

## REQUEST FOR PROPOSALS

### **Consultancy services for conducting an advanced 4-day regional training workshop on air quality data analysis in Nepal**

#### **1. Introduction**

The International Centre for Integrated Mountain Development (ICIMOD) is seeking a consultant to design and deliver a comprehensive training programme on air pollution data analysis. The consultant will be responsible for developing customised training modules and materials tailored to the practical needs of professionals working with air quality data.

#### **2. Background to ICIMOD**

The Hindu Kush Himalaya (HKH) region stretches 3,500km across Asia, spanning eight countries – Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan. Encompassing high-altitude mountain ranges, mid-hills, and plains, the zone is vital for the food, water, and energy security of up to two billion people and is a habitat for countless irreplaceable species. It is also acutely fragile, and vulnerable to the impacts of the triple planetary crisis of climate change, pollution, and biodiversity loss.

ICIMOD, based in Kathmandu, Nepal, is an international organisation established in 1983, that is working to make this critical region greener, more inclusive and climate resilient. For more information, read our Strategy 2030 and explore our website.

#### **3. Background to the consultancy**

Mountains are important global ecosystems facing especially rapid socioeconomic and environmental changes, particularly the impacts of climate change. Our aim is to influence policy and practices to meet the associated challenges emerging in the greater Himalayan region. To do this, we bring together top researchers and experts from the region and around the globe to generate and disseminate state-of-the-art knowledge in the physical and social sciences, including traditional knowledge, for evidence-based decision making; and we provide a neutral meeting point for transboundary research, knowledge sharing, and collaboration.

Within this framework, ICIMOD's Strategic Group 1, focused on reducing environmental and climate risks, and its Action Area B (AAB), Stimulating Action for Clean Air, are dedicated to tackling air pollution issues in the HKH region, which includes some of the most polluted cities globally. ICIMOD prioritises capacity building among its partners to enhance their knowledge and skills in air pollution data analysis, which is crucial for mitigating air pollution and improving public health outcomes.

To address knowledge gaps, enhance capacity in air pollution data analysis, and create a platform for knowledge sharing among the region's leading non-governmental organisations (NGOs), governmental environmental bodies, knowledge institutions, and ICIMOD staff, ICIMOD's AAB team will organise an advanced training workshop on air quality data analysis.

## 4. Objectives

The training is aimed at NGOs and selected government or relevant entities from ICIMOD's Regional Member Countries . The primary objective is to equip participants with a thorough understanding of advanced statistical and data analysis concepts related to air pollution.

The training should focus on:

- Introducing tools and methodologies for air quality data analysis.
- Building participant skills in data cleaning, organisation, and advanced analytics.
- Enabling effective visualisation of air quality trends using available datasets.

By the end of the training, participants will possess the knowledge and skills needed to perform detailed data analysis, enhancing their contributions to air quality management, research initiatives, and policy development within their organisations and regions.

## 5. Scope of the work

- a) Prepare for and provide data analysis training in coordination with ICIMOD staff
- b) Design a draft hourly/period plan together with ICIMOD staff
- c) Offer technical support and presentations to conduct the training programme
- d) Provide training and hands-on exercises with examples using air quality data on agreed-upon dates **on 4 days** in the **first quarter of 2025**
- e) Provide sharable presentation slides, scripts, sample data and formulas used
- f) Submit a report on the training to ICIMOD

**The role of ICIMOD will be to:**

- a) Arrange invitations and finalise the agenda based on plans submitted by the consultant
- b) Arrange for an e-banner
- c) Arrange the venue to conduct the training programme
- d) Facilitate the training as required during the programme

## 6. Work plan

In their proposal, the consultant must describe a framework with milestones and comprehensive deliverables.

Proposed timeline of activities:

- In January **2025**, the contract signing will take place
- Preparation for the training will be conducted **from January 2025 onwards**
- Technical support and presentations will be provided during the training sessions (in the first quarter of 2025)
- Following the training, presentation slides will be shared
- Finally, the invoice and report of the training will be submitted

As mentioned above, ICIMOD's AAB team will support the consultant in finalising the customised content on data from the HKH for best possible training outcomes.

## 7. Detailed tasks and deliverables

The advanced training programme on air quality data analysis will include the following components:

### a) Design and finalisation of the agenda

Develop and finalise a detailed agenda for the four-day training, scheduled for the first quarter of 2025.

### b) Development of comprehensive training modules and materials

Training modules will include the following topics:

- **Defining the data:** Introduction to the data, with examples illustrating the potential issues arising from misunderstanding or misinterpreting data or a lack of understanding of the data.
- **Processing of data:** 1) Techniques for identifying and managing noise, outliers, and clean data; 2) Preparing datasets for analysis. **Types of data to be handled:** Methods for managing various data types, such as time series data, numeric data, gridded data, spatial data, qualitative data, quantitative data.
- **Basic statistics for data analysis:** Understanding key statistical terms and measures, including mean, median, and mode; minimum and maximum values; variance and standard deviation; coefficient of variation; quartiles; skewness and kurtosis; correlation, correlation coefficient, and coefficient of determination.
- **Comparison of groups:** Conducting parametric and non-parametric tests; determining when to use the appropriate test (e.g., T-Test and Z-Test); and interpreting the significance of test results.
- **Data visualisation techniques:** 1) Creating and interpreting various types of graphs and visualisations, including time series, box plots, ratio plots, and pie charts; 2) Introduction to geo spatial analysis for effective data presentation.

### c) Sharing presentation slides

Presentation slides for the training sessions will be shared during or at the conclusion of the training.

### d) Submission of a comprehensive training report

A detailed report on the training programme will be submitted upon its completion (first quarter of 2025).

## 8. Timelines and deliverables (outputs)

See **Section 6**.

## 9. Proposal

Bidders must submit a **technical proposal** that includes, but is not strictly limited to, the following component:

### 1. Methodology:

- Provide a clear explanation of the bidder's understanding of the assignment objectives.
- Describe the proposed approach to the services and the detailed methodology to achieve the expected outputs.

### 2. Work plan:

- Outline the main activities of the proposal, including content and duration.
- Specify milestones, a detailed log frame, consultative measures, adoptive measures, baseline indicators, impact indicators, targets, and delivery dates of the achievement of the project output.

### 3. Relevant experience of the organisation and experts:

- Provide detailed information about the organisation and the experts who will be involved in delivering the project, including details of experience relevant to this RFP from the last five or more years.

### 4. Consortium agreement

- A consortium is allowed for this RFP. The bidder should be either a company (single entity) or a consortium of companies. In the case of a consortium, the bidder consortium shall submit a valid agreement among the members.

### 5. Financial proposal:

- The bidder should provide a financial quote with the breakdown of all the costs
- Include applicable taxes in the budget
- Bidding companies should ideally have an annual minimum turnover of 50,000 USD

## 10. Reporting

After the completion of the training, a report must be submitted to ICIMOD's AAB team for further processing.

## 11. Proposal submission

Completed proposals must be submitted via email to [consultancy.int@icimod.org](mailto:consultancy.int@icimod.org) by **5:00 pm (Nepal Standard Time) on 27 December 2024**. Proposals should be submitted as two separate files: one for the technical proposal and one for the financial proposal.

ICIMOD reserves the right to accept or reject any or all proposals received without providing a reason.

## 12. Evaluation

The service provider will be selected based on the highest-ranking technical proposal (**80% weightage**) and the lowest-cost financial proposal (**20% weightage**). The service provider scoring the highest will be selected.

### Requirements:

- At least five years of experience in conducting training/workshops on environmental science, atmospheric science, air pollution or other relevant fields.
- Specific experience as an instructor analysing air quality measurements using ground-based in-situ data, satellite data, and model data.
- Prior experience of training [a large number of participants \(approximately 20 external participants and approximately 8 internal participants\)](#) working on air quality data analysis and travelling for training sessions and workshops focused on data computation.
- Strong programming and computational skills, [preferably using open-source tools such as Excel, R/RStudio, Python, etc.](#), and experience conducting training sessions on geo-spatial visualisation or analysis.
  - Ability to work independently and within multidisciplinary and multicultural teams.

### Competencies and skills:

- **Cross-cultural adaptability:** Adapts effectively to various customs and practices.
- **Results-orientated:** Thrives in challenging situations, generating concrete results, and successfully transforming output into outcomes.
- **Teamwork and collaboration:** Actively solicits ideas and opinions to help form specific plans and make cohesive decisions.
- **Networking and stakeholder engagement:** Identifies relevant stakeholders and external parties, building strong relationships with them.
- **Effective communication:** Listens actively and tailors convincing messages for different audiences, integrating ideas from multiple sources.
- **Continuous improvement and innovation:** Spots opportunities for improvement, encourages new ideas, and implements new technologies to enhance workflow.
- **Analytical thinking:** Simplifies complex issues to identify the essence of a problem or opportunity, enabling effective and timely decision-making.
- **Adaptability and change management:** Adapts to change and easily adjusts to new responsibilities and circumstances.

## 13. Ethical consideration

The service provider will be required to take all the necessary actions to handle the data responsibility (please see ICIMOD Responsibility Data Policy) to ensure data privacy, anonymity, and confidentiality.

## **14. Our commitment to the prevention of sexual harassment**

ICIMOD is committed to the prevention and redressal of sexual harassment at the workplace and promoting the welfare of children, young people and adults and expects all staff, consultants, and volunteers to share this commitment. We will do everything possible to ensure that only those who are suitable to work within our values are selected to work for us.

## **15. Confidentiality/non-disclosure**

All material used in connection with this ToR shall remain the property of ICIMOD and shall be used only for the purpose of this procurement exercise. All information provided shall be either returned to ICIMOD or securely destroyed by unsuccessful applicants at the conclusion of the procurement exercise.

During the performance of the assignment or at any time after the expiry or termination of the agreement, the consultant shall not disclose to any person any information or otherwise make use of any confidential information which he/she has obtained or may obtain during this agreement relating to the partner organisation/ICIMOD, the respondents or otherwise.

The consultant will be required to sign a non-disclosure/confidentiality agreement as part of their undertaking of this work.

## **16. Intellectual property, copyright, and ownership of all prepared information**

### **15.1 Copyright, patents and other proprietary rights:**

ICIMOD shall be entitled to all intellectual property and other proprietary rights including but not limited to patents, copyrights and trademarks, regarding documents and other materials which bear a direct relation to or are prepared or collected during the execution of this contract. Under no circumstances shall the contents of such documents or data be made known to any unauthorised person/organisation without the prior permission of ICIMOD.

### **15.2 Intellectual property right:**

The consultant shall take full responsibility to ensure that the work produced by them, or anyone whom the consultant may employ to carry out the work, does not violate the intellectual property rights of a third party and does not use work protected by copyright law without permission prior to submitting the final work to ICIMOD.

### **15.3 Use of logo:**

Apart from the exclusive purpose of the execution of the Contract, none of the Parties shall use the name, logo/emblem or trademarks, or any elements of corporate identity to

which the other Party holds the intellectual property rights or an abbreviation thereof, without the express prior written consent of the other Party in each case.

**15.4 Open-source tool:**

Tools should be open source or widely used software (such as Excel) for use after the training.

**15.5 Ownership of training materials**

All training materials, including presentations, sample data, customised formulas, and written software codes, will remain the property of ICIMOD and may be reused or distributed freely in the future without additional approval or consent from the consultant.