

**No.: 02-06001/1/2021-RKM**

**Date: 03 January 2022**

# Request for Expression of Interest (EoI)

The Coalition for Disaster Resilient Infrastructure (CDRI) invites Expression of Interest (EoI) from eligible consulting agencies for a study titled “Risk and Resilience Assessment of Health Infrastructure”.

The objectives, scope of work, deliverables, reporting, and supervision, etc. are mentioned in the Terms of Reference (ToR) enclosed on Page 4.

Interested consultants should provide information in the format given at Annexure 1 at Page 19, demonstrating that they have the required qualifications and relevant experience to perform the services.

The shortlisting and eligibility criteria are given at Page 2 in the ToR.

Consultants submitting an EOI may be required to make a presentation on their proposals before the shortlisting process. Shortlisted Consultants will be invited in the Request for Proposal (RfP) stage to submit their technical and financial bids. The final selection of the agency/consulting firm will be done based on the basis of Quality and Cost Based Selection (QCBS) method.

Interested consultants may obtain further information and may also give their comments on the objectives and scope of work at the email addresses below.

The EOIs should be submitted electronically to E-mail: **deepak.rawat@cdri.world by 1730 hrs (IST) on 16 February 2022** in PDF format.

**INFORMATION FOR THE CONSULTANT:**

Client Name	Coalition for Disaster Resilient Infrastructure (CDRI)
Brief description of the required services	Develop of a risk and resilience framework in the context of health infrastructure. This framework will be tested through an in-depth assessment across selected CDRI member countries. Based on the analysis, a set of practical recommendations and roadmap will be developed for building resilience of health infrastructure in those countries.
List and description of expected outputs to be delivered	Deliverables are listed under Section 4 of the ToR.
Nodal person	Deepak Rawat Designation: Manager Procurement E-mail: <a href="mailto:deepak.rawat@cdri.world">deepak.rawat@cdri.world</a>
Location of work	New Delhi, India
Expected duration of work	12 months
Criteria for Preliminary Examination of EOI	<ul style="list-style-type: none"> <li>- Relevant experience of the Agency</li> <li>- Relevant experience of the proposed Team Leader</li> <li>- Proposed Team Composition</li> <li>- Overall experience of the agency</li> <li>- Documents of registration / incorporation in country of origin</li> <li>- Agency not blacklisted by any Govt. institution</li> </ul>
Criteria for essential eligibility / qualification	<ul style="list-style-type: none"> <li>- The agency must have experience of at least 10 years in conducting similar studies for National/Sub-national Government or Agencies/Departments, Multilaterals and Bilateral agencies.</li> <li>- Demonstrated experience of developing frameworks on infrastructure resilience at global and national scale will be an added advantage.</li> </ul>

	<ul style="list-style-type: none"> <li>- Agency with prior experience in conducting technical studies on planning/ design/ standards/ mitigation/ damage assessment / resilience frameworks for transport infrastructure assets will be given priority.</li> <li>- Agency should have a team of experienced professionals from relevant fields relating to the subject matter of the proposed study. The agency should engage an adequate team of professionals having expertise on transportation infrastructure (roads, rails, airport, seaport, bridges and tunnels), disaster preparedness, emergency management, economic and financial analysis, design of DSS tools.</li> </ul>
Who can apply	Proposals are invited from institutions/ organisations only.

**Note:**

1. CDRI or any of its designates reserves the right to cancel this request for EoI and/or invite afresh with or without amendments, without liability or any obligation for such request for EoI and without assigning any reason. Information provided at this stage is indicative and CDRI reserves the right to amend/add further details in the EoI.
2. The EOI is not an offer and is issued with no commitment. CDRI reserves the right to withdraw EOI and or vary any part thereof at any stage. CDRI further reserves the right to disqualify any bidder, should it be so necessary at any stage.



# TERMS OF REFERENCE (ToR)

## RISK AND RESILIENCE ASSESSMENT OF HEALTH INFRASTRUCTURE

### 1. Background

Access, affordability and availability of health services are vital to reducing morbidity and mortality in people. An important determinant of health services is the underlying health infrastructure. This infrastructure includes hospitals and health care institutions, supply-chains for medicines and equipment, health finance, associated infrastructure (e.g. water, energy, transport), skilled human resources, and the policy and governance systems.

Robust Health Infrastructure is the foundation for the successful delivery of health services. This implies enhancing the ability of health infrastructure to absorb stresses and strains during hazard events. It also includes planning for associated infrastructure such as water, energy, communication and transport; building redundancies in operations; strengthening governance; adopting technology, and planning for recovery and reconstruction post-disasters.

Though the concept of 'resilient health infrastructure' is widely understood and accepted, it has garnered a sharp focus only recently. The COVID-19 Pandemic has exposed gaps in health infrastructure globally<sup>1</sup>. For example, countries such as Brazil, Nepal, Sudan and India faced significant demand-supply gaps for medical oxygen. Even in developed countries such as the UK, where adequate oxygen was available, hospital pipelines needed to be retrofitted to ensure adequate oxygen supply to patients. In a different context, Hurricane Sandy forced the evacuation of 6400 patients from 6 hospitals and 31 centres across New York with accompanying damages of US\$1 billion to NYU Langone Hospital alone<sup>2</sup>.

A preliminary landscape analysis by CDRI reveals that much of the public health discourse has focused on the impact of disasters on population health outcomes, community resilience, estimation of disease burdens, health equity considerations, social determinants of health, financing of health etc. Another stream of health research covered in the literature focuses on different disciplines related to clinical medicine.

---

<sup>1</sup> [A Holistic View of Health Infrastructure Resilience before and after COVID-19 \(nih.gov\)](https://doi.org/10.1289/EHP3810)

<sup>2</sup> <https://doi.org/10.1289/EHP3810>

Few studies discuss the resilience of health infrastructure, but mainly from the perspective of climate change. For example, the World Health Organization (WHO) Framework<sup>3</sup> for building climate-resilient health systems identifies 'climate-resilient and sustainable technologies and infrastructure' as one among ten components. This component looks at building codes, water and sanitation, as well as electricity supply. In addition, it advocates the use of satellite and mobile technology for enhancing disease surveillance.

Some work in these areas is already underway. Studies have looked at the benefits of integration of renewable energy into health facilities for reduction of carbon emissions as well as reducing disruptions in service delivery in remote, rural areas<sup>4</sup>. Efforts for strengthening of health information infrastructure such as the Integrated Health Information Platform (IHIP)<sup>5</sup> are underway. The IHIP is a state-of-the-art platform that provides a single operating picture with geospatial information for managing disease outbreaks and related resources. Equally, there are examples of disruptive thinking and out of the box approaches that can be mainstreamed with an eye for resilience in health systems. Yet, a comprehensive framework that studies the structural and non-structural elements of the health infrastructure system in the context of disasters is missing.

Thus, there is an urgent need for a well-articulated narrative on health infrastructure resilience that promotes systemic preparedness, response and recovery capabilities for minimizing disruptions in service provision during disasters and redundancy for meeting surge requirements. In this regard, there remain several opportunities and challenges:

- Population growth, urbanization, lifestyle patterns are changing the landscape of human settlements. The concentration of people in urban areas is increasing the exposure risk to disasters.
- In most developing countries, chronic underinvestment in health infrastructure has resulted in a demand-supply gap for health services. Under disaster situations, this gap is further accentuated as health infrastructure cannot meet the surge requirement. In addition, underinvestment also implies that new infrastructure assets are not keeping pace with demand. Countries with large public health systems are often straddled with ageing health infrastructure. The codes and standards used (for this ageing infrastructure) may no longer be resilient in the ever-changing context of current and future disaster risk.
- Nonetheless, international commitments such as the Sustainable Development Goals and advances in automation, digitization and

---

<sup>3</sup> [Building climate-resilient health systems \(who.int\)](https://www.who.int/publications/m/item/building-climate-resilient-health-systems)

<sup>4</sup> [Solar-powered healthcare in developing countries | Nature Energy](https://www.nature.com/articles/s41560-020-0450-0)

<sup>5</sup> [IHIP-Integrated Health Information Platform \(nhp.gov.in\)](https://nhp.gov.in/)



technological innovation provide opportunities for enhancing the resilience of health infrastructure.

Given the complexity of health systems, it is important to understand the dimensions – e.g. political, economic, social and technology - that promote or hinder resilience – in the context of public and private health infrastructure.

## 2. Key Concepts

### 2.1 Resilience

Resilience is defined as: 'the ability of a system or community, exposed to hazards, to resist and absorb the hazard; recover from it or transform if conditions require it to, in a timely and efficient manner, including through the preservation and restoration of its essential basic services and functions.'

Resilient infrastructure is essential for the safety, well-being, sustainability, and economic prosperity of cities. (Transformation through infrastructure, World Bank 2012). Goal 9 of the UN Sustainable Development Goals (SDG) is to 'Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Resilient infrastructure also links with Goal 3: Ensure Healthy lives and promote well-being at all ages<sup>6</sup> .

Infrastructure resilience embraces three key concepts:

- a. Withstand and endure: The capacity of infrastructure systems to continue performing and providing their intended functions in the face of shocks and stresses.
- b. Learn and adapt: The ongoing process of evaluating and adapting performance (systems, processes and assets) to better cope with shocks and stresses. This can also be described as 'adaptive capacity.
- c. Achieve transformational change: Infrastructure functions evolve at a system level to meet rapidly changing urban needs and better support city-scale resilience.

### 2.2 Resilience vs Disaster Risk Reduction/Management (DRR/M)

Traditionally, a DRR/DRM approach seeks to treat and reduce risk (hazard x exposure x vulnerability) of particular assets and people from specific, known hazards. DRR/DRM has traditionally focused on natural hazards such as earthquakes, floods, etc., but has also evolved to include human-induced risks like war and pandemics. With resilience, the focus is on building the underlying capacity of a system to manage uncertainty, including a range of hazards, both known and unknown, and various combinations of hazards and threats, including economic

---

<sup>6</sup> [THE 17 GOALS | Sustainable Development \(un.org\)](https://www.un.org/sustainabledevelopment/)



(financial crisis, unemployment), social (labour strike, unrest) etc. A resilience approach emphasizes providing critical services that protect us and connect us with whatever the future has in store. The facilitation of adaptation in the face of disruption and resilience can be considered complementary approaches to reducing the impact of shocks and stresses.

The resilience concept offers the possibility to include societal aspects by taking into account the ability to absorb external shocks. While these studies will focus on natural hazards, the focus will extend beyond traditional disaster risk reduction founded on risk assessments related to specific threats. Instead, such a resilience approach responds to the idea that a wide range of disruptive events – both stresses and shocks – can occur. Still, these are not necessarily predictable in nature or intensity.

### *2.2.1 Engaging with resilience*

People and organizations have struggled to engage with resilience for various reasons. Efforts have always been taken to help address human suffering in the immediate aftermath of an extreme event. Still, the scale of these disasters has been long in the making due to a compendium of social, economic, and environmental challenges and because strategies that were designed to address the crisis and natural shocks were narrow. Resilience as a concept is still new and ill-defined and spans many different disciplines, sectors, and silos. Although the current understanding of the potential risks posed to stakeholders is improving, there has been much less emphasis on understanding how stakeholders can use their influence to promote broader societal resilience to climate-related perils.

### *2.3 Exposure and vulnerability of infrastructure systems*

According to UNDRR (2017) terminology, the definition of disaster risk reflects the concept of hazardous events and disasters as the outcome of continuously present conditions of risk. Hazard: A hazard is 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. Hazards may be natural, anthropogenic or socio-natural in origin. Exposure: The situation of people, infrastructure, housing, production capacities and other tangible human assets located in hazard-prone areas.

Vulnerability: The characteristics determined by physical, social, economic and environmental factors or processes increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards. It is widely acknowledged that risk in cities is distributed unevenly, both socially and spatially.

When exploring who is most at risk – to everyday hazards, disasters, and climate change impacts – the term vulnerability is widely used because it brings in notions of threat, risk or stress, insecurity, and lack of power to address these. For example,



low-income households are often hit hardest by extreme weather because of greater exposure to the hazards (as only on high-risk sites can they find accommodation), poor quality infrastructure, lack of hazard-removing infrastructure, less capacity to cope with the impacts, less adaptive capacity (to reduce risks from future events), less state provision and less legal protection or insurance.

Vulnerabilities are especially high where infrastructures are subject to multiple threats and are already stressed (e.g. overcapacity, ageing), mainly when they are located in areas already exposed to extreme events, resulting in cascading impacts over several infrastructure systems.

Health infrastructure needs to undertake an assessment of their exposure and vulnerability to understand where they need to build their capacity to plan for resilience and develop infrastructure systems that will not lead to cascading failures of other elements or related systems and delivery of key services.

### 3. Purpose of this study

The purpose of this study is to critically understand the different dimensions that ensure the disaster resilience of health (and interconnected) infrastructure in a rapidly evolving global context. It aims to equip health authorities with the evidence base and roadmap for building disaster resilient health infrastructure for better public health.

### 4. Scope of Work

The study will involve the development of a risk and resilience framework in the context of health infrastructure. This framework will be tested through an in-depth assessment across selected CDRI member countries. Based on the analysis, a set of practical recommendations and roadmap will be developed for building resilience of health infrastructure in those countries. Assessments will include both desktop research and in-depth primary field study. We propose a "systems" view to better understand infrastructure resilience.

The study will look into the following aspects:

- What is the current status of health infrastructure provision across the country? What are the key hazards that threaten the resilience of health infrastructure systems?
- What are the existing frameworks for measurement of health infrastructure risk and resilience in the context of disasters (cyclones, earthquakes, floods etc.)?
- What is the current level of resiliency of health infrastructure systems, including structural and non-structural aspects including critical interdependencies?



- How have health systems planned for robustness, redundancy and responsiveness in relation to historical as well as future risks?
- What are the broader aspects (codes, standards, certification systems, governance frameworks, finance mechanisms etc.) that currently help or hinder health infrastructure resilience?
- How do these frameworks include gender-sensitivity and inclusion of vulnerable communities or those with disabilities? Does health infrastructure resilience consider inclusion aspects?

The key activities and tasks have been shared below:

### **Activity 1** - Inception

- a. Inception meeting between Agency and CDRI
- b. Discuss the proposed methodology and confirm key research questions
- c. Discuss key stakeholders and engagement strategy

Meeting between the client and Agency to discuss the assignment, including scope, understanding of the assignment, approach, output, timelines, quality control and assurance measures.

**Output: Inception report** including the proposals for the assessment framework

### **Activity 2** – Desktop Research

The aims of desktop research are to gain a robust understanding of the health infrastructure context in the selected Member Countries, gather qualitative or quantitative data to support the assessment, and identify gaps in data availability. Exact process will be confirmed at inception but it is anticipated that desktop research would examine – but will not be limited to - the following:

- a. Health infrastructure systems, essential functions and current levels of service provision.
- b. Understanding the hazard profile and record of historical impacts of disaster on health infrastructure.
- c. Mapping the existing codes, standards and designs for construction, operation and maintenance protocols in relation to health infrastructure
- d. Review of frameworks, policies, and practices related to health infrastructure planning and development, including resilience strategies and business continuity arrangements.
- e. Review of interdependencies on supporting infrastructure (energy, water, transport) based on a 'systems' approach.
- f. Mapping of key local stakeholders within the health infrastructure system



- g. Understanding the gender-sensitivity and inclusion aspects in relation to health infrastructure.

The above activities should inform a list of Key Informant Interviews (KII) and Focus Group Discussions (FDG) membership composition and topics for subsequent primary research.

The Agency will review existing infrastructure capabilities, policy and regulatory frameworks, hazards analysis and existing resilience measures, undertake deeper sector analysis of main investment and non-investment bottlenecks, and review existing risk assessments including climate risk assessments, gender sensitivity, overall infrastructure sector growth strategy, policy frameworks and investment programs.

Based on this research, the agency will develop a conceptual framework for risk and resilience assessment of health infrastructure.

We propose the selection of one country from each income category\* based on the framework below:

Income Category	CDRI Member Country
High	Australia; Canada; Chile; France; Germany; Italy; Japan; Mauritius; Netherlands; United Kingdom; United States of America
Middle	Brazil; Fiji; Jamaica; Maldives; Peru; Turkey, Bhutan; India; Sri Lanka; Bangladesh
Low	Afghanistan; Mongolia; Nepal

\*Based on the World Bank Income Classification

**Output: Interim Report** that provides an overview of the above and identifies areas for detailed investigation. This report will contain the draft risk and resilience framework. A **Workshop** that brings together key stakeholders and discuss elements of the risk and resilience framework for health infrastructure.

**Activity 3:** Primary Research and Site Visits

This activity will provide an opportunity to operationalize the proposed framework across the selected CDRI Member countries. It will comprise of the following activities:

- Key Informant Interviews (KII)
- Focus Group Discussions (FGD) with key infrastructure resilience stakeholders
- Surveys with key health infrastructure stakeholders to validate the framework



- Site assessments to aid testing of the risk and resilience framework for existing health infrastructure

There will need to be strong engagement with a wide range of stakeholders to identify the most appropriate persons to interview. It is suggested that the Agency look at a sample of both public and private healthcare infrastructure in a country. It will be important to speak with a range of experts, including health policy experts, engineers, architects, service providers etc. Site assessments shall be targeted on the basis of the findings from other activities of this phase of work, and their location, scope and contribution to the study should be agreed upon in conjunction with CDRI and key project stakeholders.

The Agency will be responsible for all organization, facilitation, and collection activities and will need to identify appropriate forums and methods for the consultation process, including virtual consultations, in-person consultations and field visits. Interviews will be supported by robust qualitative and quantitative data collection practices to be proposed by the Agency.

It is expected that interviews and focus group discussions will happen in person. A team of Agencies (including senior personnel) are expected to conduct **field visits spanning 8 - 10 days** in each country.

**Outputs:** A final **framework document** for health risk and resilience assessment based on the experience of pilot testing.

#### **Activity 4:** Analysis and Reporting

This phase will draw together data collected during activities 2 and 3, through the selected assessment framework, in order to draw conclusions around the resilience of the country's health infrastructure systems. Qualitative and quantitative analysis will result in the following understanding:

- Baseline assessment of current service capacity, reliability, accessibility and affordability
- Current capacity of health infrastructure systems to provide critical functionality for a range of shocks and stresses identified in the previous phases
- Mapping health infrastructure system (service provision and geographic) interdependencies, including elements of the wider socio-technical system and key infrastructure resilience stakeholders
- Current consideration of resilience in institutional processes, governance, infrastructure plans (including investment plans)
- Development of sample metrics [e.g. 'cost per unit resilience'] that can be used for measurement of health infrastructure resilience



- Identification of gaps in the resilience of the country's health infrastructure systems across operational, organizational and institutional levels as well as gaps in knowledge and practice.
- Priority areas for improvement, level of effort required and key stakeholders responsible

Reporting will take place over several drafts, which will be reviewed by the Steering Committee.

The Agency will be expected to incorporate their inputs into a clear and well-structured report, which clearly answer agreed research questions. The studies will gear towards deriving a set of tangible and actionable recommendations across physical/operational, financial, organizational and institutional/capacity-building aspects to improve and enhance health infrastructure disaster risk and resilience for the short and long term.

Apart from the Final Report, a Policy Brief will be prepared wherein the recommendations and findings of the study will be included. The main purpose of the Policy Brief will be to succinctly provide evidence, evaluate policy options and suggest *actionable* recommendations for the decision-makers of health ministries of the respective countries.

Stakeholder workshops are to be organized for each country to present the draft report before finalizing output.

**Outputs: Country Workshop reports** capturing findings across country assessments. **Final Report and Dissemination Workshop:** outlining priority physical/operational recommendations, organizational measures and institutional recommendations for each country. A **Policy Brief** for health authorities in the selected countries.

### **Expected Deliverables**

The expected set of deliverables include:

- a. Inception Report: This report will be developed within the first 15 days after award of contract. This report will identify any relevant literature related to health infrastructure resilience, the stakeholders as well as have the work plan. It will identify the assessment framework (i.e. methodology) and three CDRI Member countries to conduct the risk and resilience assessment.
- b. Interim Report 1: Draft research report based on the desktop survey. The report will also propose a draft risk and resilience framework for health infrastructure.
- c. Workshop 1: The workshop will bring together key stakeholders and discuss elements for inclusion within the risk and resilience framework



for health infrastructure. The inputs from this workshop will be used to strengthen the framework.

- d. Final Framework Document: This document will contain the final health infrastructure risk and resilience framework based on pilot testing. This framework should be such that it can be applied to different countries. The framework will need to have internal validity as well as consistency across country contexts.
- e. Country Workshop & Activity Reports: The framework will be tested across three CDRI Member countries. The country workshop reports will capture findings from the country assessments to different stakeholders. Based on the feedback, necessary modifications will be incorporated in the framework.
- f. Final Report & Dissemination Workshop: Present the findings in a well-structured report. The Final Report will have a SOP for developing health infrastructure roadmaps in other countries. The dissemination workshop will widely share the findings from the study.
- g. Policy Brief: for key decision-makers in the health ministries.

## 5. Confidentiality and sensitivity

CDRI is a partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions. The projects undertaken by CDRI are for scientific inquiry to build resilient infrastructure. Further, the Agency shall agree that data centres are sensitive assets and house sensitive information with regards to organizations, businesses and governments security and must ensure confidentiality. Further, the Agency shall not promote or publish findings of the report that may, directly or indirectly, affect the sensitivity and confidentiality during or after the project.

## 6. Timeline and Payment Schedule

1. The estimated project duration is **twelve months**.
2. In case of delays in any intermediate milestones, the research agency agrees to deploy additional resources and efforts to recover delays.
3. The interested agency shall be free to propose delivery milestones and corresponding payment schedules as per their understanding of the project requirements given in the ToR. However, the payment schedule shall explicitly mark the percentage budget proposed for the various components. The tentative composition for the cost breakup of the project is given below (Refer Table. 2)



4. The budget and milestones should account for workshops/stakeholder consultation meetings required for User need assessment and other activities proposed in TOR.

**Table 2: Deliverables, Timelines, and Payment schedule (\*Calendar days)**

S. No.	Milestone	Description of milestone*	No. of days	Timeline T0 + days (number of days available for activity)	% amount of total to be disbursed after completion and verification of milestone
1	Contract Effectiveness Date	-	-	T0	0
2	Inception report	Inception report identifying literature, stakeholders, and work-plan	15	T0+15	20%
3	Desktop study and questions for interviews	Completion of desktop study and firming up questions for interviews.	30	T0+45	15%
4	Workshop 1	Workshop on elements of risk and resilience framework for health infrastructure.	20	T0 + 65	5%
5	Interim report 1 & Framework document	Based on desk survey and workshop	25	T0 + 90	10%
6	Field work & stakeholder meetings	Field visits across selected CDRI member	180	T0 + 270	20%



		countries to test the framework.			
7	Country Workshops (one in each country selected for the study)	Present findings from the country assessments to different stakeholders.	45	T0 + 315	10%
8	Final reports, dissemination workshop and Policy Brief	Final Report – Country-wise + synthesis report, SOP on developing roadmaps for other countries	45	T0 + 360	20%

## 7. Staffing Requirements

The Agency submitting the proposal should have the requisite expertise, qualifications, and minimum experience as given in the table below. If all the required skills are not available within the institute/ firm, it is encouraged to associate with other institutes/ firms. Appropriately curated consortiums of academic institutions/ think-thanks/ firms are appreciated to fulfil the entire gamut of requirements.

CVs of key experts will be used for the evaluation of Technical Bids. Any additional CVs shall not be considered in the assessment of the Technical Proposal. However, the Agency must propose a complete team that will work on the project. The Agency can use additional personnel (apart from the Proposed Team) as required to achieve the project's aims. CDRI reserves the right to seek more details regarding the qualifications and experience of the key experts, including samples of previous works.

**Table 3: List of Key Experts to work on the project**

Team Composition	Expertise	Qualifications	Minimum Years of relevant work experience
Project Lead	Project and/or Leadership Experience in the infrastructure sector with	PhD or Masters in Engineering/	15 years



	work related to government advisory, policy and planning or digital systems	Management or related field	
Health Sector Infrastructure Expert	Experience in planning, design and operations of health infrastructure	PhD or Masters in Epidemiology/ Public Health/ Management or related field	10 years
Disaster Management Expert	Experience in disaster risk reduction	PhD or Masters in DRR/ Climate change/ Management or related field	10 years
Risk and Resilience Assessment Expert	Experience in risk and resilience assessments	PhD or Masters in Statistics/ Risk Studies/ Management or related field	10 years

## 8. Additional Information

1. Please note that CDRI may facilitate the process of data collection and meetings with the requisite stakeholders, but the primary responsibility for these will lie with the Agency.
2. The Agency will propose a standard form for the Project Management Report (PMR) in their proposal.
3. The Agency shall report and communicate the status and products of the project to the CDRI representative via a written PMR on the first business day of each month after the project's initiation.
4. There will be quarterly Project Meetings following project initiation. An inception report should be provided at the first Project Meeting. All the quarterly report and the PMRs should be communicated in English language.
5. The Agency will closely interact and report to the Client's team that will accept the deliverables.
6. The CDRI will not be providing any facilities to the Agency for this project.
7. Licensing: All data procured and developed for this project will be done on behalf of the CDRI. The intent is that the data shall be licensed to allow for



free access and distribution in a manner that follows the Open Database License (ODbL). The license includes the right of the CDRI (and sub-licensees) to freely access and distributes data.

8. All work products created or produced by the Agency under the ToR shall be considered the property of CDRI. Accordingly, the Agency will not own work products created under the ToR, nor possess particular or exclusive usage rights to those work products and may not use the work products in any manner apart from the ToR except as per the written authorization of CDRI.
9. The Agency must ensure the protection and confidentiality of private and/or legally protected information and data created under this project.
10. The Agency must ensure the security of data and information in accordance with the international and local legislation and practices.
11. Information and data created according to the ToR should follow internationally accepted standards and practices. In addition, the methods and procedures used in producing information and data consistent with the ToR should follow prevailing scientific standards, techniques, and professional ethics regarding objectivity and independence.
12. The Agency must provide documentation of the methodologies used to generate data created or produced under the ToR, including metadata for all data files.
13. All data and work products created under the ToR shall be transmitted in their entirety and promptly to the Client via commonly used electronic formats appropriate to the information or data. In addition to the structures defined above, other data examples include tabular data should be transmitted in Microsoft Excel, DBF, or CSV format; textual information should be transmitted in Microsoft Word or TEXT format.
14. After the inception stage, the Agency shall prepare a detailed schedule and task-flow diagram, which depicts the interrelationship of various tasks in the assignment and depicts how they lead to completing the different tasks. The Team Leader/Project Manager of the Agency will be the principal contact and is expected to be available during project implementation. The Agency shall be responsible for all aspects of the performance of services as outlined in the ToR.
15. The ownership of the raw data collected by the Agency during the study and the deliverables, including documents, maps, images, processed data, etc. will rest with CDRI. The Agency will keep the data and work products/outcome documents confidential. Dissemination of the



outputs/outcomes/reports/framework/tools will require the written authorization of the CDRI.

16. Any other related information is specific to the study/assignment necessary to be furnished to all the bidders.
  - a. As this project will be implemented at the time of travel restrictions due to COVID-19, the Agency should account for all restrictions in the proposal.
  - b. The cost of logistics for organizing Workshops/stakeholder consultancy to complete the scope of work will vary based on the mode of workshops (online or in-person). This will depend on prevailing COVID-19 restrictions in place at the time. Thus, the logistics costs of the workshops will be reimbursed *as per actual*.

**[Note:** Logistics does not include the Agency's staff time, or resource persons, or coordination. For web-based meetings, this does not include the cost of purchase of hardware or software, only services if any.]

\*\*\*



**Annexure 1 – Format for submitting consultant information**

1. Name of Agency
2. Contact Information including Address, Phone Number and Email
3. Name and contact details of Nodal person
4. Year of establishment of Agency
5. Registration/ Incorporation details
6. Self-certification for not being blacklisted/debarred by any Govt. Institution
7. A brief write-up about the agency
8. Year-wise annual turn-over details for the last 3 financial years with supporting documents
9. Any documents in support of above or eligibility criteria mentioned in the EoI
10. Overview of proposed team leader and composition based on understanding of the ToR
11. Overview of proposed methodology and possible innovation or enhancement of scope
12. Tentative budget for conducting the work across countries such as Germany, Brazil and Mongolia.
13. List of completed projects of similar nature and brief description of services performed.

Name of Client	Title of Project	Sponsoring Agency	Date of award and date of completion	Cost of Project	Remarks and brief description of relevance to current project

## 14. Any other supporting documents

\*\*\*

