

## **Short Terms of Reference (ToR)**

### **Engineering Geological Survey and Related Other Works in Rural Parts of MSDP Project Area**

#### ***Scope of Work***

Considering the earthquake threat of the populated urban and rural areas of the project, UDD will have to be taken many initiatives for earthquake preparedness of the Project area. This component mainly addresses the following areas:

- a) Earthquake hazard, vulnerability, risk and loss assessment for Project area.
- b) Detailed building inventory of 10 (ten) unions including Akua, Baera (Kewatkhal), Bhabkhali, Char Ishwardia, Char Nilakshmia, Dapunia, Ghagra, Khagdahar, Sirta and Bhangnamari under MSDP project area.
- c) Preparation of risk sensitive land use plan for MSDP project area.
- d) Development of scenario-based spatial earthquake contingency plan for Project's rural areas.
- e) Preparation of ward-based spatial contingency plan for rural part of the Project area.

#### ***Short TOR for Tasks:***

Assessing the earthquake hazard, vulnerability and risk assessment for both urban and rural areas are the most crucial parts of the MSDP Project activities to achieve the outcomes of CDMP II. Such activities for urban areas shall be conducted by CDMP. According to the revised agreement, such activities for rural part of MSDP project area shall be conducted by UDD through outsourcing.

**Duration of Activities needs to be accomplished within 04 (four) months after commencement of the Contract.**

**The activities consist** of the following tasks as mentioned below:

***Task- I:*** Earthquake risk and damage assessments and subsequent development of scenario- based contingency planning for 10 (ten) unions surrounding Mymensingh paurashava namely Sirta, Char Ishardia, Char Nilakshmia, Dapunia, Khagahar, Bhabkhali, Aqua, Bayra, Bhangnamari and Ghagra unions.

***Task- II:*** Linking of the earthquake risk and damage assessments for 10 the (ten) unions with that of Mymensingh municipality, which is being prepared by CDMP and subsequent development of scenario-based contingency planning; and also development of guidelines and strategies for integration of risk information with the physical/land use planning

#### ***Objectives and activities of Task I***

***Activities of Task I are as follows:***

- (i) Review of Regional morphotectonic and neotectonic mapping and crustal movement modeling for the identification of potential earthquake sources***
- (ii) Review of active faults mapping and modeling Updated by CDMP***
- (iii) Engineering geological mapping for 10 (ten) unions surrounding Mymensingh paurashava under MSDP Project***
- (iv) Seismic hazard assessment***

- (v) *Vulnerability assessment*
- (vi) *Risk and Damage/loss assessment*

### ***Objectives and activities of Task II***

***Linking of the earthquake risk and damage assessments for 10 the (ten) unions with that of Mymensingh municipality, which is being prepared by CDMP and subsequent development of scenario- based contingency planning; and also development of guidelines and strategies for integration of risk information with the physical/land use planning***

Sub-activities of Linking of the earthquake risk and damage assessments and subsequent development of scenario- based contingency planning for 10 the (ten) unions with that of Mymensingh municipality, which is being prepared by CDMP; and also development of guidelines and strategies for integration of risk information with the physical/land use planning are given below:

- (i) Linking of the earthquake risk and damage assessments for 10 the (ten) unions under MSDP Project with that of Mymensingh municipality, which is being prepared by CDMP***
- (ii) Development of guidelines and strategies for integration of risk information with the physical/land use planning***
- (iii) Study and review of contingency plan template***
- (iv) Revisit roles & responsibilities of the major stakeholders and gap analysis***
- (v) Development of scenario-based spatial contingency plan***
- (vi) Development Training Manual and provide training on scenario-based contingency plan preparation***

The Survey firm should have the following technical personnel for the above-mentioned tasks:

- A. Geologist (4 mm.)**
- B. Civil Engineer (4 mm.)**
- C. Associate Geologist (4 mm.)**
- D. Planner (4 mm)**
- E. Geological Survey Technician (4 mm.)**
- F. GIS Assistant (3 mm)**