

A Framework for Ready2Respond

The Emergency Preparedness and Response Thematic Group of the World Bank



For additional information please contact:
Adam McAllister
Thematic Group Lead – Emergency Preparedness and Response
Global Practice – Social, Urban, Rural and Resilience

amcallister@worldbank.org

Table of Contents

| Goal | 4 |
|---|----|
| Objective | 5 |
| Program Background | 5 |
| Addressing Demand | 5 |
| Protecting Public Safety | |
| Building Institutional Capacity | |
| Increasing Climate Change Resilience | |
| Safeguarding Development | |
| Definition and Common Themes of Preparedness | |
| Return on Investment for Emergency Preparedness and Response Improvements | 7 |
| Capacitating Emergency Preparedness and Response Systems | 8 |
| Building a Consistent Approach | |
| Core Principles of Disaster Preparedness and Emergency Management | |
| Resilience Platform Connections | |
| City Resilience Program Critical Linkage | |
| Other World Bank Group Program Connections | |
| Finance Instruments | 12 |
| Framework Overview | 13 |
| Legal and Institutional Framework | |
| Information | 14 |
| Facilities | 15 |
| Equipment | 15 |
| Personnel | 15 |
| Ready2Respond Rapid Diagnostic | 16 |
| Framework Implementation | 17 |
| Appendix 1: Anticipated Outputs and Associated Timelines | |
| Short-term (0-3 months): | |
| Mid-term (3-12 months): | 19 |
| Appendix 2: Ready2Respond Rapid Diagnostic - Sample Output | 20 |



Goal

Ready2Respond improves national, sub-national and city resilience mechanisms and protects development gains through investments in emergency preparedness and response (EP&R) systems informed by the encompassing City Resilience Program (CRP) and other World Bank platforms.

Objective

Ready2Respond provides timely, technical expertise, and global support to World Bank teams with implementation tools and techniques as they pursue EP&R development investments. The purpose of this framework document is to provide a knowledge base for the generation of more targeted guidance and reference materials for task team leaders and their clients regarding EP&R programs, and to inform future World Bank Group (WBG) operations and technical assistance to countries.

Program Background

Addressing Demand

At present, the demand for World Bank funded emergency preparedness and response projects is increasing globally. At the same time, many of the WBG's disaster risk management programs have largely focused on longer term process and structural risk reduction efforts, e.g. risk-sensitive land use planning, coastal and riverine flood defenses, etc. As a result, while several smaller scale emergency preparedness and response projects have been implemented in the last decade, only recently, through projects such as Istanbul Seismic Risk Mitigation Project (ISMEP) and the Bangladesh Urban Resilience Project (BURP), has emergency preparedness and response been considered as a major component of resilient development. As these projects matured, internal expertise to organize and advise in this area was challenging to obtain. This dual pressure of increased demand for this type of project and limited supply of internal expertise has led to a growing service gap for WBG investment in emergency preparedness and response.

While the demand within developing nations for EP&R investment may be increasing, it is helpful to explore how this aspect of disaster risk reduction fits within the mission of the WBG:

Protecting Public Safety

Protecting the public is a core responsibility of any government. It follows that the demonstrable, visible capacity of government for emergency preparedness and response aids in establishing credibility for both elected officials and the civil service. Investments in EP&R capacity further the WBG vision of being a stabilizing influence for government in developing nations.

Building Institutional Capacity

Effective preparedness planning and response operations requires strong coordination and information sharing vertically and horizontally within and across governments, as well as private sector engagement. As a result, EP&R projects improve intra- and inter-governmental collaboration and institutional capacity that carries over into other development sectors. In working to reduce disaster risk, the high visibility, high demand nature of EP&R projects can open the door to advancing less visible, but equally important, disaster risk reduction activities.

Increasing Climate Change Resilience

Considering the context of increasing uncertainty, "planning for the worst" must assume a central role in resilient development. Resilience is defined by the International Panel on Climate Change as "the ability of a system and its component parts to anticipate, absorb, accommodate or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions" (IPCC 2012). Preparedness for such a hazard event is therefore a critical element of resilience. Greater preparedness enables an individual, community or institution to anticipate, absorb and recover much faster than it would have done otherwise, thereby reducing the intensity and longevity of the hazard impacts. Given that climate change is leading to natural hazards becoming more intense and frequent, preparing for emergencies can be considered as resilience not only to disasters, but also to climate change.

Safeguarding Development

While a sound investment on its own, capacitating emergency preparedness and response also supports the broader WBG risk reduction effort and fundamental goal of eliminating poverty. According to a recent World Bank report, the impact of extreme natural disasters is equivalent to a global \$520 billion loss in annual consumption, and forces some 26 million people into poverty each year. A functional response reduces felt consequence and enables rapid recovery, reducing cumulative impacts to public safety and the economy. Therefore, ensuring capacity for emergency response protects WBG investment across development sectors and the development gains that have resulted from those investments. Emergency preparedness and response capacity must keep pace with development and demographics to ensure these gains are not lost as a consequence of disaster and emergencies. In essence, a well capacitated emergency preparedness and response system is the first line of defence for WBG investments and country development.

Definition and Common Themes of Preparedness

Preparedness, in the context of disaster and emergency management, is defined by the United Nations International Strategy for Disaster Reduction 2009 report Terminology on Disaster Risk Reduction as:

"The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions." (UNISDR, 2009)

The ISDR further notes that:

(

"Preparedness action is carried out within the context of disaster risk management and 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." (UNISDR, 2009)

¹ Hallegatte, Stephane; Vogt-Schilb, Adrien; Bangalore, Mook; Rozenberg, Julie. 2017. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development; Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/25335 License: CC BY 3.0 IGO

To achieve preparedness as defined above, response systems, and the early warning systems that enable response, need to work horizontally across government ministries and departments and also vertically through national, regional and local levels of government. Inclusive in these systems is the role of NGO response partners for the delivery of assistance and aid regardless of the event's scale and impact intensity. An effective preparedness system enables local level preparedness as a priority while in parallel creating supportive and aligned coordinating capacity and specialized resources at the national and sub-national levels for larger scale events.

Return on Investment for Emergency Preparedness and Response Improvements

For many emergency and disaster risk reduction treatments, quantitative assessments of the Return on Investment (ROI) are not available. Until recently, EP&R investment also lacked quantitative data to support qualitative conclusions about the importance of these projects to public safety and the economy of the engaged jurisdiction. However, a series of comprehensive studies completed by the United Nations World Food Programme (WFP) and UNICEF, provides a clear demonstration of investment value.

The major output of that research, titled *UNICEF/WFP Return on Investment for Emergency Preparedness Study — Final Report*, assessed forty-nine emergency preparedness investments in Chad, Pakistan and Madagascar for their impact on response time and cost savings. Both measures provide important insight into the value of such investments. Cost savings highlight the financial impacts to the jurisdiction that were avoided due to the investment. Time savings highlight the efficiency of response operations with the understanding that during emergencies, response speed is one of the most significant drivers of survival rates and loss avoidance.

The results are compelling. The forty-nine investments considered in the study represented a cumulative investment of USD 5.6 million². Of these investments, 64% saved both time and money. The investments saved a total of USD 12 million toward future response costs for a net savings of USD 6.4 million and an average ROI of 2.1. However, certain investments, such as those that focused on personnel development, produced a much higher ROI of 18.7. Perhaps more importantly, 93% of preparedness investments saved time for emergency response operations and no investment slowed operations down. On average these investments sped response time by two to fifty days or more than a week on average. Combined, the study results demonstrate that emergency preparedness and response investment produces immediate, tangible and quantifiable benefits to jurisdictional resilience.

Notwithstanding the above, it is important to note that to be successful, WBG financing may need to be linked to the establishment of government program budgets to ensure long-term investment viability. Further, many EP&R projects will require phased actions by government counterparts to ensure investment is maintained, e.g. hiring of staff, maintenance works, etc. throughout its lifecycle.

"DRM is a policy area with high visibility, one where the fortunes of political leaders can be made."³

² Meerkatt, H., Kolo, P., and Renson, Q. (2015). UNICEF/WFP Return on investment for emergency preparedness study – final report. The Boston Consulting Group; UNICEF, WFP. Funded by DFID-UKaid.

³ The Economist Intelligence Unit (2016). Towards disaster-risk sensitive investments: The disaster risk-integrated operational risk model. The Economist Intelligence Unit, London.

Capacitating Emergency Preparedness and Response Systems

Building a Consistent Approach

Within EP&R systems, there are five primary components that enable a high-functioning capacity. These are a) Personnel, b) Facilities, c) Equipment, d) Information, and e) Legal and Institutional Framework. These elements, whether implied or explicitly categorized, are common across various national disaster preparedness systems, development partner preparedness platforms and international organizations that address disaster resilience. Development partner preparedness platform examples include International Federation of Red Cross/Red Crescent, Business Continuity Institute and the Global Preparedness Partnership.

Effective and contextualized preparedness system examples from other national governments include the United States of America's National Incident Management System, Canada's National Emergency Response System, the United Kingdom's Emergency Response and Recovery Guidance, Mexico's National Civil Protection System, and notably, Japan's Disaster Management System, amongst many others.

Ready2Respond will look to these established national programs, and their city level applications, as well as more recent developments, such as those capacitated by ISMEP and BURP, for best practices, lessons learned, knowledge exchange/study tours and twinning peer-to-peer learning events. It is also vital to assess the systems, equipment, and protocols formally or informally developed for addressing emergencies in cities with similar typologies, hazard and exposure profiles, and available response resources. Additionally, the Ready2Respond will identify specific training programs on EP&R and training facilities around the world which could benefit the EP&R project design and implementation.



Figure 1: Emergency preparedness and response system key elements

Enabling the five primary components outlined above requires a transparent and easily understood description of institutional responsibilities across the spectrum of emergency preparedness and a frame for building out activities that are tailored, at a more in-depth level, to a jurisdiction's needs. Once established, this outline of responsibilities greatly increases the ability for government and preparedness partners to plan and budget with certainty for their identified accountabilities in emergency response.

Core Principles of Disaster Preparedness and Emergency Management

Guiding these preparedness and response systems, which tend to be built around the aforementioned five components, are core principles that are considered best practice. These principals form the foundation of modern preparedness and response systems globally, whether those systems are driven by government or the private sector. While each national, sub-national and city-level system will frame the principles in their own context, the list of principles is perhaps best presented by the International Association of Emergency Managers, which states that emergency management must be:

- 1. *Comprehensive* consider and take into account all hazards, all phases, all stakeholders and all impacts relevant to disasters.
- 2. *Progressive* anticipate future disasters and take preventive and preparatory measures to build disaster-resistance and disaster-resilient communities.
- 3. *Risk-Driven* use sound risk management principles (hazard identification, risk analysis and impact analysis) in assigning priorities and resources.
- 4. Integrated ensure unity of effort among all levels of government and all elements of a community.
- 5. *Collaborative* create and sustain broad and sincere relationships among individuals and organizations to encourage trust, advocate a team atmosphere, build consensus, and facilitate communication.
- 6. *Coordinated* synchronize the activities of all relevant stakeholders to achieve a common purpose.
- 7. Flexible use creative and innovative approaches in solving disaster challenges.
- 8. *Professional* value a science and knowledge-based approach based on education, training, experience, ethical practice, public stewardship and continuous improvement.

Taken together, the five aforementioned program components and eight foundational principles above are instructive for any government seeking to clarify assigned accountabilities and shared responsibility for emergency preparedness and response.

Resilience Platform Connections

Emergency preparedness and response mechanisms are critical capacities for increasing resilience. However, resilience spans beyond the ability to address an emergency or disaster immediately before and after an event. For example, risk-sensitive land-use planning is a powerful and cost-effective resilience-building tool that takes many years for its potency to fully mature. When combined with an EP&R capacity that provides immediate and tangible risk reduction, a functional bridge is created that connects risk treatments and establishes a more robust approach to achieving jurisdictional resilience.

City Resilience Program Critical Linkage

The City Resilience Program (CRP) aims to consolidate the WBG's city-level engagements across sectors by providing a platform for resilience-building investments with clients in areas of infrastructure, governance and systems, and finance. In addressing all of these elements, the CRP seeks to catalyze a shift from a more siloed operational approach in WBG engagements with cities to a more comprehensive and ambitious approach that incorporates multi-disciplinary packages of technical and financial services to build resilience. To better address the huge investment needs, the CRP also aims to move beyond the World Bank's traditional International Development Association (IDA) and International Bank for Reconstruction and Development (IBRD) financing envelopes by raising other sources of capital through a single investment platform at the city-level, including from MBDs, bi-laterals and investors of private capital.

The CRP program does not aim to duplicate or replace the many existing and successful efforts to engage cities on resilience across the WBG but, rather, to convene and curate various best practices under a single city-level engagement framework. To do so, the CRP has drawn on lessons learned from investment programs implemented over the past decade in municipal infrastructure, governance, and finance. It has further reached out to champions of various relevant communities of practice and initiatives, *inter alia*, geospatial platforms, capital budgeting systems, asset management programs and emergency preparedness and response systems. With them, CRP has catalyzed new Thematic Groups such as the Emergency Preparedness and Response Thematic Group, known as Ready2Respond.

Other World Bank Group Program Connections

Open Data for Resilience Initiative (OpenDRI) is supported by the Global Facility for Disaster Reduction and Recovery (GFDRR). In partnership with governments, international organizations, and civil society groups, this initiative develops open systems for creating, sharing, and using disaster risk and climate change information to ensure that a wide range of actors can participate in meeting these challenges. This open and dynamic information can in turn shed light on the existing emergency preparedness and response capacity of a city and inform decision making to improve city resilience mechanisms.

ThinkHazard! is a web-based tool enabling non-specialists to consider the impacts of disasters on new development projects. The tool, supported by GFDRR, provides recommendations and guidance on how to reduce the risk from eight hazards: river flood, earthquake, drought, cyclone, coastal flood, tsunami, volcano, and landslide within a specific project area. In addition, it also provides links to additional resources such as country risk assessments and can provide guidance for establishing local disaster preparedness systems.

Africa Region's Crisis Management Support Platform: the WB Africa Region and the Global Facility for Disaster Reduction and Recovery (GFDRR) are working towards the establishment of a crisis response platform. Initially aimed at serving the Africa Region but with the possibility of a global rollout, it is proposed that the platform be anchored on three components: (i) Crisis Watch: improving quality and efficiency of information flows regarding crises to WBG Management, Disaster Monitoring and Early Warning, Crisis Specific Briefs, etc.; (ii) Operational Crisis Response Readiness: Mapping active operational tools (with build in crisis response capacity) by country and GP, during crisis times liaising with affected countries/ regions and initiate CMU dialogue where relevant (by GP or in collaboration) to developing crisis response strategies to inform Bank's decision making; and (iii) World Bank Internal Knowledge Management: Create online platforms for knowledge sharing and dissemination, weekly news on early warnings, contact points, etc.

Central America and Caribbean Catastrophe Risk Insurance Program: The Central America and Caribbean Catastrophe Risk Insurance Program Multi-Donor Trust Fund (MDTF) channels resources from various donors totaling US\$51.1 million. The objectives of the Program are twofold: (a) to improve affordability of high quality sovereign catastrophe risk transfer associated with earthquakes and climate risks for the Council of Ministers of Finance of Central America and the Dominican Republic (COSEFIN) and Caribbean Community (CARICOM) countries participating in CCRIF SPC; and (b) to enhance the capacity of the COSEFIN and CARICOM countries for developing and implementing Disaster Risk Financing and Insurance strategies. To achieve these objectives, funding under the Program has been allocated to: (i) expand the services and membership of CCRIF SPC (through a grant implemented by CCRIF SPC) and (ii) strengthen the capacity of COSEFIN and CARICOM countries to reduce fiscal vulnerability to disasters and to promote the efficiency and transparency of post-disaster public spending through World Bank-executed technical assistance. The TA support could serve to advance EP&R considerations in both COSEFIN and CARICOM countries.

Climate Risks & Early Warning Systems (CREWS): GFDRR, in partnership with France, the World Bank, WMO, and UNISDR, has launched the CREWS Initiative to finance weather stations, radar facilities, and early warning systems in poor and vulnerable countries where weather data is unreliable or lacking. The objective of the CREWS initiative is to significantly increase the capacity for seamless Multi-Hazard Early Warning Systems (MHEWS), to generate and communicate effective impact-based early warnings, and risk information for hazardous hydro-meteorological and climate events to protect lives, livelihoods, and property in Least Developed Countries (LDC) and Small Island Developing States (SIDS). The EP&R Framework is fully aligned with the CREWS initiative's focus on building capacity for early warning systems and disaster management information systems.

Finance Instruments

At their core, limitations regarding EP&R investment may exist within the scope of existing WBG finance instruments. Generally, EP&R components are wrapped into larger disaster risk management investments, allowing for significant development in this area, while specific EP&R investments tend to be of a small scale. Concrete examples on possible linkages to existing financing instruments are listed below:

- a) **Program-for-Results (PforR) Financing**: In alignment with the EP&R Framework which seeks to build capacity in client countries for emergency management programs, PforR Financing helps partner countries improve the design and implementation of their development programs and achieve lasting results by strengthening institutions and building capacity. It helps strengthen partnerships with government, development partners and other stakeholders by providing a platform to collaborate in larger country programs.
- b) Caribbean Catastrophe Risk Insurance Facility (CCRIF): As mentioned in the section above, Bank executed Technical Assistance implemented under the CCRIF to reduce fiscal vulnerability to disasters could be used to finance EP&R engagements in COSEFIN and CARICOM countries.
- c) **CREWS Initiative:** Similarly, CREWS Grants can help advance capacity building EP&R activities in Least Developed Countries (LDC) and Small Island Developing States (SIDS).
- d) **CAT-DDO**: The Development Policy Loan with a Catastrophe Deferred Drawdown Option (CAT-DDO) is a contingent credit line that provides immediate liquidity to IBRD member countries in the aftermath of a natural disaster. The CAT-DDO gives a government immediate access to funds after a natural disaster, a time when liquidity constraints are usually highest. EP&R components and activities could be included in CAT-DDO financing.

Regarding emerging instruments, other sources of financing through GFDRR such as the "Japan-World Bank Program for Mainstreaming DRM in Developing Countries" may enable direct investment in EP&R as standalone Technical Assistance projects.

Framework Overview

Ready2Respond is based around the four components of EP&R as constituent activities and the pinnacle (core of the wheel) representing a fifth component that enables the function of the others. As a whole, these five components are indicative of a functional emergency preparedness and response capacity. The five components are centered on: (i) legal and institutional framework, (ii) personnel, (iii) facilities, (iv) equipment and (v) information. This model ensures that the program aligns very well with existing preparedness/response systems as well as international best practice for resilient business and business continuity. The approach also provides consideration for system fault tolerance, whereby despite any particular local disruption, the preparedness and response systems capacity to ensure public safety and limit economic disruption is maintained. The five components and framework, including indicative activities, are detailed below:

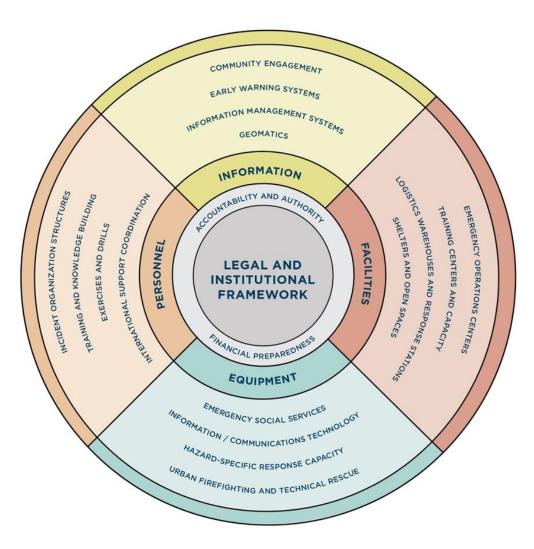


Figure 2: Emergency preparedness and response system core components

Legal and Institutional Framework

Internal and external clarity about the role of various public and private agencies is critical during disaster and emergency response. Where ambiguity exists, so does inefficiency and jurisdictional overlap. When lives and economic loss are threatened during an event, this ambiguity can increase both potential and actual losses. To address this challenge, improvements regarding preparedness and response roles can be a potent means to improve resilience at various levels of government. Further, clarity in this area ensures that World Bank investments do not lead policy through capacity improvements; rather these investments ensure that financial and technical support is provided at the right time, to the right agency. Ideally these accountabilities are clearly enshrined in legislation with directive regulations. Where possible, deconflicted policy instruments identify the operational expectations on those agencies that are assigned a preparedness and response mandate. However, even in the absence of complete organizational clarity, investment in preparedness and response can often improve on a jurisdiction's ability to mitigate impacts and limit disaster and emergency related losses.

Legal and Institutional Framework

Criteria

Accountability and authority, including indicators for linked legislation, expedited decision-making, response plans, and critical infrastructure assurance.

Financial preparedness, including indicators for ex-ante funding for emergency response, fast-track procurement, financial protection strategy, and risk-based critical infrastructure investment plans.

Information

The collection, analysis and swift dissemination of information enables better decision-making in advance of emergencies, during response operations and through the transition to early recovery. Impacts from emergencies are felt locally, and so community engagement is vital to a well-developed state of preparedness. The information used for preparedness and response includes the information generated from early warning systems to provide local residents, and the response teams that support them, with advance notice of emerging hazardous events. As well, the coordination of emergency information from responding agencies and social media ensures horizontal and vertical situational awareness that enables efficient, coordinated and prioritized response operations. Finally, the development of hazard and vulnerability maps along with other geo-referenced emergency information, captured digitally and shared electronically, provides decision-makers with a key resource for planning across time scales to reduce risk. However, for quality information to have an impact, it must be utilized by well-trained, committed personnel that have the appropriate equipment to respond safely and effectively.

Information

Criteria

Community engagement, including indicators for volunteer management, public preparedness education, community-led mitigation, and leadership engagement.

Early warning systems, including indicators for hazard monitoring, information analysis, active messaging and warning dissemination.

Information management systems, including indicators for full-phase utility, multi-stakeholder functionality, maintenance programming, and user development.

Geomatics, including indicators for implementation capability, geo-spatial hazard data, geo-spatial vulnerability data, and public-private data sharing agreements.

Facilities

Coordination of effort for emergency preparedness and response activities requires a structural presence, be it for command and control, movement of emergency aid or the staging of response teams and their equipment. These facilities act as a core element in establishing a culture of preparedness, ensuring a dependable common operating picture and resilient services when most other critical infrastructure and government service is disrupted. This component ensures that there is a nexus for information, personnel and equipment as an emergency preparedness and response system matures through focused investment.

Facilities

Criteria

Emergency operations centers, including indicators for resilient structures, mobile command posts, activation procedures, and social-media monitoring.

Training centers and capacity, including indicators for operational practice sites, classroom locations, online infrastructure, and volunteer development capacity.

Logistics warehouses and response stations, including indicators for international reception, warehousing networks, specialized hazard response facilities, and urban response stations.

Shelters and open spaces, including indicators for temporary housing, multifunction open space, evacuation routes, and emergency shelter management.

Equipment

The appropriate acquisition, use and maintenance of preparedness and response equipment ensures timely information sharing and safe, effective rescue operations. It ensures the ability to effectively communicate despite the harshest possible conditions. These investments assist governments to overcome the capital requirements to ensure access to life-saving technologies and resources. Combined with established parts and service supply chain, it enables governments to ensure its core preparedness and response agencies have the tools to safely and effectively deliver their service.

Equipment

Criteria

Urban firefighting and technical rescue, including indicators for structural firefighting, vehicle extrication, high-angle rescue, and hazardous materials containment.

Hazard-specific response capacity, including indicators for specific diagnostics tailored to the jurisdiction's top four natural hazards.

Information / communications technology, including indicators for radio capacity, system interoperability, broadband connectivity, and community connectivity.

Emergency social services, including indicators for ambulance capacity, water/sanitation/hygiene/electricity services, vulnerable population support, and mortality management.

Personnel

A highly skilled and experienced workforce is the most valuable resource in any disaster preparedness and response system. To achieve this, a culture of preparedness must be established that places the trust of the public and political body in the agencies tasked with ensuring public safety and minimizing economic disruptions. This requires intensive and extensive training of those involved in emergency preparedness and response to acquire knowledge, develop skills and gain practical experience. This development of personnel must take advantage of the best available plans and information, facilities and equipment to

ensure an interoperable systems approach is broadly understood. It must also enable deep capability in focused areas of expertise to ensure investment in personnel development transitions from the individual to the team, and from the team to the agency culture.

Personnel

Criteria

Incident organization structures, including indicators for policy direction, multi-incident application, guiding materials, and functional role rosters.

Training and knowledge building, including indicators for comprehensive programs, knowledge management, continuous improvement methodology and common training for public-private response partners.

Exercises and drills, including indicators for central design, stakeholder involvement, response plan validation, and exercise planning process.

International support coordination, including indicators for central agency coordination, application of service standards, logistics management, pre-existing service agreements.

Ready2Respond Rapid Diagnostic

Within the Ready2Respond framework, a rapid diagnostic has been developed with input from international experts in each of the five component areas. Each component includes a set of criteria that address a particular aspect of a functional EP&R system for a jurisdiction. In turn, each criterion includes a set of four indicators, each with five key attributes that gauge the maturity of that aspect of the of the preparedness and response system. In total, the diagnostic examines 360 individual data points related to the strength of the EP&R system. An indicative summary profile from the completed diagnostic is provided in Appendix 2.

The Ready2Respond Rapid Diagnostic uses an attribute-based scoring system for every indicator. This allows results to be quantified and verified; key considerations for informing investments. Further, this approach ensures that results are replicable by largely removing subjectivity and qualitative assessment from the diagnostic approach. As well, the Ready2Respond Rapid Diagnostic avoids fidelity to any particular emergency management standard (e.g. NFPA, EMAP, CSA, ISO), communication standard (e.g. CAP, 700mHz), incident organization structures (e.g. NIMS, ICS), etc. Rather, the Rapid Diagnostic focuses the scope entirely to the typical operational needs for World Bank engagements and creates room for the application of these standards in jurisdictional program design. This approach ensures that a market advantage is not created for any particular standard and that EP&R solutions can be tailored to the needs and context of the jurisdiction, rather than requiring the jurisdiction to conform to a standard at the outset of discussion.

The Rapid Diagnostic will be completed by World Bank Task Teams and/or consultants selected to collect the data in a collaborative effort with the government. Reports will be generated in coordination with Ready2Respond as a component of global support offerings. This approach avoids the challenges associated with government self-assessment which is demonstrated to generate significant data errors due to image management, introspective ability and subject matter understanding.

Overall, the Ready2Respond framework and associated diagnostic increases planning confidence for World Bank Task Team Leads as well as their jurisdictional counterparts and creates a stable platform for the emergence of constructive projects with immediate risk reduction applications.

Framework Implementation

Ready2Respond provides global support to task team leaders at any point in an engagement. If utilized at the beginning of discussions with a government counterpart, the program may follow a three-phase approach that also aligns with the City Resilience Program process:

1. Introduction and Diagnostic

- Outline:
 - Introduce concept to governments.
 - Ready2Respond Rapid Diagnostic would be led by TTL with support from technical team and CMU, with external consultants available for implementation.
 - Results interpreted, analyzed and used to drive discussions with governments for next step of engagement.
 - This diagnostic provides quantifiable baselines of the current performance of emergency systems, enables progress monitoring, and provides relevant evidence for performance improvements after investments.
- Support products/services:
 - Ready2Respond Rapid Diagnostic
 - Results analysis and report development support.
 - STC supply management.
- Cost: ~ US \$50-100k
- Timeframe: 3-6 months

2. Project Development

- Outline:
 - Using results from rapid diagnostic, identify key areas of project interest across the primary activities of CRP Element 9. Would need to engage lead government partner.
- Support products/services:
 - EP&R Component Best Practices, including known reference standards, e.g. equipment procurement considerations, EOC design standards, training and exercise package outcome management, etc.
 - Baseline technical specification catalogue.
 - Baseline outputs and outcomes for results tracking.
 - Global market analysis for implementation consultants/firms across the spectrum of EP&R project components.
 - Generic ToRs for a variety of EP&R components.
 - Operationally focused comparative study tours (Japan, Turkey, Italy, etc.) with client governments, including report templates to capture applicable knowledge.
 - Advice on project design elements related to government requirements at various project stages, e.g. hiring of staff, adding permanent budget line items, etc.
 - Advice and best practice for clarifying organizational accountabilities associated with emergency preparedness and response.
- Cost: ~ US \$400-600k
- Timeframe: 12-18 months

3. Project Implementation

- Outline:
 - Once the project has been developed and is ready for implementation, support may shift to ensuring an effective transition from design to delivery.
 - Ongoing technical support to TTL and Project Implementation Units.
 - Completion of second rapid diagnostic prior to project close-out to demonstrate value for money and quantifiable evidence of operational increases in jurisdictional resilience.
- Support products:
 - Baseline vendor selection criteria for each identified project activity.
 - Second rapid diagnostic for results analysis at project close-out.
 - Internal Ready2Respond product and support service revisions in-line with continuous improvement.
- <u>Cost</u>: > US\$5M
- Timeframe: 3-5 years

Appendix 1: Anticipated Outputs and Associated Timelines

Short-term (0-3 months):

- 1. Generic STC Terms of Reference for use by World Bank teams as they seek STC or external support.
- 2. Draft diagnostic for emergency preparedness and response framework implementation. This output will enable pre- and post-investment comparison to quantify outcomes achieved and, over time, enable enterprise-wide EP&R investment cost/benefit analysis and increased accuracy for project budgets.
- 3. Compile a list of emergency preparedness and response STCs and Firms for World Bank teams with particular reference to technical experience across the five components of the framework. Regional experience, previous World Bank STC contracts, contact information and other elements would be provided to add utility for TTLs.
- 4. Initial support during roll-out of the EP&R framework, including technical and strategic support to World Bank teams at the vanguard of program implementation.

Mid-term (3-12 months):

- 1. Development of best practice guidelines for World Bank teams for emergency preparedness and response that addresses timescale (pre-emergency, during emergency, post-emergency) and the five components of the framework.
- 2. Initiate regional engagement of Firms to undertake Ready2Respond Rapid Diagnostic in support of Task Teams.
- 3. Conduct review and formulate report on international emergency management program standards and professional certifications, including project planning considerations for EP&R projects.
- 4. Field test Ready2Respond Rapid Diagnostic, including implementation guidance and review timeline.
- 5. Quarterly environmental scan of international DRM organizations undertaking work that aligns with EP&R. This will enable World Bank teams to leverage partner funding where possible, and avoid investment overlap where possible.
- 6. Ongoing support during roll-out of the City Resilience Program, including technical and strategic global support to World Bank teams at the vanguard of program implementation.

Appendix 2: Ready2Respond Rapid Diagnostic – Sample Output

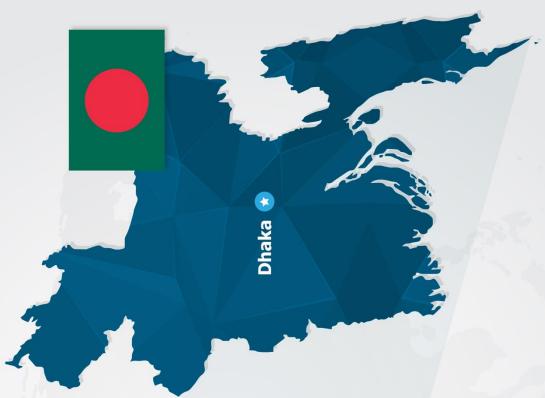
The following infographic represents an indicative summary profile of the Ready2Respond Rapid Diagnostic with 360 individual data points captured under the five primary components of the Ready2Respond framework.





RAPID DIAGNOSTIC SUMMARY PROFILE

DHAKA, BANGLADESH



EMERGENCY PREPAREDNESS AND RESPONSE WORKING GROUP



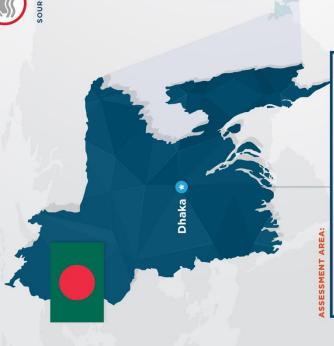
WATER SCARCITY

TOP 5 ENVIRONMENTAL HAZARDS



RAPID DIAGNOSTIC SUMMARY PROFILE





DHAKA, BANGLADESH

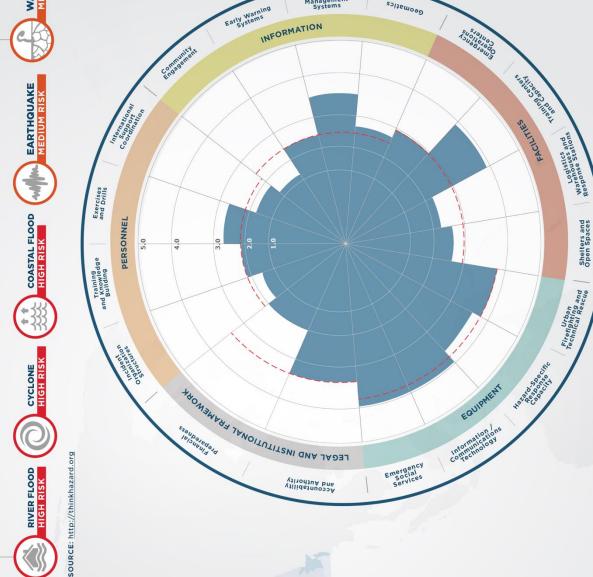
CONTACT NAME: ADAM MCALLISTER ASSESSMENT DATE: 2017-06-11

X

adam@mcallister-craig.com

+1-705-768-8288

WBG REGION: **SOUTH ASIA** TASK TEAM LEAD: **MARC FORNI, SWARNA KAZI**



Information Management Systems

Geomatics



