



**Humanitarian
Programme**

**BRAC
Resilience
Marker
Tool**

March 2021

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1. Introduction

In 2020, Bangladesh faced three different types of crises: recurrent natural hazards, the protracted Rohingya refugee crisis and the COVID-19 pandemic. Cyclones, floods, river erosion and landslides have repeatedly threatened development progress for decades. Government-led efforts on disaster management and response, with support from national and international development and humanitarian actors, have increased the countries' resilience to climate-related shocks.

BRAC is one of the largest NGOs in the world. It implements a range of programs across Bangladesh and 10 other countries. Most of the program areas are susceptible to disaster and the program participants are affected by recurrent disasters induced by flood, cyclone, and river erosion. This poses a major threat to jeopardize program outcomes. BRAC Humanitarian Program (BHP) committed to improving resilience of the programs to natural shocks and stress. In order to fulfil its commitment, BHP developed this Resilience Marker to improve program design integrating resilience consideration. This resilience marker will help to portray BRAC's capacity to sustain its programmes' outcomes and improve community's resilience. The marker may be of interest of other organizations to assess the extent to which projects integrate resilience consideration to withstand adversities. .

1.1. What is Resilience?

Resilience is the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate to and recover from the effect of a hazard in a timely and efficient manner, including through the prevention and restoration of its essential basic structure and function (UNDRR defining resilience).

The two elements are importance for concern-

- Buffer capacity or robustness (capacity to absorb stress, hazard, disturbance, or destructive forces, maintain certain basic functions and structures during disastrous events)
- Capacity for learning, adaptation and self-organisation (which includes improving or 'bouncing forward' after an event)

BRAC resilience building process includes four core activities:

- i) Understanding the context/system,
- ii) Identifying resilience building strategies through an open, inclusive learning process that can address the uncertainties of climate change through action and implementation,
- iii) Assessing the outcome of the resilience enhancing initiatives and
- iv) An iterative and shared learning approach to guide the whole process. A central focus is to lead to social transformation and reduce inequalities.

Development of Resilience Marker is based on the assessment of the current organisational and programmatic resilience within BRAC. The assessment focused on BRAC's existing humanitarian interventions and disaster risk reduction practices in line with organisation priorities of disaster risk reduction integration across all development programmes. Based on the assessment report, NIRAPAD team developed resilience marker tool including four steps, indicative elements, criteria of assessment, applications and guidance on how to use the tool.

1.2. What is the Resilience Marker?

Resilience Marker is a tool to examine the extent to which the program design integrates resilience consideration. It ensures systematic inclusion of resilience in programs to reflect performance on resilience and generate constructive interaction across program.

BRAC Resilience Marker provides relevant insight of how risks and vulnerability to shocks and stresses are addressed and offer opportunities for further reflection as well as tracking progress on resilience integration over time. It seeks to enhance the quality of program by

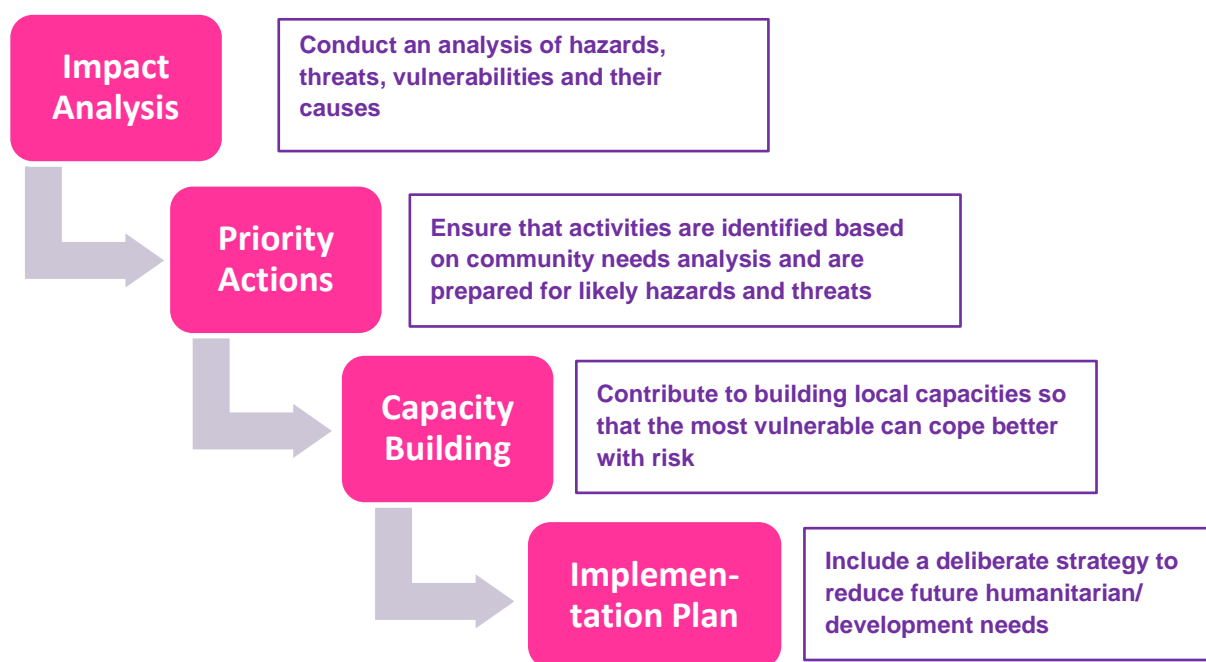
- Ensuring a systematic inclusion of resilience considerations in program design.
- Assessing to what extent the project contributes to household resilience capacity.
- Identifying the strengths and improvement areas for building resilience.
- Facilitating reflection and learning and possible adjustments to project implementation to enhance the level of resilience integration.

There have been several studies attempting to measure resilience mainstreaming in development work. Most of them have reported lack of adequate resilience classification and information as challenges. A major setback in estimating the aid flows intended to resilience mainstreaming is the lack of standardized guidelines for recording such investments. This is due to the fact that resilience has not been identified as either a stand-alone or cross-cutting theme in most donor agencies' accounting and reporting systems, despite call for improved standard setting and development of tools and guidelines.

2. Steps of the Resilience Marker

Resilience-building requires an integration of humanitarian and development work in places of recurring crises to put an end to the current structural disconnect between the two and strengthen their impact. This requires joint strategies across the humanitarian and development continuum, closer collaboration, increased development work in places with predictable and recurrent crises, and the building of flexible, long-term programming which can adapt to changing circumstances. Internal organisational factors - such as staff competencies, culture, systems, structures and leadership - may need to be adapted to better support this work.

There are four key steps which are expected to help promote resilience in BRAC programming activity. The steps are developed on the basis of the accumulated information from BRAC relevant programme documents such as reports, strategies, tools and framework; and the review of United Nations Resident Coordinator Office's (UNRCO) suggested Strategic Preparedness for Response and Resilience to Disaster Approach ([SPEED Approach](#)) in Bangladesh for promoting 'Nexus'. The steps are Impact Analysis, Priority Action, Building Capacity and Implementation Plan. Infographics 1 briefly captured the steps.



Infographic 1: Key Steps for Resilience Marker

The steps are described below:

- **Impact Analysis:** provides an overall assessment of disaster impacts, based on available data sets and forecasts (e.g. path and speed of a cyclone, weather forecasts). Disaster impact estimates are derived from detailed scenarios developed for the high-impact hazards to which an area is exposed and vulnerable to or already impacted.

- **Priority Actions:** aims to identify community priority based on needs that meet the following criteria
 - (a) are time-critical and, of high-impact in terms of saving lives, reducing suffering and improving resilience;
 - (b) can be realistically prioritized at scale and through market-based solution;
 - (c) are specific enough to allow logistical and operational arrangements;
 - (d) meet the stakeholders' expectations and priorities identified by the communities at risk or affected by disaster.

- **Building Capacity:** for disaster preparedness, response and disaster risk reduction is a whole-of-society matter, not the concern of a particular organization, professional discipline or stakeholder group. It is important for the organisation to acknowledge people's ability to anticipate, to cope, to resist and to recover from disasters, rather than focusing on vulnerabilities that limit them. Apply capacity building in different contexts to build resilience of the community by maintaining well-being, building back better and sustaining economy.

- **Implementation Plan:** provides strategic coherence and complementarity between prioritised actions to reduce and prevent loss of life and asset, prepare and respond to reduce affected people's distress, and restore and recover life and livelihood functions.

3. Resilience Marker Indicative Elements

a) Impact Analysis: Conduct an analysis of hazards, threats, vulnerabilities and their causes

The impact analysis identifies different relevant past and potential shocks and stresses. For example, risk of flood, drought, storm, landslide, earthquake, food price hike, epidemic, pandemic, technological disaster, climate change or environmental degradation, and threat of an outbreak or intensification of social unrest and conflict. The analysis also identifies characteristics of shocks with regard to what areas might be affected, intensity and likelihood. As mentioned earlier, BRAC works in location which are frequently affected by hazard. So, this component looked at how the issues of hazard has been taken into account in the programming. The **indicative elements** are described below-

Analyses the loss of life, asset and environment due to disaster or crisis:

Life- hazards kill and injure many people. Asset- hazards also destroy assets and properties such as equipment, crops, livestock, houses, roads, bridges, water and sanitation and other infrastructure. Environment- damage results form of hazards may loss of land, siltation and sedimentation of riverbeds, increased salinity of surface and ground water, water logging, disappearance of water bodies, deforestation and chemical contamination of water.

Analyses the disruption of service provision, economic activities and social functions due to disaster or crisis:

Service provisions- for example, health care services, water and sanitation facilities, schools, power supply and communication may stop operating. Economic activities- for example, plantation and other agriculture work, industries and factories and market cease to function. Social functions – for example, social cohesion, recreational activities, festival, ceremonies and social network become suspended.

Analyses the distress of the affected people due to disaster or crisis:

Physical distress – absence of services hinders meeting the basic needs and people suffer from hunger, illness, thirst, filthiness, hypothermia and heat-stroke. Emotional distress – exposure to violent event, displacement and resulting increase in the vulnerability to abuse, exploitation and physical harms may cause trauma, fear, anxiety and apprehension. Social distress – loss of assets and incomes and reduction in employment opportunities may lead to paucity and impoverishment, disgrace and relief dependency.

Identifies/understands the root causes of the vulnerabilities of the target people:

People differ in their exposure to risk because of their social group, gender, ethnic or other identity, age and other factors. Better what makes the community vulnerable to that threat or hazard- such as poverty, poor governance, discrimination, inequality and inadequate access to resources and livelihoods.

Analysis of livelihood strategies of the community:

How people combine their income generating activities; the way in which they use their assets; which assets they chose to invest in; and how they manage to preserve existing assets and income (UKAid 2004). The livelihood strategies on which community rely, the constraints they face and the coping

strategies they are forced to depend on to achieve outcomes in terms of food security and accessing other basic requirements.

b) Priority Actions: Ensure that activities are identified based on community needs analysis and are prepared for likely hazards and threats

The project priority actions are based on the identified problem, interests, needs, potential, interaction and other relevant factors to community engagement. Identified different group of people who have a role in the community and influence the success of the community engagement activities and program outcomes. Participatory approaches enable people to explain their vulnerabilities and priorities, allowing problems to be defined accurately and appropriate interventions. The indicative elements are described below-

Design/develop in consultation with community and stakeholders:

Provision for the affected population to express their needs and aspirations ensuring they are treated respectfully and provided with clear information on assessment process and what happens next. Effective community consultation is a participatory process that underpins genuine community development. It enables communities to articulate their own concerns, and identify the appropriate responses and solutions to problems that affect them.

Must considers the community engagement during implementation:

Enable two-way communication for engaging communities in dialogue, by managing the information sent to and received from affected communities and integrating their feedback into decision-making process. Enable affected populations to play an active role in the decision-making processes that affect them through the establishment of clear guidelines and practices to engage them appropriately and ensure that the most marginalised and affected are represented and have influence.

Establishes feedback and complaint response mechanism:

Provisions feedback and complaints handling procedures in consultation with affected community with a clear procedure for submitting feedback and complaints; the steps taken and the right to receive a response. Special Measures for Protection from Sexual Exploitation and Abuse prohibits certain behaviours.

Includes adequate measures for protecting project outputs from risks:

It is widely recognized that reducing risk is fundamental to ending humanitarian needs and achieving resilience. The main requirements for protecting project outputs from risks consider plans and process developed in such a way that the development activities a) will sustain during the disaster, b) will not increase the disaster risks and c) will reduce the disaster risks.

Provisions for certain flexibility to modify (adapt or scale up) activities in the event of future hazards or threats:

The organisation internal structure is strictly segregated, divided by mandates and rules that were originally designed to meet different kinds of needs. To build resilience, both emergency and longer-term livelihoods and development support may be appropriate at the same time- designed to enable early action and rapid response to new humanitarian needs that manifested in the project areas.

c) Building Capacity: Contribute to building local capacities so that the most vulnerable can cope better with risk

Local level capacity building should be built on the existing knowledge of local communities, and established often through their experience of disasters. Local level capacity development activities include: Anticipate (e.g. awareness raising of risk, education, participating in and implementing risk assessments, etc.); Cope (e.g. training in first aid, securing home, learning to swim, etc.); Resist (e.g. preparedness measures including establishing early warning systems, designing evacuation strategies, stock piling emergency equipment, etc.) and Recover (e.g. alternative means of income, i.e. diverse livelihoods, networks, social protection, etc.). It is expected that any proposed program which is going to be implemented in disaster prone area must have component to build capacity of the target population and institution against the expected and known disaster. The indicative elements are described below-

Develop the capacity of marginalised people and local institutions to overcome a range of challenges they face and determine their own future building local adaptive capacity:

Strong institutional capacity is to contribute to building local capacities so that the most vulnerable can better cope with shocks. Coping capacity also depends on adequate household assets and supportive social and governance relations (UkAid, 2004) and can be thought as a component of wider capacity development for disaster risk reduction for resilience.

Creates opportunity to use available resources for strengthening coping capacity:

The ability of people, organizations and systems, to use available skills and resources, to manage adverse conditions, risk or disasters is carrying capacity. Coping capacity are influenced by a variety of pre-existing factors and vulnerabilities, which cut across sectors and impact communities' potential for self-recovery. These relate in part to the availability of various types of capital- financial, natural, human physical.

Strengthens assets of vulnerable populations or communities to deal with hazard identified:

At the household level, capacities are often internal (sometimes called endogenous') to communities, meaning that people have more control over them (Wisner et al., 2012). Rather than attempting to reduce vulnerability, building capacity may therefore be an easier strategy for individuals, since many of the drivers of vulnerability are not influenced by households but instead by economic and political conditions, e.g. governance (Wisner et al., 2004).

Support local institutions to develop its capacity to manage risk:

Capacity development is the process through which people, organizations and society systematically stimulate and develop their capacities over time to achieve social and economic goals with the available resources. It is often much more effective to build on existing community structures, institutions and social capital.

Support coordination and collaboration structure between the community-based organisations, local government institutions and non-government organisations:

Well-coordinated disaster preparedness and response system at all levels, with commitment from relevant stakeholders with roles and responsibilities should be clearly defined. Disasters are complex problems demanding a holistic response from these different disciplinary and institutional groups. Coordination of activities and interventions relies on collaboration between agencies working in relief,

development and DRR for resilience. Such collaboration can be hard to achieve in the aftermath of major crises, when there may be a massive influx of national and international agencies of all kinds.

d) Implementation plan: Include a deliberate strategy to reduce future humanitarian/ development needs

A range of linked approaches to reduce short-term hazard risk and promote long-term livelihood security. Implementation plan use the available resources to carry out the planned activities and achieve the objectives. Monitor progress and adjust to changing circumstances is also necessary. It is expected that the proposed program would reduce future need of humanitarian action in case of occurrence of disaster. The indicative elements are described below-

Improves risk awareness and culture of the community:

The extent of common knowledge about disaster risks, the factors that lead to disasters and the actions that can be taken, individually and collectively, to reduce exposure and vulnerability to hazards is risk awareness. The four major types of approaches that can be used for improving risk awareness and culture of the community- campaigns, participatory learning, informal education and formal school-based interventions.

Supports entitlement and access to basic services of the target people:

Entitlement and access to certain basic services can itself reduce the risk of disaster and improve the resilience of the affected community. The several dimensions of accessibility of basic services i.e. physical, economic, cultural and non-discrimination. Since non-discrimination is closely connected with to aspects of accessibility, it is also clearly related to information, accountability and empowerment.

Increases coping and adaptive capacity of the target people:

The most important capitals that contribute to adaptive capacity and showed significant influence on adoption of modern coping strategies are human and physical capital. Support households in formal schooling of children and with necessary information enhance abilities to make informed choices. The improved physical capital such as infrastructures, including roads and market stores, enhances access to improved inputs that enhance productivity of households. Support private sector to invest in agricultural service provision, input trading, and establishing outlets close to farmers, improve adaptive capacity of the households.

Promote diversified livelihood opportunities of the target people:

A livelihood 'comprises the capabilities, assets (including both natural and social) and activities required for a means of living'. Projects that strengthen or diversify livelihoods that enable individuals or households to develop strategies to reduce risk e.g. home gardening can improve nutritional outcomes and increase reserves to cope with drought.

Promote partnership and contributes to relevant government and non-government plans or strategies:

The disaster 'community' is diverse, comprises very different organisations, including international aid agencies, government (at all levels), NGOs and other civil society organisations, academia, consultancies, military agencies and the private sector. All have a role to play in reducing risk – together, of course, with vulnerable communities, who are the main actors in mitigation, preparedness, response and recovery at local level. Partnership-building requires a great deal of time, negotiation, sustained effort, transparency, trust, commitment and institutional support.

4. Resilience Marker Application Criteria

BRAC's Resilience Marker allows teams to self-assess how the resilience is integrated into particular projects/program and provides a starting point for further reflection on integrating resilience throughout the project cycle. Using the Resilience Marker across all project will support the organization to build resilience of the community.

Four key border criteria help to assess the resilience of BRAC project/program:

- Does the project/program conduct an analysis of hazards, threats, vulnerabilities and their causes?
- Does the the project/program ensure that activities are identified based on community needs analysis and are prepared for likely hazards and threats?
- Does the project include adequate measure to contribute to building local capacities so that the most vulnerable can better cope with risks?
- Does the project/program take the opportunity to include a deliberate strategy to reduce future humanitarian/ development needs?
- Does the project ensure participation of most marginalised people irrespective of their identify in the process of improving their ability, livelihood opportunity, access to basic services and social development?
- Does the project taken into consideration most marginalised people's access to social protection system to manage and overcome situation that adversely affect their well-being?

The each of the broader criteria has five indicative elements to assess the resilience of the BRAC's project/program. The responsible staff would assess the indicative elements of each of twenty questions in a scale of 3 where s/he would provide an integer score between 1 and 3. If any indicative elements are not relevant to the project/program provide – (Dash) and it will be equivalent to “Not Applicable”. It should be noted that 1 stands for little resilience and 3 is excellent resilience integration for each project/program assessed. The integer score is described in below table-

Integer Score		Score Meaning
– (Dash)	→	Not Applicable
1	→	Little
2	→	Good
3	→	Excellent

This assessment is about the integration of resilience in the process (design + implementation), rather than the impact. It is assumed that proper integration of resilience into project design and implementation will lead to meaningful impact in terms of actively engaging people in reducing their vulnerabilities to shocks that affect them. Hence, to assess the extent to which the program/project integrated resilience consideration sufficiently, program team to assign the score 1 to 3 against each indicator mentioned in the tables following rules:

- If the indicator provides a quantitative value, score would be based on it. Depending upon the characteristic of the threshold value say 75%, score higher than threshold would be given a score of 3
- Any score between 25% and 75% would be given a score 2
- Score lower than the 25% value would be given a score of 1.

Once the scoring is completed, the score for each of the component need to be calculated. Hence the total resilience score would be the summation of scores of all the questions. It is expected that any project/programme would have a score between 20 and 60 (all the criteria score). Based on the total score, the programme could be categorised in three groups as mentioned in the following table:

<30 = Initial Stage of Resilience
31-45 = Moderate Stage Resilience
>45 = Excellent Stage of Resilience

It is important to mention here that a project/program could get a score over 30 even by getting a minimum score of five in one component. Apparently, the reviewer may feel that the project/program is moderately resilient which is not true. To avoid this confusion, it is decided that any program must earn at least six points out of 15 to be considered in moderate or excellent stage of resilience.

5. Use of the Resilience Marker

The marker has been designed for BRAC senior management staffs. The project design team design a project/program and proposal for submission to different donors; they send the proposal along with a scoring template to the senior staffs of concerned program and BHP. Senior staff of the concerned program and BHP will then carry out the assessment and enter their assessment score into the template. The responsible directors of concerned program and BHP will validate assessment score and send the proposal back to the project design team with recommendations. The project design team will then finalize the proposal addressing recommendation form the concerned department and BHP.

BRAC monitoring and evaluation department will update their assessment at mid-term review of the program as part of program's monitoring and mid-term report. This ensures that the resilience marker tracks the actual performance of the project/program (rather than only the proposal) and that changes in the context throughout the implementation period can be taken into account. Final mark will be determined by the monitoring and evaluation department as part of final report, based on the overall resilience performance of project/program. The mark will be communicated with the program through the internal communication system.

6. Resilience Marker Template

1. Project Information

Project Title
Date
Project Type <input type="radio"/> Response <input type="radio"/> Recovery <input type="radio"/> Development/DRR <input type="radio"/> Climate Change
Project ID
Reviewer

2. Impact analysis: Does the project/program conduct an analysis of hazards, threats, vulnerabilities and their causes?

A. Impact Analysis Indicative Elements for Resilience	Score
1. Analyses the loss of life, asset and environment due to disaster or crisis	
2. Analyses the disruption of service provision, economic activity and social function due to disaster or crisis	
3. Analyses the distress of the affected marginalised people due to disaster or crisis	
4. Identifies/understands the root causes of the vulnerabilities of the target people	
5. Analyses of livelihood strategies of the community	
Total Score (A)	

3. Priority actions: Does the project/program ensure that activities are identified based on community needs analysis and are prepared for likely hazards and threats?

B. Priority Actions Indicative Elements for Resilience	Score
1. Design/develop in consultation with community and stakeholders	
2. Considers inclusion and community engagement during implementation	
3. Provisions for establishes feedback and complaint response mechanism	
4. Includes adequate measures for protecting project outputs from risks	
5. Provisions for certain flexibility to modify (adapt or scale up) activities in the event of future hazards or threats	
Total Score (B)	

4. Building Capacity: Does the project include adequate measure for contribute to building local capacities so that the most vulnerable can cope better with risks?

C. Capacity Building Indicative Elements for Resilience	Score
1. Develops capacities of beneficiaries and local institutions to absorb, respond and recover to the identified hazards	
2. Creates opportunity to use available resources for strengthening coping capacity	
3. Strengthens assets of vulnerable populations or communities to deal with hazard identified	
4. Support local institutions to develop its capacity to manage risk	

5. Support coordination and collaboration structure between the community-based organisations, local government institutions and non-government organisations	
Total Score (C)	

5. Implementation plan: Does the project/program take the opportunity to include a deliberate strategy to reduce future humanitarian/ development needs?

D. Implementation Plan Indicative Elements for Resilience	Score
1. Improves risk awareness and culture of the community and stakeholders	
2. Supports entitlement and access to basic services of the target people	
3. Increases coping and adaptive capacity of the target people	
4. Promotes diversified income opportunities of the target people	
5. Promote partnership and contributes to relevant government and non-government plans or strategies	
Total Score (D)	

Total Resilience Score (A+B+C+D)	
Resilience Level of the Project	

Description of the total resilience score of a project

Resilience Score	Resilience Level	Remarks
<=30 or any component has score below 6 (six)	Initial Stage of Resilience	The project did not meet a predetermined threshold in terms of the score obtained. The project yet to think on resilience as one of the criteria of development work. The marker reflects important quality indicators and allow taking important variations between different contexts into account. However, the project has a plenty of scope to redesign and integrate components that would enhance resilience and sustainability. The project is therefore expected to meet the criteria when context allows it.
31-45	Moderate Stage of Resilience	The project meets predetermined threshold in terms of the score obtained. It satisfies most of the BRAC resilience criteria. There is further scope of integrating components during mid-term review of projects to enhance resilience and sustainability. Some projects may include a variety of activities and implementation areas. They might integrate resilience to varying degree. The answer for all criteria as well as overall resilience score reflect the moderate stage of resilience.
>45	Higher level of Resilience	The project meets predetermined threshold in terms of score obtained. It presents a good analysis of vulnerability to shock and stress, takes into consideration strengthening capacity of marginalised population and community to adapt to evolving conditions, and activities are designed to address most significant drivers of risk that cause the shock and stress. The project included deliberate strategy and a coherent set of actions combining capacity and resources to influence plans, policies and legislation; and

Resilience Score	Resilience Level	Remarks
		embedded system to monitor unintended effects on the project participants and wider context and has the flexibility to act upon this.

7. Related Key Concepts

Disaster Risk

The potential disaster losses, in lives, health status, livelihoods, assets and services, which could occur to a particular community or a society over some specified future time period (UNDRR).

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.

$$\text{Risk} = \text{Hazard and Exposure} \times \text{Vulnerability} \times \text{Lack of Coping Capacity}$$

Hazard

A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation (UNGA, 2016, 2017).

Hazard inclusion criteria-

- The hazard has the potential to impact a community
- Proactive and reactive measures are available
- The hazard has measurable spatial and temporal components

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. (UNDRR)

Vulnerability is a function of exposure, sensitivity and adaptive capacity

- **Exposure** refers to the shocks and stress impacting upon a system
- **Sensitivity** refers to the degree to which the system is affected to shocks and stress
- **Adaptive capacity** refers to the ability of a system to deal with the new shocks and stress

Adaptive Capacity

The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters (UNDRR)

Disaster Risk Reduction (DRR)

The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events' (UNDRR).

Adaptation

Adaptation The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (UNDRR)

Adaptation In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. In natural systems, the process of adjustment to actual climate and its effects; human intervention may facilitate adjustment to expected climate (IPCC).

Resilience

The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner” (UNDRR)

Intergovernmental Panel on Climate Change (IPCC) defines resilience as “the capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation” (IPCC).

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

References

- Blaikie, P., Cannon, T., & Wisner, B. (2004). *At Risk: Natural Hazards, People's Vulnerability and Disasters* (2nd ed.). Retrieved from <https://www.routledge.com/At-Risk-Natural-Hazards-Peoples-Vulnerability-and-Disasters/Blaikie-Cannon-Davis-Wisner/p/book/9780415252164>
- IPCC. (2014a). *Annex II: Glossary (In Climate Change)* . Retrieved from https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-AnnexII_FINAL.pdf
- IPCC. (2014b). *Climate Change 2014*. Alistair Woodward. Retrieved from https://www.ipcc.ch/site/assets/uploads/2018/02/ar5_wgII_spm_en.pdf
- Rahman, K. S., Glorieux, H., Mita, H. A., Kamal, M., & Sarker, K. H. (2020). *Humanitarian Coordination and Collaboration in Bangladesh*. Dhaka. Retrieved from https://www.humanitarianresponse.info/sites/www.humanitarianresponse.info/files/documents/files/humanitarian_collaboration_and_coordination_in_bangladesh_3rd_draft_24_august_2020_kazi.pdf
- UNDRR. (2009a). Resilience | UNDRR. Retrieved April 6, 2021, from <https://www.undrr.org/terminology/resilience>
- UNDRR. (2009b). Vulnerability | UNDRR. Retrieved April 6, 2021, from <https://www.undrr.org/terminology/vulnerability>
- UNISDR. (2009). *UNISDR Terminology on Disaster Risk Reduction*. Retrieved from https://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf
- Warren Patrizio. (2002). *Livelihood Diversification and Enterprise Development. An Initial Exploration of Concepts and Issues* (4). Retrieved from <http://www.fao.org/3/j2816e/j2816e00.htm#Contents>
- Wisner, B., Gaillard, J., & Kelman, I. (2011). *Handbook of Hazards and Disaster Risk Reduction* (1st ed.). Routledge. Retrieved from <https://www.routledge.com/Handbook-of-Hazards-and-Disaster-Risk-Reduction/Wisner-Gaillard-Kelman/p/book/9780415523257>



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