

# **Terms of Reference (ToR)**

for

"Comprehensive Risk and vulnerability mapping of Sudurpaschim Province and hazard mapping of major rivers/tributaries in Sudurpaschim leading to draft of multihazard early warning system requirements"

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#### 1. INTRODUCTION

**Practical Action** is a global change-making group that consists of a UK registered charity with community projects in Africa, Asia and Latin America, an independent publishing company and a technical consulting service. It combines these specialisms to multiply its impact and help shape a world that works better for everyone. In Nepal, Practical Action is focused on putting ingenious ideas into work to contribute to poverty reduction and sustainable wellbeing through working in three expertise change areas: Energy that transforms; Farming that works and Resilience that protects.

The International Centre for Integrated Mountain Development (ICIMOD) is a regional intergovernmental learning and knowledge sharing center serving the eight regional member countries of the Hindu Kush Himalayas – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan – and based in Kathmandu, Nepal. Globalization and climate change have an increasing influence on the stability of fragile mountain ecosystems and the livelihoods of mountain people. ICIMOD aims to assist mountain people to understand these changes, adapt to them, and make the most of new opportunities, while addressing upstream-downstream issues.

The Centre support regional transboundary programmes through partnership with regional partner institutions, facilitate the exchange of experience, and serve as a regional knowledge hub. We strengthen networking among regional and global centres of excellence. Overall, we are working to develop an economically and environmentally sound mountain ecosystem to improve the living standards of mountain populations and to sustain vital ecosystem services for the billions of people living downstream now, and for the future.

ICIMOD aims to deliver impacts through its six Regional Programmes, which are supported by the four thematic Areas of Livelihood, Ecosystem services, Water and Air and Geospatial Solutions and underpinned by Knowledge management and Communication.

**Practical Action and ICIMOD** recognized the mutual objective of collaboration between two parties to work in far western province to strengthen and localization of multi-hazard early warning system through the Project "**Strengthening and localisation of multi-hazard early warning system in Sudurpaschim province of Nepal**"

The overall objective of this project is to strengthen multi-hazard EWS in Sudurpaschim Province, improve EWS governance, effective and simplified risk communication and enhanced coordination and linkages between and among all concerned stakeholders in the DRRM landscape.

### 2. OBJECTIVES

The major objective of this study/assignment is to contribute to the project objective: by conducting Comprehensive Risk and vulnerability mapping of Sudurpaschim Province and hazard mapping of major rivers/tributaries in Sudurpaschim leading to draft of multi-hazard early warning system requirements.

### Specifically, this assignment tries to answer

- What are the prevalent and potential multi-hazards in the Sudurpashim province?
- What are the essential requirements of multi-hazard early warning systems in the province?
- What is the supporting and hindering policies for multi-hazard early warning systems in the province.
- What are the policy gaps and limitations for rolling out multi-hazard early warning systems?

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- How can these policies and practices be adapted to effectively to roll out multi-hazard early warning systems?
- What is the current state of institutional gaps and challenges for addressing multihazard early warning systems? and what are the specific capacity requirement at institutional and systems level?
- What further work Risk and vulnerability mapping, hazard mapping of major rivers/tributaries and policy considerations are required to address multi-hazard early warning systems? leading to standard operation procedures) to consider climate related shocks and stressors?

## The steps to proceed the assignment comprise:

- Comprehensive Risk and vulnerability mapping of Sudurpaschim Province
- Hazard mapping of major rivers/tributaries in Sudurpaschim
- Asses the existing multi-hazard early warning system policies and practice in the province.
- Identify the gaps in policies and practices
- draft the multi-hazard early warning system requirements for the province.
- Assess the capacity needs of the stakeholders for execution of multi-hazard early warning system.

# For the assessment of the assignment requirements following can be useful.

- Outline the detailed process for Comprehensive Risk and vulnerability mapping of Sudurpaschim Province and select districts local government units and areas/locations for risk vulnerability mapping. (To create synergy with ZFRA Consider at least one palika from ZFRA working area where Flood Resilience Measurement for communities FRMC approach is applied via FRMC study.)
- Outline the detailed process for Hazard mapping of major rivers/tributaries in Sudurpaschim. To align with risk vulnerability mapping (To create synergy with ZFRA Consider at least one major rivers/tributaries that include a palika from ZFRA working area where Flood Resilience Measurement for communities FRMC approach is applied via FRMC study).

# 3. SCOPE OF STUDY

- Comprehensive Risk and vulnerability mapping of Sudurpaschim Province jointly with ICIMOD.
- Risk and Hazard mapping (including geological study of major watershed) 5 rivers/ tributaries jointly with ICIMOD.
- Reports including Policy brief on localization of Early Warning System.

# 4. REQUIRED QUALIFICATION AND EXPERIENCE

Practical Action is sought for two individuals who has capacity to work together with ICIMOD for Risk and vulnerability mapping from technical and social prospective. These two individual work together, plan together and report together as a team.

Consultant one should have a Master's degree in Environment Science or equivalent with experiences in DRR and climate change risk and vulnerability mapping, flood modeling and establishment of EWS. Knowledge of river basins of Sudurpachim will add value.

The second consultant should have appropriate qualifications with experiences in the vulnerability and capacity assessments at the community level. Strong facilitation skill is an essential aspect.

Both consultants should have capacity to write report, develop knowledge products, draft the policy briefs and publications.

# 5. DELIVERABLES

The expected deliverables of the assignment are:

- Inception Report entailing the framework or methodology for the assignment.
- Risk and Hazard maps (including geological study of major watershed), Comprehensive Risk and vulnerability maps of Sudurpaschim Province. Outline of muti-hazard early warning system requirements.
- Publication of Research reports including Policy brief on localization of Early Warning System – Partial engagement
- Key policy guidelines and SoPs recommendation.
- Updates and reports as agreed.

#### 6. ROLES AND RESPONSIBILITY

### **CONSULTANT**

The main roles of the consultant shall be:

- Lead the overall process of data collection, stakeholder analysis, policy process and report writing.
- Organize all the workshops, discussion and key informant interviews as and where needed
- Identify, contact stakeholders and collate information
- Collect data, process, Analyze and Finalize the deliverables.

# PRACTICAL ACTION

The main responsibility of Practical Action Nepal Office is to:

- Orient consultant on the concept and objectives of the assignment.
- Provide timely feedbacks and inputs.
- Release budget as per the agreement.

# 7. DURATION

The duration of this assignment will be approximately 5 months with 30 working days. The consultant is expected to start work from November 2022 and complete the assignment by March 2022. The days working in a month will be agreed upon the plan prepared together with consultant/s and Practical Action. General work volume and deliverables are shown in Section 5 of ToR. Consultant should have commitment for completion of deliverables within time period with set workdays.

### 8. BUDGET

Consultant has to submit daily remuneration rate based on the deliverables and scope of work mentioned above. The rate should be inclusive of all travel expenses, daily allowances, and field accommodation. All applicable taxes will be deducted at source.

### 9.EVALUATION OF PROPOSAL

All received CVs shall be reviewed following criteria based on sound understanding of the assignment, experiences and qualifications. All rights of approval of proposal remain with Practical Action and its decision will be considered final.

## 10. INVITATION FOR LETTER OF INTEREST

Practical Action Nepal Office requests interested professionals to submit their CVs reflecting the detail of engagement at similar assignment along with a letter of interest quoting the expected remuneration (per day rate) to <a href="mailto:proposals@practicalaction.org.np">proposals@practicalaction.org.np</a> no later than 12<sup>th</sup> October 2022.

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Practical Action believes in and follows fair and competitive process to recruit the consultant in all of its assignment to ensure quality assurance.

