meet basic needs of affected people and protect vulnerable groups.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	In addition to the homes of relatives and neighbors, the community **has a structure** (**other than the school**) that can serve as shelter in *[chosen risk scenario]*. Its **facilities can meet the basic needs of some** affected people and protect **some vulnerable groups**.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	In addition to the homes of relatives and neighbors, the community **has a structure** (other than the school) that serves as a shelter with **adequate conditions** to **meet the basic needs of most** affected people and **protect most vulnerable groups.**
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	In addition to the homes of relatives and neighbors, the community has a **purpose-built emergency shelter in optimal condition** to meet **basic needs of all affected people** and **to protect all vulnerable groups**.

Suggested guiding questions	**Suggested means of verification**
• Is housing infrastructure in the community adequately safe? • In *[chosen risk scenario]*, do community members stay in their homes? If not, do they take shelter in community buildings, or in neighboring houses? • Are schools used as emergency shelters? • Are there community buildings that have adequate conditions (in terms of water supply, sanitation, first aid, sleeping, food storage) during the time necessary to recover from *[chosen risk scenario]*? • Do these community buildings include access for persons with disability? Are latrines clearly signed for men and women and in well-lit areas? Are there designated areas for women and girls? And for PLW and families with children under 5? • How many people can these community buildings shelter? Do they cover the needs of the community?	• Photos of buildings used as emergency shelters. • Manual for operating the shelter. • Inventory of resources in the emergency shelter.

Component 29: Leadership and volunteerism in health response and recovery		**Key question:** Does the community play a leading role in coordinating health preparedness, response, and recovery, reaching all affected people (including the most vulnerable: For ARC-D Health, the most vulnerable groups include orphans and vulnerable children and youth [e.g., child laborers]; children under age 5; PLW; female-headed households; child-headed households; adolescent parents; persons with serious/chronic illness; and persons with a physical, sensory, or intellectual disability) through an organized and trained group of volunteers during the *[chosen risk scenario]*?
Generic resilience level		**Specific resilience characteristic**
1	Little awareness of issues and no action.	Community plays a **passive role** in preparedness, response, and recovery, with the needs of affected and vulnerable people **remaining unattended**. There is **negligible or no community volunteerism**.
2	Some awareness and motivation, some action but action is piecemeal and short-term.	Community plays a **somewhat active role** in preparedness, response, and recovery, but **few or some of the affected** people and vulnerable groups are reached. Community volunteers are **too few, disorganized, and untrained**.
3	Awareness and long-term actions, but these are not linked to a long-term strategy and/or not all aspects of the problem are addressed.	Community plays an **active role** in coordinating preparedness, response, and recovery, and **some of the affected** and vulnerable groups are reached. Community volunteers are **generally organized but untrained**.
4	Actions are long-term, linked to a strategy and address main aspects of the issue, but there are still deficiencies (especially systemic) in implementation.	Community plays a **leading role** in coordinating preparedness, response, and recovery, and **most of the affected** and vulnerable people are reached. Volunteers are **organized and trained** and **most of them** act according to the **established plan/protocol**.
5	Long-term actions are linked to a strategy, address all aspects of the issue, are embedded in society, and are sustainable.	Community plays a **leading role** in coordinating preparedness, response, and recovery, **reaching all affected people and vulnerable groups**. The volunteer group is **robust, organized, and trained**, acting in **full accordance** with the established plan/protocol.

Suggested guiding questions	**Suggested means of verification**
• How active would you describe the role of your community in the *[chosen risk scenario]*? • Is it the community that drives health preparedness, response, and recovery, or is it external agencies (INGOs, government, etc.)? • What examples of community volunteerism can you give for health preparedness, response, and recovery? • How are the volunteers organized? And are there any volunteers organized to attend health-related needs/issues during *[chosen risk scenario]*? • What training (or appropriate instruction) have these volunteers received? • What plan or guidance do they follow? • Is this level of community leadership and participation adequate to meet the needs of affected people in *[chosen risk scenario]*? If not, why and what else is needed? • In what ways do these volunteers ensure the protection of vulnerable persons? And particularly PLW and children under 5?	• Contingency plan (including mention of role of volunteers). • Census of vulnerable groups. • Risk maps. • Inventory of resources and equipment for emergency response. • Evacuation routes. • Inventory list of volunteers. • Training attendance lists trainings. • Evidence of actions implemented by volunteers (photos, works).

APPENDIX 3. COMPARISON OF COMPONENTS BETWEEN ARC-D AND ARC-D HEALTH

SFDRR	ARC-D Health	ARC-D	Resilience Capacities
Understanding Risk (related to health)	**1. Risk assessment**	1. Participatory community risk assessment	Absorptive
		2. Technical/scientific risk assessment	Absorptive, Adaptive
	2. Dissemination of health resilience information	3. Dissemination of DRR information	Absorptive, Adaptive
	3. Education of children on health resilience (optional)	4. Education of children on DRR	Adaptive, Transformative
Strengthening Governance to Manage Risks (to health)	4. Health resilience in development planning (optional)	5. DRR in development planning	Transformative
		6. Land-use planning	Transformative
	5. Community decision-making	7. Community decision-making	Transformative
	6. Inclusion of vulnerable groups	8. Inclusion of vulnerable groups	Transformative
	7. Participation of women	9. Participation of women	Transformative
	8. Rights awareness and advocacy (optional)	10. Rights awareness and advocacy	Transformative
	9. Partnerships for health resilience	11. Partnerships for DRR and recovery	Transformative
Investing in disaster risk reduction for resilience	10. Sustainable environmental management (optional)	12. Sustainable environmental management	Transformative
	11. Water security and management (optional or see 15)	13. Water security and management	Adaptive
	12. Health awareness, behaviors, and practices ("calm" times)	14. Health access and awareness	Adaptive
	13. Access to health services ("calm" time)		

	14. Quality of health ("calm" times)		
	15. Secure and nutritious food and water supply	15. Secure and nutritious food supply	Absorptive
		13. Water security and management	Adaptive
	16. Shock/stress-resistant livelihoods practices (optional)	16. Hazard-resistant livelihoods practices	Adaptive
	17. Market access (optional)	17. Access to market	Transformative
	18. Access to financial services (including financing for health)	18. Access to financial services	Adaptive, Absorptive
	19. Income and asset protection (optional)	19. Income and asset protection	Adaptive
	20. Social protection (optional)	20. Social protection	Absorptive, Transformative
	21. Social cohesion and conflict prevention (optional)	21. Social cohesion and conflict prevention	Absorptive, Transformative
	22. Critical infrastructure	22. Critical infrastructure	Absorptive, Transformative
	23. Housing (optional)	23. Housing	Absorptive
Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction	**24. Contingency planning and capacities in health preparedness and response**	24. Contingency and recovery planning	Absorptive
		26. Capacities in preparedness and response	Absorptive
	25. Surveillance and EWS	25. Early warning system	Absorptive
	26. Health services in emergencies	27. Health services in emergencies	Absorptive
	27. Education services in emergencies (optional)	28. Education services in emergencies	Absorptive
	28. Emergency infrastructure (optional)	29. Emergency infrastructure	Absorptive
	29. Leadership and volunteerism in health response and recovery	30. Leadership and volunteerism in response and recover	Absorptive

APPENDIX 4. GLOSSARY OF TERMS

Absorptive capacity (Health resilience)

The prevention and coping measures used to avoid permanent, negative impacts from shocks and stresses and maintain health and health system stability. For example, implementing task shifting or task sharing to optimize health workforce to meet priority needs. (Blueprint for Global Health Resilience | U.S. Agency for International Development (usaid.gov))

Adaptive capacity (Health resilience)

The ability to make changes in response to long-term change. The capacity of the health system to make adjustments while improving overall system performance. For example, leveraging digital solutions for training and/or clinical decision support during the COVID-19 pandemic. (Blueprint for Global Health Resilience | U.S. Agency for International Development (usaid.gov))

Assessment

A process of gathering information, analyzing it, and then making a judgment based on the information. (www.ifad.org)

Capacity

The ability of people, institutions, and societies to perform functions, solve problems, and set and achieve objectives (www.undp.org). According to the United Nations Office for Disaster Risk Reduction (www.unisdr.org), capacity is the combination of the strengths, attributes, and resources available within a community, society, or organization that can be used to achieve agreed-upon goals. Capacity may include infrastructure and physical means, institutions, and societal coping abilities, as well as human knowledge, skills, and collective attributes such as social relationships, leadership, and management. A capacity assessment is the process by which the capacity of a group is reviewed against desired goals, and the capacity gaps are identified for further action. (www.unisdr.org)

Chemical accidents

Accidental release occurring during the production, transportation, or handling of hazardous chemical substances. (www.unisdr.org)

Climate

Climate is generally defined as the average weather. More rigorously, it is a statistical description in terms of the mean and variability of such surface variables as temperature, precipitation, and wind over a period of time, ranging from months to thousands or millions of years. The accepted period for averaging these variables is 30 years. (https://www.un.org/climatechange/IPCC)

Climate change

The United Nations Framework Convention on Climate Change (UNFCCC) defines climate change as "A change of climate which is attributed directly or indirectly to human activity that alters the

composition of the global atmosphere and which is, in addition to natural climate variability, observed over comparable time periods." An alternative definition, by the Intergovernmental Panel on Climate Change (IPCC), is "a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forces, or to persistent anthropogenic changes in the composition of the atmosphere or in land use." Both definitions are widely accepted, even though the UNFCCC definition excludes climate changes attributable to natural causes. The IPCC definition can be paraphrased as "A change in the climate that persists for decades or longer, arising from either natural causes or human activity." (www.unisdr.org)

Climate change adaptation

The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate and its effects. (https://www.un.org/IPCC)

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 (e.g., a village or an urban neighborhood). This overlooks other significant dimensions of the "community" including common interests, values, activities, and structures. From a hazard perspective, the spatial dimension is essential in identifying communities at risk. However, it must be linked to an understanding of the socioeconomic 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. It was noted during field testing in Malawi in 2014 that the smallest administrative level facilitated the most consensus in terms of resilience measurement. (www.goalglobal.org)

Contingency planning

A management process that analyzes potential events or emerging situations that might threaten society or the environment and establishes protocols in advance to enable timely, effective, and appropriate responses. Contingency planning results in organized and coordinated courses of action with clearly identified institutional roles and resources, information processes, and operational assignments for specific actors for times of need. Based on scenarios of possible emergency conditions or disaster events, it allows key actors to envision, anticipate, and solve problems that can arise during crises. Contingency planning is an important part of overall preparedness and should be regularly updated and practiced. (www.unisrd.org)

Cyclone

A severe weather system characterized by high winds and heavy rains. In the North Atlantic and East Pacific, cyclones are usually called hurricanes; in the West Pacific they are called typhoons. Depending on an area's geography and topography, they can cause widespread damage to houses, roads, crops, and livelihoods as the result of wind damage, storm surge, flooding and flash flooding, and landslides. Without proper sanitation in affected areas, disease outbreaks are possible. (www.usaid.gov)

Desertification

The United Nations Convention to Combat Desertification (UNCCD) defines desertification as "land degradation in arid, semi-arid, and sub-humid areas resulting from various factors including climatic variations and human activities" (UNCCD Art.1.a). Desertification is a dynamic process that occurs in dry and fragile ecosystems. It affects terrestrial areas (topsoil, earth, groundwater reserves, surface run-off), animal and plant populations, and human settlements and their amenities (for instance, terraces and dams). (http://www.unesco.org/mab/doc/ekocd/chapter1.html)

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. Disasters are often described as a result of the combination of the exposure to a hazard, the conditions of vulnerability that are present, and insufficient capacity or measures to reduce or cope with the potential negative consequences. Disaster impacts may include loss of life, injury, disease, or other negative effects on human physical, mental, and social well-being, including property damage, destruction of assets, loss of services, social and economic disruption, and environmental degradation. (www.unisdr.org)

Disaster risk reduction

The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness for adverse events (www.unisdr.org).The purpose of disaster risk reduction is to minimize vulnerabilities and disaster risks throughout a society in order to avoid (prevent) or to limit (mitigate and prepare for) the adverse impacts of natural hazards, and facilitate sustainable development. (www.unicef.org)

Drought

A deficiency of precipitation over an extended period, usually a season or more, which results in a water shortage for some activity, group, or environmental sector. It develops slowly, sometimes over years, and its onset can be masked by several factors. Its impact can be devastating: water supplies drying up, crops failing to grow, animals dying, and malnutrition and ill health becoming widespread (www.preventionweb.net). There are four drought classifications: meteorological (deviation from normal rainfall), agricultural (abnormal soil humidity conditions), hydrological (related to abnormal hydric resources), and socioeconomic (when the lack of water affects the life and livelihoods of persons).

Early recovery

A process that shifts the focus after a disaster from saving lives to restoring livelihoods. Early recovery interventions seek to stabilize the economic, governance, human security, and social equity of the

affected area. They also aim to integrate risk reduction at the very early stages of the response to a specific crisis and to lay the foundation for long-term reconstruction. (www.unisdr.org)

Early warning system (EWS)

The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities, and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss. This encompasses a range of factors necessary to achieve effective responses to warnings. A people-centered EWS comprises four key elements: 1) knowledge of the risks; 2) monitoring, analysis, and forecasting of the hazards; 3) communication or dissemination of alerts and warnings; and 4) local capabilities to respond to the warnings received. The expression "end-to-end warning system" is also used to emphasize that warning systems need to span all steps, from hazard detection through to community response. (www.unisdr.org)

Earthquake

A sudden motion or trembling in the earth's crust caused by the abrupt release of accumulated stress along a fault. The energy released through seismic waves that travel to the source area cause the earth to tremble. The level of damage depends upon various factors, including earthquake intensity, depth, the vulnerability of structures, and the distance from the earthquake source. (Natural Hazards Research Platform » National Emergency Management Agency (civildefence.govt.nz))

Ecosystem

A functional unit consisting of living organisms, their non-living environment, and the interactions within and between them. Ecosystems are nested within other ecosystems and often have no fixed boundaries. Today, most ecosystems either contain people as key organisms, or are influenced by the effects of human activities in their environment. Ecosystems are critical in supporting human well-being, and the importance of their preservation under anthropogenic climate change is explicitly highlighted in Article 2 of the United Nations Framework Convention on Climate Change. (Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation — IPCC)

Environmental degradation

The reduction of the capacity of the environment to meet social and ecological objectives and needs. Environmental degradation can alter the frequency and intensity of natural hazards and increase the vulnerability of communities. The types of human-induced degradation are varied and include land misuse, soil erosion and loss, desertification, wildland fires, loss of biodiversity, deforestation, mangrove destruction, land, water, and air pollution, climate change, sea level rise, and ozone depletion. (www.unisdr.org)

Epidemic

The occurrence of a greater number of cases of disease than expected in a given area or among a specific group of people. Epidemics such as cholera, typhoid, and the bubonic plague, affect, or tend

to affect, a disproportionately large number of individuals over a particular period, usually short-term (days, weeks, months maximum). (Principles of Epidemiology | Lesson 1 - Section 11 (cdc.gov))

Exposure

The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas. According to the GOAL 2016 guidance on programming for resilience, "exposure relates to the likelihood of a community experiencing a disturbance and includes issues of placement (location and types of houses, land use, etc.), as well as the magnitude, frequency, and duration of an event (e.g., a family that has a home on steeply sloped land will generally be more exposed to the hazard of landslides than a family living on a flatter surface). (Exposure | Understanding Disaster Risk (preventionweb.net))

Flooding

The overflowing of the normal confines of a stream or other body of water, or the accumulation of water over areas that are not normally submerged. Floods include river (fluvial) floods, flash floods, urban floods, rain-induced (pluvial) floods, sewer floods, coastal floods, and glacial lake outburst floods. (3.4.3 Floods and droughts - AR4 WGII Chapter 3: Fresh Water Resources and their Management (ipcc.ch))

Food insecurity

"When people lack regular access to enough safe and nutritious food for normal growth and development and an active and healthy life. This may be due to unavailability of food and/or lack of resources to obtain food. Food insecurity can be experienced at different levels of severity." Food insecurity may be caused by the unavailability of food, insufficient purchasing power, inappropriate distribution, or inadequate use of food at the household level. Food insecurity may be chronic, seasonal, or transitory. (Hunger | FAO | Food and Agriculture Organization of the United Nations)

Food security

When all people 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). There are four dimensions to food security: food availability, food access, utilization, and stability. (al936e.pdf (fao.org))

Gender-based violence

Violence that is directed against a person on the basis of gender or sex. It includes acts that inflict physical, mental, or sexual harm or suffering, threats of such acts, coercion, or other deprivations of liberty. While women, men, boys, and girls can be victims of gender-based violence, because of their subordinate status in many places of the world, women and girls are its primary victims. (UNHCR - Gender-based Violence)

Governance

Governance encompasses the system by which an organization or a system is controlled and operates, and the mechanisms by which it, and its people, are held to account. Ethics, risk management, compliance, and administration are all elements of governance. It is the exercise of political, economic, and administrative authority in the management of a country's affairs at all levels. It comprises mechanisms, processes, and institutions through which citizens and groups articulate their interests, exercise their legal rights, meet their obligations, and mediate their differences. Governance encompasses, but also transcends, the state. It encompasses all relevant groups, including the private sector and civil society organizations. (What is governance? (governanceinstitute.com.au)

Health preparedness

In the context of this toolkit, this is understood as preparedness (see definition later in this glossary) that is specifically focused on the health sector, including activities that will support the local health system to respond effectively and promptly to a crisis while continuing to provide critical health services to mitigate/reduce the potential deterioration of health outcomes.

Health resilience

The ability of people, households, communities, health systems, and countries to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces acute and chronic vulnerabilities, and facilitates equitable health outcomes. MIHR-resilience-program-brief-draft-5-20-21.pdf (usaidmomentum.org)

Heat wave

Marked warming of the air, or the invasion of very warm air, over a large area, usually lasting more than two days. This rise in atmospheric average temperature well above the average of a region, affects human populations, crops, properties, and services. (During a Heat Wave (weather.gov))

Hurricane

See Cyclone.

Landslides

The movement of a mass of rock, debris, or earth down a slope. Landslides encompass rock falls, topples, slides, and spreads, as well as flows, such as debris flows commonly referred to as mudflows or mudslides. Landslides can be initiated by rainfall, earthquakes, volcanic activity, changes in groundwater, disturbance and change of a slope by man-made construction activities, or any combination of these factors. (What is a landslide and what causes one? | U.S. Geological Survey (usgs.gov))

Livelihoods

"A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stress and shocks and maintain or enhance its capabilities and assets both now and in the future, while not undermining the natural resource base."
(16771_16771guidancenoteonrecoveryliveliho.pdf (unisdr.org))

Mitigation

The lessening or limitation of the adverse impacts of hazards and related disasters. While adverse impacts of hazards often cannot be prevented fully, their scale or severity can be substantially lessened by various strategies and actions. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness. It should be noted that in climate change policy, "mitigation" is defined differently, being the term used for the reduction of greenhouse gas emissions that are the source of climate change.
(45462_backgoundpaperonterminologyaugust20.pdf (preventionweb.net))

Participation

One or more processes in which a crisis-affected person (or group) takes an active role in specific decision-making processes that affect them, and over which they may exercise specific controls. It often refers to processes in which primary stakeholders take an active part in planning and decision-making, implementation, learning, and evaluation. Participation involves enabling crisis-affected people to play an active role in the decision-making processes that affect them. It is achieved through the establishment of clear guidelines and practices to engage them appropriately and ensure the most marginalized and worst affected are represented and have influence (CHS. 2014)

Pastoralism

A livelihood strategy based on moving livestock to seasonal pastures, primarily in order to convert grasses, forbs, tree-leaves, or crop residues into human food. The search for feed is not the only reason for mobility—people and livestock may move to avoid various natural and/or social hazards, to avoid competition with others, or to seek more favorable conditions. Pastoralism can also be thought of as a strategy that is shaped by both social and ecological factors concerning uncertainty and variability of precipitation, and low and unpredictable productivity of terrestrial ecosystem (IPCC, 2013)

Preparedness

The knowledge and ability to effectively anticipate, respond to, and recover from the impacts of likely, imminent, or current hazard events or conditions. Preparedness aims to build the capacities needed to efficiently manage all types of emergencies and achieve orderly transitions from response through to sustained recovery. Preparedness is based on a sound analysis of disaster risks and good linkages with early warning systems, and includes such activities as contingency planning, stockpiling of equipment and supplies, the development of arrangements for coordination, evacuation and public information, and associated training and field exercises. These must be supported by formal

institutional, legal, and budgetary capacities. The related term “readiness” describes the ability to quickly and appropriately respond when required. (www.unisdr.org)

Prevention

The outright avoidance of adverse impacts of hazards and related disasters. Prevention expresses the concept and intention to completely avoid potential adverse impacts through action taken in advance. Examples include dams or embankments that eliminate flood risks, land-use regulations that do not permit any settlement in high-risk zones, and seismic engineering designs that ensure the survival and function of a critical building in any likely earthquake. Very often the complete avoidance of losses is not feasible, and the task transforms to that of mitigation. Partly for this reason, the terms prevention and mitigation are sometimes used interchangeably in casual use. (www.unisdr.org)

Protection

It is a concept that encompasses all activities aimed at obtaining full respect for the rights of the individual in accordance with the letter and spirit of human rights, as well as refugee and international humanitarian law. Protection involves creating an environment conducive to respect for human beings, preventing and/or alleviating the immediate effects of a specific pattern of abuse, and restoring dignified conditions of life through reparation, restitution, and rehabilitation. www.reliefweb.int

Recovery

The restoration, and improvement where appropriate, of facilities, livelihoods, and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors. The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programs, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the “build back better” principle. www.unisdr.org

Resilience

The ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth. https://www.usaid.gov/resilience

Response

The provision of emergency services and public assistance during or immediately after a disaster to save lives, reduce health impacts, ensure public safety, and meet the basic subsistence needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called “disaster relief.” The differences between this response stage and the subsequent recovery stage are not clear-cut, as some response actions, such as the supply of temporary housing and water supplies, may extend well into the recovery stage. www.unisdr.org

Retrofitting

Reinforcement or upgrading of existing structures to become more resistant and resilient to the damaging effects of hazards. Retrofitting requires consideration of the design and function of the structure, the stresses that the structure may be subject to from particular hazards or hazard scenarios, and the practicality and costs of different retrofitting options. Examples of retrofitting include adding bracing to stiffen walls, reinforcing pillars, adding steel ties between walls and roofs, installing shutters on windows, and improving the protection of important facilities and equipment. www.unisdr.org

Risk

The potential for consequences where something of human value (including humans themselves) is at stake and where the outcome is uncertain. "Risk" has two distinctive connotations. In popular usage, the emphasis is usually placed on chance or possibility, such as in "the risk of an accident." In technical settings, the emphasis is on the consequences, in terms of "potential losses," for some particular cause, place, and period. Since people do not necessarily share the same perceptions of the significance and underlying causes of different risks, both are used in this toolkit. www.unisdr.org

Risk assessment

A methodology to determine the nature and extent of risk by analyzing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods, and the environment on which they depend. Risk assessments (and associated risk mapping) include:

- Review of the technical characteristics of hazards such as their location, intensity, frequency, and probability.
- Analysis of exposure and vulnerability including the physical social, health, economic, and environmental dimensions.
- Evaluation of the effectiveness of prevailing and alternative coping capacities in respect to likely risk scenarios. www.unisdr.org
- Analysis of loss/impact to estimate potential losses of exposed population, property, services, livelihoods, and environment, and assessment of their potential impacts on society. www.undp.org

Shocks

Sudden events that impact the vulnerability of the system and its components. There are many different types of disaster-related shocks that can strike at different levels. These include disease outbreaks and weather-related and geophysical events including floods, high winds, landslides, droughts, or earthquakes. There are also conflict-related shocks, such as outbreaks of fighting or violence, and shocks related to economic volatility. While drought is not a sudden event, once a drought surpasses the tipping point into an extreme event, it is classified as a shock. (DFID 2011) See a comprehensive list of shocks in Part A.

Stress

A long-term trend that undermines the potential of a given system or process and increases the vulnerability of actors within it. This can include natural resource degradation, loss of agricultural production, urbanization, demographic changes, climate change, political instability, and economic decline (DFID 2011). See a comprehensive list of stresses in Part A.

Tornado

Tornadoes are nature's most violent storms. Spawned from powerful thunderstorms, tornadoes can cause fatalities and devastate a neighborhood in seconds. Winds of a tornado may reach 300 miles per hour. Damage paths can be more than one mile wide and 50 miles long. Strong downburst (straight-line) winds may also occur due to the same thunderstorm. Hail is very commonly found very close to the tornadoes, as the strongest thunderstorms that spawn tornadoes are formed under the atmospheric conditions that are also highly likely to make hail. Tornado Definition (weather.gov)

Transformative capacity (Health resilience)

The ability to make fundamental change that addresses underlying vulnerabilities and contextual dynamics that impact system performance and progress toward health outcomes. For instance, instituting formal arrangements between public and private providers to share resources (workers, supplies, etc.) during a crisis. (Blueprint for Global Health Resilience | U.S. Agency for International Development (usaid.gov))

Tropical storm/depression

See Cyclone.

Tsunami

A tsunami comprises seismic sea waves that are a series of enormous waves created by an underwater disturbance such as an earthquake, landslide, volcanic eruption, meteorite, or underwater explosion. A tsunami can move hundreds of miles per hour in the open ocean and smash into land with waves as high as 100 feet or more. Tsunamis can have devastating effects on coastal regions. (www.ready.gov/tsunamis)

Typhoon

See Cyclone.

Volcanic eruption

A volcanic eruption is when lava and gas are released from a volcano—sometimes explosively. The most dangerous type of eruption is called a 'glowing avalanche,' which is when freshly erupted magma flows down the sides of a volcano. This can travel quickly and reach temperatures of up to 1,200 degrees Fahrenheit. Other hazards include ash fall and lahars (mud or debris flows). Volcanoes often cause population displacements and food shortages. (Volcanic eruptions | IFRC)

Vulnerability

The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of an individual, a community, assets, or systems to the impacts of hazards (Vulnerability | UNDRR). There are many aspects of vulnerability arising from various physical, social, economic, and environmental factors. Examples may include poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. Vulnerability varies significantly within a community and over time.

Vulnerability capacity analysis (VCA)

An analytical and planning process (and associated tool) developed by IFRC and used to facilitate community-led assessment of local disaster risk. The process uses participatory techniques (mapping, seasonal calendars, transect walks, FGDs, interviews, etc.) to develop a comprehensive picture of exposure, vulnerability, and capacities and to prioritize actions to reduce disaster risk. For more information on VCA and associated tools, refer to the GOAL DRR sectoral strategy. (98600-TxtMeasuring-9 (humanitarianlibrary.org))

Vulnerable groups

Segments of the population that are more susceptible to experiencing harm, discrimination, or disadvantage due to various factors such as their social, economic, or physical circumstances or geographic location. These groups may face increased risks, have limited access to resources or opportunities, and require specific support and protection to ensure their well-being and equal participation in society. Vulnerable groups can vary across different contexts, but some common examples include children, the elderly, persons with disabilities, women and girls, ethnic and racial minorities, LGBTQIA+ individuals, immigrants and migrants, and refugees and displaced persons. It is important to note that these groups are not mutually exclusive, and individuals can belong to multiple vulnerable groups simultaneously. (Social Protection and Human Rights: Disadvantaged and vulnerable groups; UNESCWA: Vulnerable groups)

APPENDIX 5. ORGANIZING A DATA REVIEW WORKSHOP

Duration: Approximately 4 hours

Participants: Deputy director, MERL staff, health staff, and any other staff or partners working on health programming in the target areas.

Facilitator(s): Resilience Advisor, MERL Manager and/or Knowledge Manager, if any

Objectives of the workshop:

- Co-analyze and interpret data obtained through ARC-D Health
- Identify series of recommendations for programming, advocacy and/or further research

Outline of the workshop

Time	Content	Process	Materials
10 min	Introduction/presentation	(per usual practice in the country context)	
50 min	Presentation of ARC-D Health process (brief description of how the data were collected) and presentation of results from Part A and Part B per type of risk scenarios (generic score and resilience scores)	PPT presentation	Projector and screen
60 min	Analysis of Data – group work (highest and lowest components and communities, common themes/similarities/trends, contrasting stories etc.)	Divide into 2 to 4 groups, either by risk scenario or by geography	Laptops (1 per group) to record main points discussed and findings Question Guide (1 per group)
60 min	Analysis of Data - Plenary	Each group has 5-10 minutes to present and reflect on main findings. 30 min for debate and agreement on main findings	Projector and screen
30 min	Recommendations – Group work	Same groups	Laptops Question guide for Recs
30 min	Recommendations - Plenary	Presentation per group, reflections and agreement on main recommendations to include in report.	Projector and screen

Suggested question guide for the analysis in small groups

- What are the communities with the highest resilience scores? What are the communities with the lowest resilience scores? What do you think are the main factors/conditions that contribute to high or low scores in those communities?
- What are the components with the highest scores? What are the components with the lowest scores? What do you think are the main factors/conditions that contribute to these results?
- For Groups 2 and 3 only: Same question as above but for the 3 resilience capacities (absorptive, adaptive, and transformative). Which capacity scored highest? Which capacity scored lowest? Why? What does that tell you?
- Can you identify common themes and trends across the communities and/or the components?
- Are there any interesting contrasting stories to highlight? Within communities and/or within components, e.g. components with very low or very high scores? Any positive deviance that could be taken as a model?

Suggested question guide for the plenary discussion

- What do the data/evidence tell us?
- Does the data align with what you expected?
- Is there anything else we should know, and can we get this information?

Suggested question guide for the recommendations (in small groups and plenary)

- Is the project addressing the right issues?
- Does the project need to make adjustments? If so, what adjustments are needed?
- If adjustments are needed, what does this mean for project management, including the project's work with the MOH and USAID?
- What information did you use?
- What other information is needed?

Suggested guide to organize the recommendations

	Type of recommendation	Direct program intervention	For implementation by partners	Advocacy	Further research
Health	Quick win/ short-term				
	Medium-term/ long-term				
Non-health	Quick win/ short-term				
	Medium-term/ long-term				