**TERMS OF REFERENCE - STATEMENT OF WORK**

**RG-T2761**

**Empirical Analysis of Air Pollution and Climate Change Mitigation Actions in LAC**

1. Background and Justification
   1. This technical cooperation (TC) focuses on climate vulnerability, climate and environmental risk, and actions to manage, adapt, and mitigate the impacts of climate change and air pollution.

* 1. Air pollution is a serious concern in Latin America and the Caribbean. In LAC, more than 50% of the population of developing countries is exposed to air pollution above the levels recommended by the World Health Organization.[[1]](#footnote-1) High air pollution has been causally linked to infant mortality, lost income for poor households, and lower educational outcomes (Arceo, Hanna, and Oliva, 2016; Hanna and Oliva, 2014; Miller and Ruiz-Tagle, 2015; Miller and Vela, 2013).
  2. This consultancy, as part of this technical cooperation, seeks to improve the evidence available to decision makers when designing and improving air pollution and climate change policies and programs. This technical cooperation seeks to assist policy makers by providing information and evidence in two critical areas: (i) the effect of distributing salient and readily-assessable air pollution information, and (ii) the valuation of health co-benefits of climate change mitigation actions.
  3. In particular, this consultancy is part of a project that will attempt to determine households’ willingness to pay for real-time outdoor air pollution information delivered through a SMS messaging system and the effect of this information on household air pollution avoidance behavior.

1. Objectives
   1. This consultancy is part of a pilot experiment. As such, the main objective of this consultancy is to produce quantitative and qualitative evidence and results that will inform the implementation of the full scale experiment and the design of the associated household survey.
2. Scope of Services
   1. The requirements to make this project successful include experience in recruiting and training surveyors, conducting data collection through face-to-face household interviews with a survey instrument, and ensuring data quality through a data validation and data quality checking process. In addition, frequent and detailed communication with the researchers is necessary for successful completion of the project.
   2. The total duration of the contract is not to exceed 4 months.
3. Key Activities
   1. Key activities are:

* Surveyor and surveyor supervisor recruitment and training in Mexico City
* Development of a work plan, including a logistics plan
* Development of the electronic survey instrument using the survey provided by the researchers
* Changes to the survey instrument as directed by researchers
* 2 focus group with at least 10 participants in Mexico City to collect qualitative data regarding the specific information and framing of SMS messages on air quality
* 2 rounds of 30 face-to-face household surveys in the Federal District and/or the State of Mexico in neighborhoods designated by the researchers
* Data validation and data quality checks
* Creation of a complete and clean dataset from household surveys in STATA (.dta) format
* Development of a report summarizing the data from household surveys and describing the perceptions, attitudes, opinions and beliefs expressed by participants in the focus group

The scale of the activities may be increased during the period of the contract, as determined and directed by the researchers in writing, and payment will be in accordance with the scale of activities completed as stated in the contract.

1. Expected Outcome and Deliverables
   1. The deliverables include:

* A work plan that includes a detailed logistics plan and the electronic survey instrument.
* A detailed qualitative report describing the perceptions, attitudes, opinions and beliefs expressed by participants in the focus group. This report should be submitted in pdf format.
* A complete, clean STATA (.dta) format dataset containing all data collected during household surveys.
* A final report summarizing the data from the household surveys. This report should be submitted in pdf format.

1. Project Schedule and Milestones
   1. The qualitative focus group report must be submitted within one week after the focus group.
   2. The dataset and final report summarizing the data from household surveys must be submitted within 4 weeks of the completion of the household surveys.
2. Reporting Requirements
   1. The reporting requirements of this consultancy are the deliverables outlined in Section 5.
3. Acceptance Criteria
   1. The deliverables from this consultancy will be accepted by Bridget Hoffmann (RES/RES). The encrypted dataset will be transferred to Bridget Hoffmann.
4. Other Requirements
   1. In addition, this consultancy requires firms to work closely with the researchers to develop and implement a plan for data security and to maintain various data security measures, including but not limited to encrypting data before storage and transfers, maintaining updated virus scans and software systems, promptly removing data from field data collection equipment, and restricting access to data.
   2. No product or activity of this consultancy can be sold or generate any income. No product or activity of this consultancy can be given to any third party except as directed by Bridget Hoffmann.
5. Payment Schedule
   1. Final payment will be determined in accordance with the scale of the work performed. 20% of the total payment based on the scale of the activities defined in Section 4 will be paid after signing. An additional 40% of the total payment based on the scale of the activities defined in Section 4 will be paid after delivery of the work plan and the electronic survey instrument. The remaining 40% of the total payment based on the scale of the activities defined in Section 4 net any adjustments in the total payment due to a change in the scale of the activities will be paid after acceptance by the Bank of all deliverables.
6. Supervision
   1. This consultancy will be supervised by Bridget Hoffmann (RES/RES). Bridget Hoffmann will give any instructions for change, supervise and monitor the progress of work, and receive and approve of deliverables.

1. http://data.worldbank.org/indicator/EN.ATM.PM25.MC.ZS/countries/MX-XJ-CL?display=graph [↑](#footnote-ref-1)