REPUBLIC OF RWANDA

07 JUIN 2018

Kigali, ...
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RWANDA ENVIRONMENT
MANAGEMENT AUTHORITY (REMA)
P.O. BOX 7436 KIGALI

REQUEST FOR EXPRESSION OF INTEREST
(CONSULTING SERVICES – FIRMS SELECTION)

Name of the Country: RWANDA
Name of the Project: : Improving the Efficiency and Sustainability of Charcoal and Wood Fuel Value Chains Project

Assignment title: Assessment of alternative to fire wood for HH, Schools and prisons

Reference No: RW-REMA-64920-CS-QCBS

Improving the efficiency and sustainability of charcoal and wood fuel value chains Project is funded by the Nordic Development Fund (NDF) through the World Bank. The project development objective is to improve the efficiency and sustainability of wood fuel value chains in Northwest Rwanda. The project will result in a major advance in wood fuel management across the Gishwati-Mukura landscape by improving woodlot management practices, increasing the efficiency of charcoal production and improving seed quality for increased resilience

The present EOI is addressed to all qualified companies with sufficient experience to
- Establishing a baseline on charcoal and firewood use in cooking at HH level school and prisons, and refugee camps
- Identifying biomass energy alternatives for cooking at HH level, School, refugee camps and prisons,
- Piloting demonstration projects,
- Conducting Impact evaluation of National Domestic Biogas Programme (NDBP)
- Streamlining clean cooking initiatives to ensure the promotion of the most efficient cook stoves and fuels,

Rwanda Environment Management Authority (REMA) through NDF Project invites eligible consulting firms ("Consultants") to indicate their interest in providing the services. Interested consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the services. The shortlisting criteria are:

The consultancy firm for this assignment should have a proven 10 years of experience in social energies dissemination and promotion, socio-economic impact analysis of renewable energy programs, forests management programs design and implementation or marketing of biomass energy alternatives. In addition, the consultancy firm should have excellent knowledge in social energies survey, Natural Resources planning, policy development and strategy documents formulation, and demonstrated experience on performing similar assignments. ***(submit three performance certificate of similar assignment)***

- Availability of staff with relevant skills including following key experts:

S/N	Position	Qualification	Experience
1	Team leader	Master's degree in Energy Engineering, Renewable Energy, Energy Economics, Physics, Economics, Forestry, Agroforestry or any other related fields.	10 years in Energy Projects Implementation, Forestry or Household energy promotion and marketing
2	Socio-Economist	B.Sc. in Economics, Statistics or Management	5 years of experience in Monitoring and evaluation, Project design and implementation, demographic analysis or public funds management.
3	Alternative Energy Engineer	BSc in Renewable Energy, Alternative Energies, Energy Engineering, Applied Physics or Mechanical Engineering	5 years of experience in biomass and wood fuel energy or improved cook stoves dissemination

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers of January 2011 ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest.

Consultants may associate with other firms in the form of a joint venture or a sub-consultancy to enhance their qualifications. A Consultant will be selected in accordance with the Quality and Cost Based Selection (QCBS) method set out in the Consultant Guidelines.

Further information can be obtained from the Procurement Specialist on email address tgashumba@rema.gov.rw or on address below during office hours from Monday to Friday, between 07:00 to 17:00 hours.

Rwanda Environment Management Authority (REMA)
P.O. Box 7436, KIGALI
Tel: +250252 580101

Expression of interest (EOI) must be delivered at the reception of REMA in a written form to the address below by 29/06/2018 at 10h00 am and shall clearly indicate: "EOI for Assessment of alternative to fire wood for HH, Schools and prisons.

Sincerely,

Eng. Coletha U. RUHAMYA
Director General

Terms of Reference

Assessment of alternative use of firewood and charcoal at household level, school and prisons

Background

Biomass provides 83.3% of the Rwanda's energy demand and the major part goes in the cooking sector. Firewood is the dominant source of cooking energy where 83.3% of households rely on firewood and 15.6% rely on charcoal for their cooking energy needs. With the current trend, the country will suffer from environmental degradation because of a pressure put on forests for cooking energy needs.

In efforts to reduce the reliance on raw biomass as the main source of cooking energy, Improved Cook Stoves (ICS) have been promoted as one of the measures to improve the efficiency of fuel wood and charcoal use but an assessment of all cooking technologies is needed to identify the best cook stove worthy to be recommended.

Moreover, the dissemination of biogas plants in households and institutions was promoted. However, this programme has met various challenges, hence the need to evaluate its impact in reduction of biomass use at household and institutional levels. This study is also intended to review the functionality of Biogas programme and recommend the mechanism to revitalize the programme.

The use of LPG as a source of cooking energy has started to attract the attention of cooking energy consumers but its penetration has not yet reached a satisfactory level to see its impact on the reduction of biomass use. It is in this context that the baseline survey is needed to propose other energy alternative for cooking to be used at household level, school and prisons

2. Objectives of the consultancy

- Establishing a baseline on charcoal and firewood use in cooking at HH level school and prisons, and refugee camps
- Identifying biomass energy alternatives for cooking at HH level, School, refugee camps and prisons,
- Piloting demonstration projects,
- Conducting Impact evaluation of National Domestic Biogas Programme (NDBP)
- Streamlining clean cooking initiatives to ensure the promotion of the most efficient cook stoves and fuels,

3. Scope of Work

In this assignment, the consultant will be required to:

- Assess the quantity of wood fuel and charcoal currently used at HH level, in Schools and prisons
- Assess the types of alternative sources of cooking energy currently used at HH level, in schools, refugee camp and prisons within LAFREC landscape (identify gaps, constraint, penetration rate and HH perceptions)
- Identify gaps, constraints and user perceptions on the adoption of alternative cooking energy technologies,
- Based on the efficiency and affordability, propose the most appropriate alternative cooking energy technologies to be used at HH level, schools and prisons in rural areas and secondary Cities and

determine requirements for implementation within LAFREC landscape (according its efficiency, affordability),

- Develop a pilot project of the selected alternative technologies and test it for a period of six months,
- Demonstrate the sustainability of the proposed alternative energy for household cooking needs, school and prisons through a cost benefit analysis and make a comparative analysis with the wood fuel,
- Assess the impact on air pollution between the current used technologies and the proposed technology,
- Analyze the cooking quality implication and time management,
- Propose a business plan and marketing strategy to be implemented for the selected alternative energy,
- Identify types of biogas plants constructed countrywide at Household and institutional levels,
- Assess the use of domestic and institutional biogas plants, identify challenges and propose solutions for non- operational biogas plants,
- Propose the structure of a national biogas program that would improve the effectiveness of the dissemination of domestic and institutional biogas plants.

4. Methodology/Approach

- Desk review of available secondary information from reliable sources to frame the context of the problem and any previous relevant analysis already undertaken
- Field testing and sample analysis
- Structured interactions with key stakeholders including interviews, focus groups to collect information
- Participatory appraisal techniques to obtain quantitative and qualitative information.
- Review of similar analysis from other countries

5. Deliverables

- A well referenced and comprehensive report on alternative energy for HH level school and prisons in rural area and secondary Cities within LAFREC landscape
- Pilot project using the selected alternative source of energy
- Program design for the national biogas program

6. Recruitment, qualifications and experience

6.1 Composition

The consultancy firm should be a team of local experts including a Team Leader, a Socio-Economist and an Alternative Energy Engineer

6.2 Competencies for the Firm

The consultancy firm for this assignment should have a proven 10 years of experience in social energies dissemination and promotion, socio-economic impact analysis of renewable energy programs, forests management programs design and implementation or marketing of biomass energy alternatives. In addition, the consultancy firm should have excellent knowledge in social energies survey, Natural Resources planning, policy development and strategy documents formulation, and demonstrated experience on performing similar assignments.

6.3. Competencies for Team Members

To deliver the intended results, the consulting firm should be composed of the following main team members in addition to supporting team members.

S/N	Position	Qualification	Experience
1	Team leader	Master's degree in Energy Engineering, Renewable Energy, Energy Economics, Physics, Economics, Forestry, Agroforestry or any other related fields.	10 years in Energy Projects Implementation, Forestry or Household energy promotion and marketing
2	Socio-Economist	B.Sc. in Economics, Statistics or Management	5 years of experience in Monitoring and evaluation, Project design and implementation, demographic analysis or public funds management.
3	Alternative Energy Engineer	BSc in Renewable Energy, Alternative Energies, Energy Engineering, Applied Physics or Mechanical Engineering	5 years of experience in biomass and wood fuel energy or improved cook stoves dissemination

7. Time Frame

This assignment will be completed within a period of 140 days spread over a period of 18 months.

8. Mode of application

The consultancy firm is required to submit separate technical and financial proposals, which must include the following items:

- Technical Proposal should include:
    - Methods proposed, clearly demonstrating adaptation to baseline survey
    - Work plan and timeframe proposed
    - Team structure, roles and responsibilities and time allocation if applicable
    - Detailed CV(s) of the team members (with copy of academic qualifications and certificate of performance of similar assignments)
    - List of the last 2 most relevant previous consulting projects completed, including a description of the projects, completion certificates and contact details for references
- Financial Proposal should include:
    - Total budget proposed
    - Detailed budget with costs related to the following items:

- The Consultant's time, and the time of any other team members. The day rate for the Technical Assistant and all team members should be clearly specified.
- Transport costs, accommodation costs and per-diems for the consultants and any other team members.
- Communication costs, office costs, supplies and other materials.
- Tax should be clearly included