ICIMOD

TERMS OF REFERENCE (ToR)

Short-Term Consultant: Development of National Policy for Inclusive Construction and Road Dust Emissions Mitigation for Bangladesh

Air Pollution Mitigation Intervention Under Action Area Air

ToR

Title:	Development of National Policy for Inclusive Construction and Road Dust Emissions Mitigation for Bangladesh
Country:	Bangladesh
Strategic Group I:	Environmental and Climate Risks
Action Area:	Action Area Air

About 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 frontline to the impacts of the triple planetary crisis of climate change, pollution, and biodiversity loss.

The International Centre for Integrated Mountain Development (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.

Consultancy overview

Small and medium-scale construction and infrastructure development play a critical role in Bangladesh's rapid urbanization and economic expansion, with the sector reaching a market size of $80.7 billion in 2022. This growth provides approximately 3.5 million jobs, supporting the livelihoods of a large population of male and female workers. Major national projects, such as the Metro Rail, Padma Bridge Rail Link, and the Dhaka Airport Third Terminal, highlight the sector's importance to the national economy.

Despite these economic contributions, the construction and road sectors are significant contributors to air pollution in Bangladesh, particularly regarding particulate matter ($PM_{2.5}$) and particulate emissions. In Dhaka alone, an estimated 500 metric tons of dust settle daily, while an additional 2,000 tons remain suspended in the air during the winter months. Furthermore, unpaved or partially unpaved roads across the country intensify dust pollution. A recent study found that 95% of construction sites did not adequately cover loose materials, and over 83% lacked water sprinkling for dust suppression, especially at private building sites and road works.

Beyond environmental impacts, construction work is globally recognized as high-risk. In Bangladesh, workers are regularly exposed to biological, chemical, physical, and ergonomic hazards, leading to significant health and safety risks. In 2021, 154 construction workers lost their lives, further exacerbated by limited access to safety tools, weak safety practices, and informal labor arrangements.

Therefore, the overall goal of this consultancy is to support the Government of Bangladesh in preparing a comprehensive, evidence-based National Policy and action plan for the mitigation of construction and road dust emissions and the improvement of occupational health and safety (OHS) for workers. The assignment focuses on addressing regulatory gaps and technical constraints while promoting feasible, cost-effective dust-mitigation interventions and inclusive safety solutions for both male and female workers to improve overall working conditions and urban liveability.

Objectives

To address these gaps, ICIMOD with partnership with the Government of Bangladesh, is initiating the development of a comprehensive environmentally and socially responsible policy landscape for the construction and road dust & demolition dust. The initiative aims to review current policies, regulatory and institutional systems, assess dust sources and their spatial distribution, identify priority hotspots, and recommend a robust policy, regulation and institutional arrangements to reduce emissions from this sector along with context-appropriate occupational health and safety measures for both male and female workers. It will also propose cost-effective dust-mitigation interventions. This work contributes directly to Thematic Area 4.7—Construction and Road Dust—under the National Air Quality Management Plan (NAQMP), supporting national goals to reduce particulate pollution, enhance urban liability, and advance progress toward the Sustainable Development Goals. The main objectives are as follows:

- Establish a baseline understanding of existing environmental and social safeguarding policies and practices, with a particular focus on construction and road dust emissions and the occupational health and safety of sector workers.
- Develop/customise robust policies, regulatory mechanism, institutional arrangement, technical standards and guidelines for mitigating construction and road dust, along with comprehensive occupational and health safety measures.
- Suggest a system for dust emission mitigation, performance monitoring, and audit-linked compliance verification.

Scope of the work and Task

The consultant/firm will be responsible for the following tasks:

Task 1: Policy & Regulatory Review and Baseline Assessment

The first task involves reviewing existing government policies, strategies, and relevant literature related to construction and road dust management, as well as occupational health and safety. This review will be supported by secondary data analysis.

Task 2: Development of Enabling Policies and Frameworks

The second task is to suggest enabling policies, regulations and institutional arrangements for construction and road dust management, as well as occupational health and safety.

Task 3: Field Evidence Study

The third task focuses on generating field-based evidence. Insights from the desk review will guide the design of a research study aimed at translating existing and proposed policies (Task 1 & Task 2) into practical measures, particularly in the areas of construction and road dust management and occupational safety and health (OSH) practices.

Task 4: Development of Technical/air pollution mitigation and Social Standards and guidelines

The fourth task entails developing technical and social standards and guidelines grounded in existing government policies and strategies. These standards will address construction and road dust mitigation and occupational health and safety measures applicable across all phases of construction and roadwork. Along with this, the consultant will also prepare an outreach plan to engage and raise awareness among stakeholders including companies, health bodies and chambers of commerce regarding policy shifts.

Task 5: Institutional Coordination and Accountability Systems

The fifth task relates to suggesting necessary institutional arrangements that will enable implementation of rules and regulations, compliance of standards, audit systems and platforms for ensuring effectiveness and accountability.

Task 6: Design of Monitoring & Compliance Verification Systems

A functional system will be suggested to enable dust emission mitigation monitoring, performance measurement, and audit-linked compliance verification.

Deliverables and Timeline

The consultant will accomplish the following deliverables:

S. No.	Deliverables	Timeline
1.	Comprehensive policy & regulatory gap analysis report with recommendation of existing dust and construction management and OHS policies, including secondary data analysis.	March 2026
2.	Field study conceptual framework, methodology, and structured questionnaire	June 2026
3.	Field evidence report of field-based findings and evidence gathered from multi-stakeholder consultations.	August 2026
4.	Construction and road dust mitigation guidelines & Code of Conduct (CoC) and Standard Operating Procedures (SOPs) for worker's health and safety management including outreach plans to engage and raise awareness among stakeholders	October 2026
5.	M&E framework & compliance system for monitoring checklists, verification protocols, and the suggested audit-linked compliance system	November 2026

Expected Outcomes

Outcome 1: A comprehensive and robust policy, regulation and institutional arrangements to reduce emissions from this sector is developed to promote environmentally and socially responsible practices in the construction sector, with a strong focus on dust emission management and its impact on male and female workers.

Outcome 2: Demonstrated and enhanced capacity of relevant stakeholders and regulatory bodies demonstrate enhanced capacity and active participation in awareness-raising exercises. This ensures the effective implementation of construction and road dust emissions, technical standard measures; and occupational and health safety (OHS) guidelines.

Outcome 3: A robust Monitoring & Evaluation (M&E) framework is established to track dust mitigation performance, worker safety, and compliance across construction and road sectors.

Reporting and supervising

The consultant will work closely with Action Area Air's Bangladesh Focal Person, Action Area Air Lead, Intervention Manager-Air Pollution Mitigation of Action Area Air. All deliverables will be reviewed and approved by the project team prior to finalisation.

Qualifications and Experience

The consulting institute or firm should possess strong institutional capacity and a multidisciplinary background to effectively address the environmental, technical, and social aspects of dust and construction mitigation analysis. Key requirements include:

- Proven experience in air quality assessment, environmental policy research, and the development of national-level regulatory frameworks.
- Demonstrated capability in analyzing construction sector dynamics, including roadwork, demolition practices, and related emissions-reduction initiatives.
- Strong experience in conducting rapid environmental assessments, field-based survey studies, and socio-economic research with a focus on Gender Equality and Social Inclusion (GESI).
- Deep familiarity with the institutional and policy frameworks of Bangladesh, particularly regarding the Air Pollution Control Rules (APCR) 2022 and National Air Quality Management Plans.
- Experience in developing actionable technical standards, Code of Conduct (CoC) documents, and Standard Operating Procedures (SOPs) for industrial or construction applications.
- Excellent technical report-writing skills and the ability to facilitate high-level stakeholder consultations and training workshops.

The proposed team should comprise the following key experts with relevant qualifications and experience:

Policy Specialist/Team Leader

- Advanced degree (master's or PhD) in environmental science, public policy, or a related field.
- 15 years of professional experience in environmental management and policy analysis.
- Proven experience leading multi-disciplinary teams and coordinating with high-level government and development partners.

Statistic/Economics Specialist

- Advanced degree (master's or PhD) in environmental engineering or atmospheric Science.
- 10 years of experience in air pollution mitigation, specifically regarding particulate matter ($PM_{2.5}$) and construction dust management.
- Expertise in technical mitigation measures for particulate matter ($PM_{2.5}$) and knowledge of emission factors.
- Skills in cost-benefit analysis for dust-mitigation interventions are essential.

Technical Specialist

- Advanced degree in environmental engineering or industrial management.
- 7–10 years of experience in industrial or construction sector standards.
- Deep knowledge of technical standards, Social Code of Conduct (CoC) development, and Standard Operating Procedures (SOPs) for mitigation practices. Experience in audit-linked compliance systems is required.

Policy Analyst

- Advanced degree in environmental law, policy, or related field.
- 7 years of experience in policy analysis, regulatory review, or program evaluation.
- Proven experience with institutional mapping and cross-sectoral policy coordination within the Bangladesh air quality management landscape.

GESI Analyst

- Advanced degrees in social sciences, development studies, or gender studies.
- 7 years of professional experience in Gender Equality and Social Inclusion (GESI).
- Proven ability to analyse the impacts of air pollution on male and female workers and integrate social safeguards into technical guidelines.

Air Quality Analyst

- Advanced degree in Atmospheric Science, Environmental Science, or related field.
- 7 years of experience in air quality monitoring, instrumentation, and data management.
- Expertise in particulate matter ($PM_{2.5}$) monitoring networks, QA/QC protocols, and identifying pollution hotspots through field evidence.

IT Analyst / Software developer

- Advanced degree in Computer Science, Data Science, or Geoinformatics.
- 7 years of experience in handling environmental datasets and developing digital tools.
- Expertise in developing digital monitoring and evaluation (M&E) frameworks, checklists, and platforms for compliance verification. Strong skills in diverse data formats and visualization tools are required.

Technical Evaluation Criteria

The technical proposal will be evaluated using a 100-point scale. A minimum score of **60%** is required to qualify for the financial evaluation.

Criteria	Maximum Score	Details
Quality of Proposal, Understanding, and Approach	**30**	-Clarity and comprehensiveness of the proposal in addressing construction and road dust mitigation in Bangladesh. -Robustness of the methodology for field evidence

		gathering, policy review, and the co-development of communication strategies. -Alignment of the approach with National Air Quality Management Plans (NAQMP) and APCR 2022.
Organizational Experience	**25**	-Proven institutional experience in air quality policy, OHS development, and national regulatory frameworks. -Demonstrated capability in conducting rapid environmental assessments and GESI-focused field research. -History of successful engagement with the Government of Bangladesh and regional development partners.
Human Resources (Experts and Team Composition)	**25**	-Qualifications of the 7-member team: Team Lead (Policy), Statistics/Economics, Technocrat, Policy Analyst, GESI Analyst, Air Quality Analyst, and IT/Software Analyst. -Depth of professional experience (ranging from 7 to 15 years) in their respective specialized domains. -Proven expertise in institutional mapping, cross-sectoral coordination, and technical standard development.
Proposed Timeline and Deliverables	**10**	-Feasibility of the work plan to complete the 6 tasks within the March–December 2026 timeframe. -Logical sequencing of the 6 key deliverables, from baseline analysis to the final M&E and communication handover.
Management and Operational Plan	**10**	-Clarity of the internal management structure and coordination with ICIMOD and government stakeholders. -Quality control mechanisms for scientific rigor, data verification, and internal peer review of reports.

The service provider will be selected based on the highest cumulative scores obtained in the technical and financial proposals using the following formula:

Technical score = Score obtained based on technical proposal (total 100).
Financial score = Score obtained based on financial proposal (total 100)
Total weightage score = 60% of technical proposal + 40% of financial proposal

The service provider scoring the maximum weightage score based on the criteria will be awarded. However, the service provider should score at least 60 % in the technical proposal.

Duration and Timeline

The contract for this assignment is expected to commence immediately upon selection and will run through **March to December 2026**. This timeframe is designed to allow for the completion of the desk review, field-based data collection, development of technical standards, and the final delivery of the monitoring and evaluation framework.

Budget

The budget for this consultancy will be determined based on the scope of work and deliverables agreed upon.

Method of Application

The completed proposal should be submitted through email to Consultancy.int@icimod.org by 6 PM (Nepal Standard Time), on **28 February 2026**. Two separate files of technical and financial proposals should be submitted along with the valid legal documents as follows:

- Company registration certificate
- Tax registration certificate (i.e. VAT/PAN/TPIN registration)
- Tax clearance or annual tax return of last fiscal year
- Audit Report of the last 3 years

For further inquiries or to submit proposals, please contact:
consultancy.int@icimod.org+977-1-5275222 | ICIMOD | Kathmandu, Nepal

ICIMOD's Core Values

Our core values are integrity, neutrality, relevance, inclusiveness, openness, and ambition. These values are an expression of our culture and are central to the guiding beliefs and principles of our work and behaviour. Our core values will lie at the heart of ICIMOD operations and delivery. They will underpin everything we do and frame how we work with our partners. They reflect our founding intentions and the balances we seek to hold, while equipping ourselves for the future.