Terms of Reference

for

Hiring of Socio Technical Agency for Climate Resilient Villages

under

Assam Integrated River Basin Management Project (AIRBMP)

Table of Contents

Acronyms

Acronym	Acronym description
AIRBMP	Assam Integrated River Basin Management Project
ASDMA	Assam State Disaster Management Authority
ASHA	Accredited Social Health Activist
BCC	Behavior Change Communication
BLS	Basic life support
CPR	Cardiopulmonary resuscitation
CRV	Community resilient village
DDMA	District Disaster Management Authority
DPR	Detailed project report
DRM	Disaster risk management
FREMAA	Flood and river erosion management agency of Assam
FS	Fire safety
GIGW	Guidelines for Indian Government Websites
GIS	Geographic information system
HRVA	Hazard Risk and Vulnerability Assessment
IEC	Information education and communication
IT	Information technology
IWRM	Integrated water resource management
NRSC	National Remote Sensing Centre
ORS	Oral rehydration solutions
PIU	Project implementation unit
PMU	Project Management unit
PRA	Participatory Rural Appraisal
QA	Quality Assurance
SCC	Special condition of contract
STA	Socio technical agency
TDU	Technology Demonstration Unit
VDMP	Village Disaster Management Plan
VLCDMC	Village Land Conservation and Disaster Management Committee
WASH	Water, Sanitation and Hygiene
WB	World Bank
WRD	Water resource department

A Background: The Assam Integrated River Basin Management Project

Assam is strategically important as the largest and most populous State in the Northeast and holds great potential for development through improved water resources management. At the same time, Assam is one of the States hardest hit by erosion and flood hazards. Climate change is expected to exacerbate current hazards and lead to more frequent floods and accelerated soil erosion. A progressive and systematic approach is needed to address the key water-related risks and opportunities in Assam.

The Assam Integrated River Basin Management Project (AIRBMP) responds to the Government of Assam's (GoA) request to support improved integrated water resources management (IWRM) for economic growth and prosperity, including addressing flood and river erosion risks. The project focuses on building the requisite institutional capacity, filling critical knowledge gaps, and implementing integrated solutions with a focus on the IWRM-DRM nexus through different project components. The project would consist of three overlapping phases, Phase 1 (2023-2027), Phase 2 (2026-2030) & Phase 3 (2029-2033) over a total of ten years with the project development objective to reduce climate-related disaster risks and improve integrated water resources management in Assam. Key implementing agencies for AIRBMP include Water Resources Department (WRD), Flood and River Erosion Management Agency of Assam (FREMAA), and Assam State Disaster Management Authority (ASDMA).

Project Component 3 of AIRBMP- Disaster Risk Management (DRM) - focusses primarily on activities implemented by ASDMA, in close collaboration with WRD. This component supports the development of early warning and dissemination systems, enhances disaster response at the local levels, strengthens flood sheltering arrangements, and helps strengthen the climate resilience of selected villages.

This ToR concerns sub-components: 3.4- Climate Resilient Villages.

B Sub-Component 3.4: Climate Resilient Villages (CRV)

This sub-component seeks to enhance community resilience through a progressive expansion of community-based initiatives covering different attributes of resilience across selected revenue villages in Assam. In phase1, the sub-component will focus on:

1 Risk-informed disaster mitigation planning

2 Community capacities for preparedness and response

3 Linkages with sectoral-line departments (for implementation and financing of mitigation actions)

4 Housing Technology Demonstration Units (TDU)

5 Piloting a climate-resilient village monitoring mechanism (that tracks progress over time according toan overarching framework and standardized criteria)

CRV seeks to build upon ASDMA's previous experiences of Community Based Disaster Risk Management- particularly strengthening community-based planning and implementation of resilience actions- across 50 villages in AIRBMP Phase 1. Disaster

mitigation planning has been chosen as an entry point for this given the unmet need for strengthening the identification and implementation of village-specific mitigation/resilience actions. The proposed village disaster mitigation planning (VDMP) process will use a combination of risk analyses processes, including participatory community-based analysis, site surveys, and the development of GIS-based risk maps. The VDMPs will provide asset-wise information on potential flood damages and losses, and develop a potential investment plan that covers different sectors such as housing, mobility, energy, water supply and sanitation, etc. AIRBMP will not finance these investments directly in Phase 1, but rather ASDMA will work with relevant GoA departments such as the Public Works Department, the Public Health Engineering Department, Rural Development Department, Energy Department etc. to mainstream these resilience-related investments into their own programs and schemes. ASDMA will also provide training and essential equipment to the participating villages, including lightning arrestors to minimize lightning risk and emergency response kits to strengthen disaster preparedness and response capabilities. Additionally, in around 25 of the selected villages, ASDMA will construct pilot resilient housing/building block structures that utilize local materials with the support of local community that are able to withstand high flood levels. The construction of these "technical demonstration units" (TDUs) will be accompanied by capacity building on resilient housing and are intended to motivate villages in upgrading/strengthening their own homes.

Phase 1 will also undertake the adoption of a Framework for Climate Resilient Villages, based on which a climate resilient village monitoring program will be piloted by ASDMA that tracks progress over time according to standardized criteria. The proposed framework will unpack different attributes of a climate resilient village- such as Resilient Infrastructure and Housing; Resilient Essential Services; Resilient Livelihoods & Economic Security; Governance and Partnerships for Resilience; Knowledge, Skills, Behaviors for Resilience- to guide community-based resilience actions not just through AIRBMP but also other initiatives in Assam. Phase 1 will address some aspects of this framework and based upon the lessons learned in Phase 1, CRV will be expanded to include around 200 villages in Phase 2 and Phase 3, while also exploring an expansion across other themes of the CRV framework. The proposed activities for CRV across different phases are as below (phase 2&3 activities will evolve based on lessons from phase 1):

Table 1: AIRBMP Phase wise plan for CRV

	Phase 1: 2023 -2027	**Phase 2: 2026 – 2030**	**Phase 3: 2029-2033**
Three phases with overlap			
Climate Resilient Village Activities	-Piloting 50 Village Disaster Mitigation Plans (VDMP) -Initiate Departmental Linkages -Climate resilient village monitoring mechanism	-Preparing an additional 100 VDMPs -Facilitate implementation of mitigation actions by departments + AIRBMP investments in Phase 1 villages (pilot	-Preparing an additional 100 VDMP -Facilitate implementation of mitigation actions through departmental capacity building + AIRBMP investments in Phase 2 villages (pilot

	Phase 1: 2023 -2027	Phase 2: 2026 – 2030	Phase 3: 2029-2033
Three phases with overlap			
	-Housing Technology Demonstration Units	other CRV framework subthemes) -Institutionalize VDMP preparation and resilience monitoring	CRV framework subthemes) -Deepen risk informed VDMP planning, implementation, and monitoring

For more details on the sub-component 3.4, please see **Annex 1: CRV Technical Note. (Shall be provided at RFP Stage)**

C Scope of the Assignment

It is envisioned that a Socio-Technical Agency (STA) will build upon information available with ASDMA and the GIS Laboratory at the time of this assignment, in addition to the above mentioned primary and secondary data collection, to carry of this work.

Phase 1 activities in STA scope include:

- Risk-informed disaster mitigation planning
- Community capacities for preparedness and response
- Linkages with sectoral-line departments (for identification, implementation and financing of mitigation actions)
- Piloting a climate-resilient village monitoring mechanism (that tracks progress over time according to an overarching framework and standardized criteria)

Housing TDU is not included in the scope of works of the STA and will be undertaken by another entity.

The STA is expected to undertake the following key functions during the implementation of CRV:

1 **Project management,** including planning and monitoring of CRV project activities and regular reporting to ASDMA.

2 **Spatial risk assessments,** including GIS-based hazard, physical vulnerability, infrastructure vulnerability, and socio-economic vulnerability assessments through mixed methods.

3 **Community engagement and field surveys,** including designing and undertaking community orientation, facilitating discussions, building consensus through the use of participatory PRA exercises, GIS-based tools, behavior change communication techniques amongst others along with data collection exercises and surveys.

4 **Disaster mitigation planning,** including analysis of emerging risks and design of context-specific mitigation solutions across multiple sectors and infrastructures incorporating climate change risks and solutions and drawing from global and national best practice (develop catalogue of mitigation options);

5 **Training and capacity building,** including implementing the 9 capacity building modules proposed under CRV as well as any training and orientation needed for successful implementation of other CRV activities.

6 **Analytics and conceptualization,** including consolidation of emerging data from villages for presentation during stakeholder consultations; establishment of the climate resilient village monitoring program; and design of Phase 2 activities for CRV.

7 **Stakeholder consultations,** including designing and undertaking outcome-oriented consultations at multiple levels within the Government of Assam, technical experts, and civil society actors at different stages of implementation.

8 **IT and web design** including the development of the web enabled CRV platform/portal and applications.

9 **Liaison and coordination** across multiple actors within and outside ASDMA and at multiple levels (village, circle, district, state) for successful implementation of activities as well as adequate compliance to the environment and social safeguards, financial management, and procurement commitments of AIRBMP.

10 **Communications** activities for CRV in collaboration with the ASDMA Comms team-IEC Consultancy.

The anticipated activities for CRV are provided in the Activity Table in Section 3.5 below and a detailed work plan is provided as Annex 2: Workplan for CRV (shall be provided at RFP stage). It is expected that the STA finalizes this workplan as a part of their first deliverable, the Inception Report. The scope of work across the four activities is detailed below.

C.1 Scope of risk assessments and village disaster mitigation planning (VDMP)

The envisioned VDMP within CRV seeks to strengthen aspects of the planning process to enable the actual 'implementation' of these plans. In particular, previous plans were found to be (1) paper-based, and not supported by a progress monitoring mechanism (2) did not identify village-specific actionable mitigation actions, and (3) were not linked with relevant line departments for financing and implementation of risk mitigation actions. Accordingly, it has been proposed that the VDMP process under CRV:

- Undertakes a robust, participatory, spatial risk assessment exercise to enable the identification of village-specific mitigation actions
- Facilitates informed decision-making by communities by exposing them to mitigation options available to them (including global and national best practices)
- Establishes linkages with a web-based climate-resilient village monitoring mechanism
- Enhances and establishes linkages with respective implementing departments

It is expected that STA's work on this activity is informed by this background and the risk database to be available from Geo-Spatial Laboratory (to be established) in component 3.2: **Early Warning Dissemination System** to be used for intended outcome of this study.

The scope of risk assessment and planning exercise should include, at the minimum:

- Hazard Assessments: Analysis of causation, exposure, frequency, and intensity of major hazard events with a particular focus on hydro-met hazards (flooding – riverine and flash flood, erosion, rain induced landslides). This should include:
  - Preparation of local hazard maps for flood and erosion, landslide potential (if identified from past events)
  - Quantitative description from literature review and provide simple methodology along with description of hazard characteristics for the village, geographical spread
- Physical Vulnerability Assessments: Mapping and vulnerability assessment of the physical- environmental features of the village (land use-land cover, ecological assets, settlement layout and housing typologies). This should include:
  - Spatial mapping of all assets, including demarcation of safe and unsafe zones
  - Quantitative and qualitative description of the physical vulnerability for the village, including:
    - Categorization of asset vulnerability based on a pre-agreed criterion
    - Quantification of potential economic losses due to asset damage
  - Assessment of the adequacy of the current emergency sheltering arrangements
- Infrastructure Vulnerability Assessments: Mapping and vulnerability assessment of critical infrastructure and lifelines (power, communication, transport/mobility, drainage, water and sanitation, embankments), and public buildings (schools, health centers, panchayat ghars, cultural heritage sites etc.) accounting for exposure to multiple hazards. This should include:
  - Spatial mapping of all assets, overlap with risk zones
  - Narrative description of infrastructure vulnerability for the village, including:
    - Categorization of asset vulnerability based on a pre-agreed criterion
    - Quantification of economic losses due to asset damage
    - An estimation of the duration of service disruptions and their impact
  - Identification of suitable locations for demonstration lightning arrestors to be provided under the project (2 per village)
- Socio-economic Vulnerability Assessments: Demographic profile of the village including:
  - Spatial mapping of disaggregated data on vulnerable social groups and individuals
  - Narrative description of socio-economic vulnerability for the village, including:
    - Identification of specific vulnerabilities of women, children, elderly, persons with disability
    - Estimation of average annual household losses due to disasters and the key constituents of the losses
    - Livelihood vulnerability assessment, including quantification of losses and causal factors

- Development of Risk Maps: It is expected that the hazard and vulnerability assessments inform the development of village-specific spatial risk maps, such that these maps are:
  - Taken back to the community for finalization based on their inputs and to facilitate a discussion on mitigation planning
  - Integrated with the web enabled CRV platform/portal and app with a mechanism in place for their updation
- Risk Analysis: A comprehensive written report that includes data collated, process and methodology used and adopted, names and contact details of participants in the risk assessment process, spatial risk maps, findings with proposed measures and recommendations, including scenario-based analysis and temporal evolution of risk. It is envisioned that these also be represented as PowerPoint presentations in local language of the village.
- Catalogue of Mitigation Options: The STA is expected to develop a 'Catalogue of Mitigation Options' for the Assam context and present the same to communities along with the village-specific risk analysis for informed decision making by communities on their VDMPs. The catalogue should:
  - draw upon global and national best practices for community-based mitigation solutions
  - cover the different themes and sub-themes of the CRV Framework
  - present the concept, design, skill markers and costing of the solutions in the context of Assam, North-East Region
  - innovatively use visuals/videos/local language text for presentation
- Village Disaster Mitigation Plans: It is envisioned that the plans include:
  - cost and time-bound structural and non-structural mitigation actions for each village
  - design and specifications of the structural mitigation actions
  - process maps/modules/guidelines for non-structural mitigation actions
  - emergency response plan
  - indicated implementing arrangement for the action
  - sign-off from the Village Disaster Management Committees and Gram Panchayat

A mix of primary and secondary methods and tools is expected to be used for the processes above, including community based participatory rural appraisal tools and GIS-based tools and applications. The risk assessment and mitigation planning exercise will be anchored by the Village Land Conservation and Disaster Management Committees (VLCDMCs) mandated via Revenue & Disaster Management Department OM No. RRG.121/2019/39 dated 7th December 2021.The STA will be responsible for orientation of the VLCDMCs, as well as working with them closely through the entire implementation period. The VDMP process is also expected to benefit from a series of consultations – please see section C.2 below for the scope of these consultations.

Other considerations during this process:

- Coverage and Sampling: The risk assessments should cover minimum 40% of

households per village depending on village size. In case of larger villages, a suitable sampling strategy may be adopted (as agreed during the inception stage)

- Data Standards: Data should be compatible with existing data standards in India and where possible, confirm to current international good practice in data for risk management
- IT and System Development: The IT apps and tools developed as a part of this process should be such that they interface with existing systems and are scalable allowing for integration of additional modules, and meeting ASDMA storage and access standards
- Quality Assurance: An appropriate QA process should be put in place by the STA
- Available data sources at ASDMA and GoA:

1 HRVA: http://www.asdma.gov.in/studies&projects.html

2 Flood Hazard Atlas: http://www.asdma.gov.in/studies&projects.html

3 Flood Memorandum: https://asdma.assam.gov.in/documents-detail/assam-flood-memorandum

4 Flood Inundation Mapping issued by National Remote Sensing Centre (NRSC) : https://asdma.assam.gov.in/resource/detail/flood-inundation-mapping-issued-by-national- remote-sensing-centre-nrsc

C.2 Scope of stakeholder consultations

The STA is expected to conceptualize, organize, facilitate and document the following 16 consultations in the course of the CRV implementation, along with incorporating the feedback from the consultations into the respective outputs. ASDMA will support the STA in identification of and communication with relevant participants.

Table 2: Stakeholder consultations

Sr. No.	Consultation	Objective	No. and level of consultation	Participants
1.	Inception consultation (State)	• Introduce AIRBMP and CRV • Seek feedback on the outline and plan for CRV • Seek feedback on CRV Framework • Agree upon the role of depts. and district/circles in CRV process	State-level (1 consultation)	State-level Line Depts.
2.	Inception consultation (District)		District-level (6 consultations)	DDMA/Line Depts. + Circle + Block Representatives of selected villages
3.	Inception consultation (Civil Society)	• Introduce AIRBMP and CRV • Seek feedback on the outline and plan for CRV	State-level (can invite national experts if required)	Civil Society and Technical Experts

Sr. No.	Consultation	Objective	No. and level of consultation	Participants
		• Seek feedback on CRV Framework	(1 consultation)	
4.	Post-VDMP consultation (District)	• Share updates on CRV • Share findings from baseline exercise and VDMPs • Identify sources of implementation/ financing for mitigation actions in VDMPs	District-level (6 consultations)	DDMA/Line Depts. + Circle + Block Representatives of selected villages
5.	Post-VDMP consultation (Civil Society)	• Share updates on CRV • Share findings from baseline exercise and VDMPs • Seek feedback on improvements	State-level (can invite national experts if required) (1 consultation)	Civil Society and Technical Experts
6.	Post-VDMP consultation (State)/ CRV Conclave	• Share updates on CRV • Share findings from baseline exercise and VDMPs • Share identified sources of implementation/ financing for mitigation actions in VDMPs • Agree on action plan for departmental action	State-level (1 consultation)	State-level Line Depts.
7.	Pre-monsoon inter-departmental camps for sectorial flood preparedness information, skills services	• 3 annual pre-monsoon camps per village for: • Sector-specific awareness on do's and don'ts • Sector-specific provision of preparedness entitlements	Village-level (150 camps)	District/block representatives of depts. + CDMCs + VLCDMCs and community members

C.3 Scope of activities

STA is expected to design and implement the following activities:

- Formation of Task Forces: Phase 1 will support the formation of five task forces on

Shelter Management, Relief Management, First Aid, Search & Rescue (S&R), Water and Sanitation per village. Barring the S&R task force, all these will be all-women task forces. The STA is expected to:

- Form the task forces through the identification and orientation of members
- Train the task forces in their respective skill sets
- Provide inputs to ASDMA in finalizing the list of preparedness equipment to be provided to thetask forces
- Facilitate the handing-over of preparedness equipment (procured by ASDMA) to the respective task forces
- Ensure the integration of task force and training databases into the CRV platform

C.4 Scope of CRV Platform and App

The CRV Platform will support piloting of a climate-resilient village monitoring mechanism that tracks the progress of villages over time according to an overarching framework and standardized criteria. It is envisionedas a web-enabled space with the following capabilities at the minimum:

- Visualization and description of the CRV framework and resilience indices
- Visual representation of the VDMP process progress, update of no. of completed villages, etc.
- Interactive visualization of the village-wise scoring on the state map (based on the integration ofbaseline information for villages based on the CRV framework and indices)
- Access to village-wise risk assessment reports, risk maps, and VDMPs
- Access to village-wise information and updates on training, equipment, task forces
- Capability to update village physical, infrastructure, socio-economic attributes, and resultant analysis of risk
- Progress status of implementation of VDMP actions and regular updation of VDMPs
- Interactive interface for line departments to understand aggregate sectoral needs in VDMPs
- Technical Document of the Platform and Application

The functionalities expected from the App include:

- Data collection for the village-level risk assessments
- Data collection for the CRV Framework baseline and end line exercises
- Data module should be accessible to ASDMA to archive and retrieve information
- The App should be user-friendly and have a quick display format

STA will conceptualize, design and develop this platform along with the related mobile application for datacollection and updation by undertaking the following tasks:

- Finalization of the CRV Framework along with indicators in consultation with ASDMA and relevant stakeholders

- Review of existing web infrastructure at ASDMA and proposing options for the development of the digital platform; outline of the requirements for every step of the platform and timetable detailing tasks and their competition (as a part of the Inception Report)
- Development of conceptual architecture of the digital platform that will include the creation of a sitemap, the visual style, software application, and linkages with existing ASDMA site/GIS Lab
- Development of the Platform based on the finalized and approved conceptual architecture (Beta Version/ Prototype for Demo)
- Design and conduct the baseline surveys and integration of approved data in the platform
- Integration of data from risk assessments, VDMPs, and capacity building into the platform
- Testing of the platform before handover (of codes and ownership transfer) to ASDMA and launch
- Bug fixes and maintenance support will be provided by STA for the duration of their contract

Other considerations for the platform and app:

- The requisite cloud server and domain name shall be provided by ASDMA – compliance to the same must be ensured
- The platform must be compliant for the Guidelines for Indian Government Websites (GIGW)
- Open-source platform should be used. The platform and app will be developed in the Assamese, Bengali and English languages.
- Security audit and licensing should be ensured as per ASDMA's requirements

C.5 CRV Activity table

Table 3: CRV activity

A. Risk-informed disaster mitigation planning		**Level of Action**	**Responsibility**
A.1	Preparation of Inception Report for VDMP process including, planning tools (survey team mobilization), templates, orientation modules, workplan, participant list for consultations, comms outputs, IT tools specifications, wireframe for CRV portal, M&E plan	Desk	STA
A.2	Development of village GIS base maps	Desk	STA
A.3	Development of the CRV web-enabled platform and app	Desk	STA

A. Risk-informed disaster mitigation planning		Level of Action	Responsibility
A.4	Inception consultation with departments at state and district levels (including incorporating of stakeholder inputs in tools)	Ghy + 6 Districts	STA
A.5	Inception consultation with civil society	Ghy	STA
A.6	Develop content for IEC materials content (Flipcharts, videos and tools) to be developed for the VDMP process and hand-over to the 'IEC consultancy' hired by ASDMA for design and printing	Desk	STA
A.7	Pilot testing and finalization of tools	6 Villages	STA
A.8	Mobilization and training of surveyors/ community mobilizers	State-level	STA
A.9	Formation and activation of VLCDMC	50 Villages	ASDMA
A.10	Orientation of VLCDMC, including agreement of planning dates and comms activities (1 village day)	50 Villages	STA
A.11	Village-wise Village Risk Assessments • Risk Assessment Physical Surveys (2 days per village) • Socio-economic vulnerability surveys and FGDs, including Participatory GIS-based PRAs (3 days per village) • Infrastructure vulnerability assessment (2 days per village)	10 Villages 20 Villages 20 Villages	STA
A.12	Development of village-specific risk maps	Desk	STA
A.13	Development of 'Catalogue of Mitigation Options'	Desk	STA
A.15	Village-wise Village Disaster Mitigation Planning. • Presentation of risk assessment, risk maps, and mitigation options to VLCDMC and agreement on investment needs (1 village day) • Development of draft VDMP • Presentation and approval of VDMP at VLCDMC (1 village day)	25 Villages 25 Villages	STA
A.16	Post-VDMP Consultation with departments at block, circle, district levels to share findings and identify sources of implementation/financing for mitigation actions	District (circle and block level officials invited)	STA
A.17	Post-VDMP consultation with civil society to share	Ghy	STA

A. Risk-informed disaster mitigation planning		Level of Action	Responsibility
	findings and get feedback		
A.18	Approval of VDMPs from DDMAs	Desk	ASDMA
A.19	Populating village assessments and plans in the CRV portal	Desk	STA
A.20	Post-VDMP consultation with departments at state level and high- level action planning for implementation of actions (CRV Conclave)	Ghy	STA
A.21	Review, corrections, and finalization of 50 VDMPs	Desk	ASDMA
A.22	Identification of villages for Phase 2	Desk	ASDMA
B. Community capacities for preparedness and response			
B.1	Development of Inception Report on the trainings, including: • Training needs assessment • Training schedule for 8 modules (including 2 refreshers) • Details of Certified Resource Persons	Desk	STA
B.2	Development of training modules for First Aid, Search & Rescue, WASH, Public Health in disasters, Shelter Management, Relief Management, Lightning Arrestors	Desk	STA
B.3	Develop content for IEC materials material (Flipcharts, videos and training manuals) to be developed for 6 modules and hand-over to the IEC consultancy for design and printing	Desk	STA
B.4	Formation of task forces (in conjunction with activity A.7) + Identification of trainees (other than task forces) in each village	50 Villages	STA
B.5	Submission of list of trainees from each village by DDMAs	Desk	DDMA
B.6	Procurement of preparedness equipment	Ghy	ASDMA
B.7	Agreement on storage and maintenance of equipment with schools/GPs	50 Villages	STA
B.8	Distribution of preparedness equipment	50 Villages	ASDMA
B.9	Identification of schools for installation of lightning arrestors (same time as village risk assessments)	50 Villages	STA
B.10	Submission of list of schools for installation of	Desk	DDMA

A. Risk-informed disaster mitigation planning		Level of Action	Responsibility
	lightning arrestors		
B.11	Approval by DoE (in case of school building)	Desk	ASDMA
B.12	Procurement of Lightning Arrestors	Desk	ASDMA
B.13	Installation of lightning arrestors in schools	Ghy	ASDMA
B.14	Integration of training, equipment and lightning arrestor information with CRV portal	50 Villages	STA
C. Linkages with sectoral-line departments			
	Inception consultation with departments on VDMP at state and district levels and with civil society	These are covered in the section above.	
	Post-VDMP Consultation with departments at state and district levels and with civil society to share findings and identify sources of implementation/financing for mitigation actions		
C.1	Preparatory work for pre-monsoon camp: department orientation, modules, handouts	Desk+ Meetings	STA
C.2	Pre-monsoon inter-departmental camps for sectoral flood preparedness information, skills services	50 Villages	STA
E. M&E Activities			
E.1	Development of M&E Plan for CRV (linked with concept of CRV portal under activity A.1)	Desk	STA
E.2	Baseline survey and report		STA

D Project Location and Details

50 flood-prone villages across 6 districts of Assam as listed in **Annex 3: List of CRV Villages** (shall be provided at the RFP stage) are the target villages for Phase 1 of the project. The STA is expected to work at the village, circle, district and state levelsin Assam depending on the requirement of the activity, as indicated in the CRV workplan.

E Key Project Deliverables and Milestones

The expected outputs from different activities have been laid out in the CRV workplan (shall be provided at RFP Stage). The deliverables for this work have been presented below:

Table 4: Deliverables:

#	Deliverable	Tentative Timeline	Details/Specific Requirements
1	Inception Presentation	T+ 2	

#	Deliverable	Tentative Timeline	Details/Specific Requirements
	(+ mobilization advance)	weeks	
2	Inception Report	T+1.5 months	This should include: CRV proposed workplan and timelines Concept and specifications for CRV platform M&E plan based on CRV framework Strengthening risk informed VDMP & linkages methodology and tools specifications of IT tools and orientation modules consultation design
3	IT tools (CRV Platform and App) positioned at ASDMA (with scope for further enhancement based on database structure and achievement of key tasks)	T+4 months	Approved beta version/prototype demo of the CRV Platform Tested and ready-to-use version of the data collection App
4	Interim progress report on 8 consultations and pilot testing of tools	T+4 months	Report providing details of the process and outcomes of the Inception Consultations at State (1), District (6) and Civil Society (1) levels and pilot testing in 6 villages
5	Annual training report for Year 1 (upon completion of training + pre- monsoon camps schedule for Year 1)	T+12 months	Report on the capacity building work undertaken in Year 1, including participant profile, process summary, pre-post training evaluation summary. summary of process and outcomes of the pre-monsoon camps.
6	Risk assessment report for 10 villages	T+6 months	1 Report per village Reports should include: Hazard Assessments, Physical Vulnerability Assessments, Infrastructure Vulnerability Assessments, Socio-economic Vulnerability Assessments, Risk Maps, and Risk Analysis (see Section 3.1 for details) 2 PowerPoint presentations (1 English and 1 in local language of the village)
7	Risk assessment report for 20 villages	T + 8 months	
8	Risk assessment report for 20 villages	T+12 months	
9	Baseline Report	T+15	Tested version of the CRV Platform

#	Deliverable	Tentative Timeline	Details/Specific Requirements
	integrated with CRV Platform	months	
10	Village Disaster Mitigation Plan (For 1st 25 Number villages)	T+18 months	Catalogue of Mitigation Options for Assam Context 1 VDMP per village including -costed, time-bound structural and non-structural mitigation actions for each village -design and specifications of the structural mitigation actions -process maps/modules/guidelines for non-structural mitigation actions -indicated implementing arrangement for the action -sign-off from the Village Disaster Management Committees and Gram Panchayat
11	Village Disaster Mitigation Plan (For 2nd 25 Number of villages)	T+21 months	
12	Annual training report for Year 2 (upon completion of training + pre- monsoon camps schedule for Year 2)	T+24 months	Report on the capacity building work undertaken in Year 2, including participant profile, process summary, pre-post training evaluation summary. summary of process and outcomes of the pre-monsoon camps.
13	Action plan for implementation of VDMPs (based on CRV Conclave)	T+30 months	Action Plan providing a summary of consultations with the Line Departments along with time-bound commitments from the Departments for implementing the VDMP actions.
14	Annual training report for Year 3 (upon completion of training + pre- monsoon camps schedule for Year 3)	T+35 months	Report on the capacity building work undertaken in Year 3, including participant profile, process summary, pre-post training evaluation summary; summary of process and outcomes of the pre-monsoon camps.
15	Report on Phase 2 CRV investments	T+36 months	Details of this report to be finalized in discussion with ASDMA during the inception stage. Indicative contents include: -Investment gap for 50 villages based on

#	Deliverable	Tentative Timeline	Details/Specific Requirements
			Departmental Action Plan -Capacity/skill needs in departments to implement their Action Plan -Plan for undertaking VDMPs in 100 villages -Plan for institutionalizing CRV monitoring

Note- In addition to the above deliverables, the consultancy shall submit additional deliverables as may be required for the project in line and reference to Section C of the ToR "Scope of the Assignment". The deliverables listed above are not exhaustive and the consultancy is expected to perform the assignment to achieve the desired outcome from the scope of the services.

F Reporting Formats

All reports required by the ToR shall provide a clear presentation and include a table of contents and an executive summary. The main body of the text shall be organized in sections and focus on the findings and recommendations and their justification. Supporting data and analysis shall be included in the Annex which will be referenced as appropriate in the body of the text. All paragraphs in the executive summary, main text, and Annex(es), shall be numbered to facilitate reading across the report.

The report shall be illustrated as appropriate with such drawings, sketches, photographs, tables, graphs, and maps to aid comprehension and assimilation of their contents. The consultants will need to submit a draft template for all reports as part of the DPR which will be reviewed by the ASDMA/PIU and WB for adequacy. The consultant will incorporate all suggestions and submit the deliverables accordingly.

G Period of Performance

The STA consultancy will be engaged by the client for a period of 3 years.

H Payment

The STA shall be compensated based on a lump-sum structure of payment as per the Special Condition of Contract (SCC), to be detailed at the Request for Proposal (RFP) stage.

I Data, local services, and facilities to be provided by ASDMA

ASDMA would make the following available to the Consultant:

- Any supporting documents like permits and licenses necessary for the completion of the STA's duties and assistance with any special arrangements to allow the Consultant to enter any restricted areas related to the Project.

- Access to all relevant previous studies, reports, documents and contracts related to the project on request by the STA.
- Assistance with arranging meetings with the concerned Ministry and Department of the Government of Assam, project executing agencies at National, District and Circle level and other authorities as necessary during the course of the STA‘s work.
- The STA shall verify and be satisfied with the accuracy of the data/information provided by ASDMA before these are used. Data/information/material provided to the STA shall remain the property of the originating agency and shall be provided solely for the purpose of the work conducted under this contract. All such
- borrowed material shall be returned to the ASDMA upon completion of the assignment. Apart from data/information provided by the ASDMA and that which the STA could procure from other agencies, STA shall be responsible to collect any other data/information required for the assignment, through field survey and investigations.
- All costs and arrangements associated with stakeholder consultations shall be borne by the STA and should be accounted for their price quote, unless otherwise agreed with ASDMA (for e.g. in relation the use of ASDMA’s premises for departmental consultations).

J Project Organization and Reporting

- The three Implementing Agencies (IAs) under AIRBMP are FREMAA, WRD, and ASDMA. FREMAA will be the nodal coordinating agency while WRD and ASDMA will be the executing agencies for the program. A Project Management Unit (PMU) will be established in FREMAA to support the implementation of the program. The PIU in ASDMA will be headed by the CEO, ASDMA.
- The entire assignment shall be carried out under the overall guidance of the PIU-ASDMA and World Bank. At all steps, the STA will be required to closely engage and seek inputs from the ASDMA and Bank team and work closely with other consultants hired by ASDMA/World Bank.
- STA’s Team Leader will lead & report to the CEO, ASDMA or personnel/office authorized by CEO, ASDMA. He/ she will work closely with the PIU team, and core task team members (local and international) from the World Bank. He/she will lead and be responsible for the overall delivery and performance of this assignment.
- The Consultant will need to organize the visits/meetings for data collection and stakeholder consultations on their own and provide coordination support for arranging any monthly/quarterly review meetings for specific projects. ASDMA‘s/Bank‘s task team may join some of the consultation meetings.

K Required Competencies and Positions

It is expected that the STA brings strong institutional experience in:

- Hazard, vulnerability and risk assessments, including GIS-based assessments
- Designing and implementing participatory community-based processes

- Implementing community-based disaster risk mitigation/climate change adaptation investments
- Facilitating inter-government/department processes for consensus-building on resilience action
- Strong IT Capabilities for conceptualization, design, development and maintenance of web-enabled platforms/dashboards/apps

The indicative requirement of experts is laid down below Table 6. Firms are free to make their own analysis and in addition to these key positions, other technical and non-technical professionals and support staffs may be proposed to carry out this assignment from time to time. The STA can also propose and alternate deployment schedule for the proposed team as per their approach and methodology for the execution of this assignment with due justification. It is to be noted that the deployment of staff by the firm will be strictly monitored by ASDMA and the replacement of key team members will be discouraged. However, in case of an unavoidable contingency, the firm may, with proper justification, request ASDMA and the World Bank in writing for a replacement of key personnel with an alternative whose credentials are equivalent or better than the existingteam member.

It is estimated that about minimum **indicative 738 person-**months of Key Experts and other staff as listed below in (Table 7) will be required for the assignment.

Table 5: Details of expert, qualification, and suggested role

#	Expert	Minimum Competency Requirement	Nos	Suggested Role
1	Team Leader	Postgraduate in Disaster Management or any relevant field with at least 20 years of experience of project management the field of Disaster/ Climate Risk Management and experience of externally aided projects.	1	Providing strong leadership to CRV implementation.
2	Resilience/ Disaster Risk Management Specialist	Postgraduate in Disaster Management or any relevant field with at least 15 years of experience in disaster risk management/ climate change adaptation programming/ risk informed spatial planning or design of risk mitigation solutions (designing, implementing, monitoring DRM investments). Experience from Assam/ north-east will be preferred.	1	Lead the VDMP process, including the development of Catalogue of Mitigation Options, planning and operationalizing the risk assessment and planning process; leading facilitation of stakeholder

#	Expert	Minimum Competency Requirement	Nos	Suggested Role
				consultations.
3	Data Analysis Specialist	Postgraduate in Data Analytics or any relevant field with at least 10 years of experience in data analysis; strong analytical, statistical, and writing capabilities, experience of quantitative and qualitative tools and methods, particularly for risk management and visualization of risk information and analytics.	2	Support the Sr. DRM Specialist in the VDMP process, including secondary analytics for risk assessments and consolidation of analytics based on emerging data into the plans and CRV platform
4	Community / Rural Development Specialist	Master's in social work or any relevant field with at least 15 years of experience in community development processes, including PRAs, participatory planning, consensus building, development of CBOs. Experience from Assam/ north-east will be preferred.	1	Inform the design of community processes and socio-economic vulnerability analysis in the VDMP process, including co-leading the Implementation of VDMP process in the village with the Sr. DRM Sp.
5	GIS Specialist	Graduate in Engineering/Science and Postgraduate degree/ Diploma in Geographical Information Systems. Minimum 8 years' experience in all aspects of Remote Sensing and GIS related database development with previous experience in HVRAs.	2	Support the design of tools, data collection and integration of the same with the CRV portal; coordinate with the GIS Lab
6	Infrastructure Specialist	Civil engineer with demonstrated experience over 10 or more years in design and implementation of resilient	1	Lead the design, implementation

#	Expert	Minimum Competency Requirement	Nos	Suggested Role
		infrastructure/lifeline/buildings risk assessments and mitigation/ retrofitting investments.		and reporting of the Physical and Infrastructure Assessments and recommendations/ investments for VDMP process
7	Livelihood Specialist	Postgraduate in social work/ agricultural economics/ fisheries/ rural development or related fields and minimum 15 years' experience in designing and implementing rural livelihoods programs. Experience from Assam/ north-east will be preferred.	1	Lead the design and implementation of socio-economic assessments and livelihood-related mitigation planning in the VDMP
8	Capacity Building and Communications Specialist	Post-graduate in Social Science or any relevant field with at least 15 years of relevant experience in training planning, module development, implementation & monitoring of training programs/capacity building tools; applied use of behavior change communications (BCC) principles.	1	Lead the capacity building activities under CRV. Inform the design of VDMP tools through innovative use of BCC principles.
9	M&E Specialist	Post-graduate in development studies/ economics or related fields; demonstrated experience of designing monitoring and evaluation processes and systems over 10 years	1	Lead the M&E activities of CRV with significant contributions to the design of the CRV portal.
10	IT Systems Specialist	Post-graduate with at least 10 years' experience in relevant field.	1	Lead the development of the CRV Platform and associated apps and tools
11	District Focal	Graduate in any discipline with minimum	6	Focal point for

#	Expert	Minimum Competency Requirement	Nos	Suggested Role
	Point	5 years' experience of management of rural development projects. Demonstrated coordination experience and/or previous experiences with the district level officials will be an added benefit.		respective villages in their district, leading the close coordination of all CRV activities between the communities, expert teams, DDMA, block and circle officials.
12	Community Workers		10	Community teams with mixed skill sets for community engagement, capacity building, risk assessments
13	Surveyors/Data Collectors		10	
14	Junior Engineers/Capacity Building Resource Persons		10	Risk Assessment, Surveys etc.
15	Office Admin Asst.	Graduate with adequate experience in office admin works.	1	Office administration, accounts, staff support etc.

Table 6: Indicative person-months of Key Expert and other staff.

Sl. No.	Post/Designation	Nos.	Indicative Person-Months per post	Total Person Months	Remarks
1	Team Leader	1	30	30	Days/months will be spread across the project's period.
2	Resilience/Disaster Risk Management Specialist	1	18	18	
3	Data Analysis Specialist	2	18	36	
4	Community / Rural Development Specialist	1	18	18	
5	GIS Specialist	2	18	36	

Sl. No.	Post/Designation	Nos.	Indicative Person-Months per post	Total Person Months	Remarks
6	Infrastructure Specialist	1	18	18	
7	Livelihood Specialist	1	18	18	
8	Capacity Building and Communications Specialist	1	18	18	
9	M&E Specialist	1	18	18	
10	IT Systems Specialist	1	18	18	
11	District Focal Point (6)	6	30	180	
12	Community Workers (10)	10	24	240	
13	Surveyors/Data Collectors (10)	10	3	30	
14	Junior Engineers (10)	10	3	30	
15	Office Admin Asst.	1	30	30	
				738	

Note: Experts in above table from Sr. No. 1 to 10 are Key Experts (whose CV will be evaluated at RFP stage) and from Sr. No. 11 to 15 are Non-Key Experts/Support Staff.

L Annexures

1 Annex 1: CRV Technical Note (shall be provided at RFP stage)

2 Annex 2: Workplan without Budget for CRV (shall be provided at RFP stage)

3 Annex 3: List of 50 Phase 1 CRV Villages (shall be provided at RFP stage)

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