Terms of Reference (ToR)

Title: Consultancy for review and recommendation for Black Carbon mitigation policies, regulations and institutional frameworks in India, Nepal, Bangladesh, and Bhutan.

Background and context

The International Centre for Integrated Mountain Development (ICIMOD), based in Kathmandu, Nepal, is an international knowledge organisation, working to make the Hindu Kush Himalaya (HKH) region greener, more inclusive and climate resilient. ICIMOD works across eight countries in the HKH region, namely Afghanistan, Bangladesh, Bhutan, China, Myanmar, Nepal, and Pakistan, which form the Regional Member Countries (RMCs) of the organisation. ICIMOD supports its RMCs by providing science-based solutions, through capacity building initiatives, and in fostering regional cooperation to tackle shared challenges like climate change, environmental degradation, and poverty.

Rapidly worsening air quality, with both localised / national and transboundary implications, is one of most pressing challenges faced by the region. ICIMOD's clean air unit is collaborating and supporting several regional national governments in addressing this issue through two types of interventions for air quality monitoring and air pollution mitigation, respectively.

Building on this regional engagement, ICIMOD is now focusing on the mitigation of black carbon (BC), which - albeit a short-lived pollutant emitted fossil-fuel using residential stoves, diesel engines, industrial processes, and open burning of agricultural residue and municipal wastes - has critical implications for health, climate, and water security of the region.

BC deposition on snow and ice, for instance, accelerates glacier and snowpack melting, affecting water security in downstream areas, while its radiative effects influence monsoon dynamics and regional climate patterns.

Sector-targeted strategies for BC (soot) reduction can, therefore, improve air quality, reduce health risks, and contribute to the climate mitigation efforts in the region. As a regional technical partner, ICIMOD will support regional governments and stakeholders in identifying and assessing the BC emitting sources and key sectors, and in designing evidence-based, sector-specific mitigation strategies for emissions reduction to improve air quality and climate benefits

Despite its relevance for regional climate mitigation, BC remains underrepresented in national and regional air quality and climate policies. The current 'business-as-usual' pathways for BC reduction remain insufficient, there is low/ no policy attention for encouraging widespread adoption, and significant financial, technical, and institutional gaps further hindering implementation of the existing mitigation pathways, even if limited in impact. Addressing

these bottlenecks are critical for mobilising resources, scaling interventions, and ensuring effective implementation of BC mitigation initiatives.

At the same time, effective BC management also requires reliable data, robust technical methodologies, and integrated policy frameworks. While emerging research in the recent times has improved the understanding of the issue, critical gaps persist, particularly in linking scientific knowledge or evidence with policy making.

This study by ICIMOD aims to address the gaps, by assessing emitting sources or sectors, identifying key challenges to and opportunities for (sectoral) mitigation, and proposing the priorities necessary for building both a science-policy interface for BC mitigation as well as fostering an integration of BC mitigation, air quality management and climate action strategies across the region.

In this context, the source and sectoral assessment studies will provide the much-needed baseline for designing technically feasible, scalable interventions and comprehensive policies and strategies for BC mitigation. This baseline assessment document will also be the basis of a regional BC consortium for enabling coordinated action and knowledge sharing on BC emissions (and mitigation) across the HKH region.

Purpose and objectives

This Terms of Reference (TOR) is for an institutional consultancy service for designing and developing comprehensive and inclusive sectoral strategies for BC reduction in India, Nepal, Bangladesh, and Bhutan, through an evidence-based and participatory approach.

The objectives of the TOR are the following:

I. To assess and document existing national policies, regulations, and institutional frameworks - including their gender equality and social inclusion (GESI) dimensions - related to BC mitigation in the aforesaid countries; and to form actionable recommendations based on the assessment(s).
II. To identify critical gaps, challenges, and opportunities within current BC governance structures and policy instruments, apropos of GESI dimensions, national decarbonisation pathways and Nationally Determined Contributions (NDC) targets.
III. To review and synthesise global best practices and successful BC mitigation strategies that are relevant and transferable to the HKH regional context.
IV. To evaluate financing gaps, investment needs and identify potential resource mobilisation pathways and modalities (national, regional, and international) for (sectoral) BC mitigation, climate co-benefits, and regional air quality management initiatives in the aforesaid countries
V. To design a robust monitoring, reporting, and verification (MRV) framework for BC mitigation applicable to India, Nepal, Bangladesh, and Bhutan.
VI. To develop an integrated comprehensive policy roadmap to Air Quality Management and Climate Action with evidence-based strategies and institutional frameworks for

effective BC mitigation across the region; and to propose a feasible regional cooperation mechanism to strengthen coordinated action in this regard.

i. Scope of work

The contractor is responsible for performing the tasks mentioned in the table below:

Main Task 1: Mapping of existing policies, regulations, and institutional frameworks for BC mitigation
The consulting firm shall conduct a comprehensive assessment of existing black carbon monitoring and mitigation policies across Nepal, Bhutan, Bangladesh, and India; identify gaps, overlaps, and opportunities for BC mitigation policies and interventions; review global best practices of BC mitigation, apropos GESI and youth considerations; and inform actionable recommendations based on these recommendations. **Sub-task 1.1: Identify and compile BC-related policies and regulations** • Identify all relevant national policies, acts, regulations, emission standards, and sectoral guidelines related to BC. • Review sector-specific regulations for transport, industry, household energy, waste, agriculture, brick kilns. **Sub-task 1.2: Map institutional roles and responsibilities.** • Identify key government agencies and institutions involved in BC monitoring, regulation, and mitigation across sectors (energy, transport, industry, agriculture, waste management). • Document reporting lines, coordination mechanisms, and overlaps between agencies. • Highlight areas of unclear responsibility or weak coordination that could hinder BC mitigation efforts. **Sub-task 1.3: GESI and Youth representation** • Evaluate the extent to which existing BC policies, regulations, and institutional frameworks incorporate gender and social inclusion considerations. • Assess and report on how sectoral interventions, clean technologies, and financing mechanisms benefit women, youth, and marginalized groups.
Main Task 2: Identify gaps, challenges, and opportunities in national BC policies and institutional arrangements

The consulting firm shall analyse existing national and subnational BC-related policies, regulations, and institutional arrangements to identify gaps, overlaps, and opportunities for strengthening equitable BC mitigation solutions. This includes examining policy coverage across sectors, evaluating enforcement and compliance mechanisms, mapping institutional mandates and coordination, and identifying areas where alignment with national decarbonisation strategies and NDC targets can enhance effectiveness.

Sub-task 2.1: Analyse policy and regulatory gaps.

- Review sectoral regulations, emission standards, and enforcement mechanisms to identify missing or weak provisions for BC mitigation.
- Identify overlaps or conflicts between climate, energy, and air quality policies that may affect BC outcomes.
- Assess the effectiveness of existing monitoring, compliance, and enforcement practices.

Sub-task 2.2: Identify opportunities for strengthening BC mitigation.

- Analyse alignment of existing policies with respective national decarbonisation strategies, clean energy initiatives, and NDC targets.
- Highlight policy, institutional, or regulatory interventions that could improve BC mitigation.
- Recommend potential measures to enhance inter-sectoral coordination and regional harmonisation.

Main Task 3: Review global BC policies and best practices

The consulting firm shall review international and regional experiences in BC monitoring, equitable access to mitigation, and enforcement to identify best practices applicable to the South Asian context. This includes compiling global examples of regulatory frameworks, sector-specific interventions, monitoring strategies, and compliance mechanisms, and assessing their feasibility and relevance for Nepal, Bhutan, Bangladesh, and India.

Sub-task 3.1: Compile global examples of BC policy and mitigation

- Identify international and regional BC policies, standards, and emission control measures.
- Document sectoral interventions across transport, industry, household energy, agriculture, and waste management.
- Assess how BC mitigation policies and interventions address equity, including access to clean and affordable technologies for socially and economically vulnerable and low-income households.

Sub-task 3.2: Analyse applicability to the four South Asian countries under study

- Evaluate political, economic, technical, and institutional feasibility of adopting or adapting global approaches in the four countries.
- Highlight potential challenges and enabling conditions for implementation.

Sub-task 3.3: Develop a comparative benchmarking matrix

- Compare global best practices with current regional capacities, institutional arrangements, and monitoring systems.
- Identify key lessons, opportunities, and strategies that can strengthen BC monitoring, enforcement, and mitigation in each country.

Main Task 4: Assess financing gaps and investment opportunities

The consulting firm shall assess current financing for BC mitigation and monitoring in the four countries, identify gaps, and explore opportunities to mobilise domestic and international resources. This includes evaluating national budgets, climate finance, and private-sector engagement.

Sub-task 4.1: Review national budget allocations

- Examine government funding for air quality management, clean energy, and climate mitigation programs.
- Assess current allocations for BC monitoring, enforcement, mitigation technologies and related incentives or subsidy mechanisms.

Sub-task 4.2: Identify financial gaps

- Determine shortfalls in resources required to implement effective BC monitoring and mitigation across sectors.
- Highlight funding gaps for institutional strengthening, compliance, and data management.

Sub-task 4.3: Identify opportunities to mobilise finance

- Explore potential funding from international climate finance mechanisms, including the Green Climate Fund (GCF), Global Environment Facility (GEF), and Climate Investment Funds (CIF), as well as relevant multilateral and bilateral donor programs (e.g., UNDP, UNEP, World Bank, ADB).
- Identify private sector investment opportunities and public-private partnerships for BC mitigation.
- Prepare actionable financing pathways for:
  – **Short-term (1–2 years):** Identifying immediate gaps, designing of pilot projects and capacity-building activities for resource mobilisation.
  – **Medium-term (3–5 years):** Scaling up monitoring, enforcement, and sectoral mitigation measures.
  – **Long-term (5+ years):** Sustained financing strategies and integration with national decarbonisation strategies.

Main Task 5: MRV framework for BC mitigation in Nepal, Bhutan, Indian and Bangladesh

The consulting firm shall propose a framework for BC monitoring, reporting, and verification (MRV) that can be applied across Nepal, Bhutan, Bangladesh, and India.

Sub-task 5.1: Standardise BC MRV protocol

- Recommend standardised BC MRV protocol.
- Design and implement reporting structures, templates, and protocols including formats, frequencies, indicators, and tracking mechanisms aligned with national frameworks to monitor adoption, performance, and emission reduction impacts of interventions.
- Suggest options for linking the MRV framework to national environmental reporting platforms or dashboards.

Sub-task 5.2: Recommend enforcement and capacity-building measures

- Recommend compliance and enforcement measures, including inspection protocols, regulatory tools, and appropriate penalty mechanisms to ensure adherence to BC emission standards.
- Identify institutional strengthening and training needs for government agencies and monitoring teams.

Main Task 6: Provide evidence-based policy recommendations and suggest a feasible regional cooperation framework for BC mitigation

The consulting firm shall develop actionable policy recommendations for BC mitigation and institutional arrangements, in the four countries, integrating evidence from national assessments, institutional analysis, global best practices, and financing feasibility. Recommendations should support air quality improvement linkages, health benefits, climate co-benefits.

Sub-task 6.1: Propose an air quality and climate action integrated sector-wise BC mitigation strategy along with institutional framework for the four countries

- Prepare actionable measures for transport, industry, household energy, agriculture, waste and other prominent sectors.
  -**Short-term (1–2 years):** Quick, actionable measures such as pilot projects, awareness campaigns, targeted enforcement, and capacity-building.
  -**Medium-term (3–5 years):** Scale up interventions, strengthen institutions, enhance monitoring, and integrate sectoral policies.
  -**Long-term (5+ years):** Systemic actions including adoption of clean technologies, regional alignment, integration into national decarbonisation strategies, and sustained air quality and climate benefits.

Sub-task 6.2: Identify enabling policies

- Recommend policies and regulatory measures that facilitate air quality improvement, health benefits, climate co-benefits, cross-sectoral coordination, and regional alignments.
- Emphasise practical feasibility and scope of stakeholder engagement in all recommendations.

Sub-task 6.3: Integrate BC mitigation into broader strategies

- Provide guidance for embedding BC mitigation into national air quality management plans, clean energy and climate strategies including NDC implementation frameworks.

Sub-task 6.4: Recommend regional coordination mechanisms and institutional arrangements

- The consulting firm shall prepare a feasible regional roadmap outlining strategies, institutional arrangements, BC mitigation across Nepal, Bhutan, Bangladesh, and India
- Identify gaps where mandates or structures are absent and propose an appropriate institutional framework.
- Recommend regional coordination mechanisms to ensure effective implementation of BC mitigation strategies in the region.
- Define roles, responsibilities, reporting lines, and linkages between national and regional bodies

Project Deliverables and Timeline

Sl. No.	Main Task	Timeline
1	Main Task 1: Mapping of existing policies, regulations, and institutional frameworks for BC mitigation Main Task 2: Identify gaps, overlaps, and opportunities in national BC policies and institutional arrangements	30 January 2026
2	Main Task 3: Review global BC policies and best practices Main Task 4: Assess financing gaps and investment opportunities	28 February 2026
3	Main Task 5: MRV framework for BC mitigation in Nepal, Bhutan, Indian and Bangladesh Main Task 6: Provide evidence-based policy recommendations and suggest a feasible regional cooperation framework for BC mitigation	15 March 2026
4	Final report	25 March 2026

ii. Qualifications and experience

The consulting institution should demonstrate strong institutional capacity and relevant expertise to deliver the BC assessment, policy analysis, and roadmap development.

Institutional Requirements:

- Proven experience in implementing multi-country environmental or climate projects, particularly in South Asia.
- Demonstrated track record of producing high-quality technical reports, policy briefs, stakeholder materials, and capacity-building outputs.
- Experience working with governments, regional institutions, and international development partners in environmental, air pollution, or climate sectors.
- Capacity to synthesize technical, policy, financial, and social inclusion knowledge into actionable recommendations.

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

1. Team Lead

- Advanced degree (Master's or PhD) in environmental science, climate, air quality, public policy, or related field.
- At least 15 years of professional experience in environmental management, air pollution, climate change, or environmental/climate policy analysis.

- Proven experience leading multi-disciplinary teams, managing complex consultancy projects, and coordinating with government and development partners.
- Strong analytical, report writing, and communication skills in English.

2. BC Emission Analyst

- Advanced degree (Master's or PhD) in environmental science, atmospheric chemistry, or related field.
- At least 7 years of experience in BC emission measurements, source apportionment, and modelling, particularly in South Asia/HKH region.
- Knowledge of short-lived climate pollutants (SLCPs), emission factors, and air quality monitoring techniques.
- Experience in compiling technical reports and integrating scientific findings into policy-relevant outputs.

3. Policy Analyst

- Advanced degree (Master's or PhD) in environmental policy, climate change, or related field.
- At least 7 years of experience in policy analysis, regulatory review, or program evaluation in environmental/air quality sectors.
- Familiarity with cross-sectoral policy coordination, institutional mapping, and NDC implementation frameworks.

4. BC Monitoring Analyst

- Advanced degree (Master's or PhD) in environmental monitoring, air quality science, or related field.
- 7 years of experience with BC monitoring networks, instrumentation, Quality Assurance (QA)/ Quality Check (QC) protocols, and data management.
- Knowledge of reporting mechanisms and integration of monitoring data into decision-making frameworks.

5. Economic Analyst

- Advanced degree (Master's or PhD) in economics, environmental economics, or finance.
- At least 7 years of experience analysing financing instruments, funding mechanisms, and investment opportunities for environmental/climate initiatives.
- Ability to provide integrated recommendations linking policy frameworks with financial feasibility.

6. Policy Specialist

- Advanced degree (Master's or PhD) in public policy, environmental law, or related field.

- At least 10 years of experience in policy analysis, regulatory review, or program evaluation in environmental/air quality sectors.
- In-depth knowledge of national and regional policies on air pollution, climate change mitigation, and SLCPs.
- Experience in reviewing policy documents, assessing mandates, and evaluating institutional frameworks.
- Proven ability to link policy analysis with actionable recommendations.

7. Climate Specialist

- Advanced degree (Master's or PhD) in climate science, atmospheric sciences, or environmental science.
- At least 10 years of professional experience linking SLCPs/Black Carbon to climate impacts.
- Expertise in integrating climate considerations into policy analysis, technical assessments, and financing recommendations.
- Experience working with governments, regional institutions, and international development partners in climate and air quality initiatives.

8. GESI Specialist

- Advanced degree (Master's or PhD) in gender studies, social sciences, or related field.
- At least 10 years of experience integrating gender equality and social inclusion into environmental, air quality, or climate projects.
- Proven ability to develop GESI indicators, implement inclusive stakeholder engagement, and incorporate social inclusion into technical and policy reporting.
- Experience in designing strategies to ensure equitable participation and benefits for women, youth, and marginalized groups in multi-country projects.

iii. Evaluation criteria

The technical proposal will be evaluated based on the following table:

Criteria	Maximum Score	Details
Quality of Proposal, Understanding, and Approach	30	Clarity, structure, and comprehensiveness of the proposal; demonstration of understanding of the tasks; clear explanation of methodology to review existing strategies, equip the team with necessary skills, and ensure feasibility and clarity of implementation.
Organizational Experience	25	Relevant past experience in similar policy, BC mitigation, environmental, or communications and training projects;

		demonstrated capacity to handle multi-country/regional assignments.
Human Resources (Experts and Team Composition)	25	Qualifications, experience, and expertise of proposed team members; experience conducting local/provincial-level training, stakeholder engagement, and working with national and regional institutions.
Proposed Timeline and Deliverables	10	Realistic and well-structured timeline; clear connection of timeline with approach; clarity of milestones, deliverables, and sequencing of tasks; feasibility of engagement and implementation plans.
Proposed Management and Operational Plan	10	Clarity of overall management, coordination, and operational arrangements for executing the assignment; adequacy of mechanisms to ensure quality, communication, and timely delivery.

The service provider will be selected on the basis of 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.

iv. Duration and timeline

The contract period for this assignment will be from January-March 2026.

v. Reporting requirements

The consulting firm will report to the Intervention Manager - Air Pollution Mitigation and Action Area Air Lead, while providing regular updates on progress and challenges to the Action Area on Air Lead. All deliverables must be submitted as draft for review and approval by Intervention Manager - Air Pollution Mitigation and Action Area Air Lead.

vi. Budget

The budget should be prepared in the prescribed template for this consultancy with conforming the scope of work and deliverables for this consultancy.

vii. Method of application

The completed proposal should be submitted through email to Consultancy.int@icimod.org by 6 PM (Nepal Standard Time), on 30 January 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:
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