



INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: 3rd August 2018

Country: BOTSWANA

Description of the assignment: Local Individual Consultant (IC) to Collect & Analyze Data for Production of 1000 Small Scale Biogas Digesters in South Eastern Botswana

Project name: BIOGAS PROJECT

Period of assignment/services (if applicable):

Proposal should be submitted at the following address United Nations Development Programme, United Nations Building, Government Enclave Cnr. Khama Crescent and President's Drive, P. O. Box 54, Gaborone, Botswana

or by email to procurement.bw@undp.org no later than **20TH AUGUST 2018**.

Any request for clarification must be sent in writing, or by standard electronic communication to the address or e-mail indicated above. UNDP Procurement will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants.

1. BACKGROUND

The Government of Botswana in collaboration with the United Nations Development Programme (UNDP) are implementing a project called "Promoting production and utilization of Biogas from Agro-waste in South-Eastern Botswana (Biogas Project)". This follows the realization that waste has not been acknowledged as a recyclable economic commodity in Botswana. The reuse of waste to generate energy is an opportunity that Botswana must tap into for future use. Several waste streams are available at several agro-industrial facilities which can be utilized for generation of energy. Some of the agro-waste for consideration in bio-gas production include chicken manure, cow dung and goat/sheep droppings. Despite this immense potential presented by the abundance of livestock manure, agricultural/animal waste and other forms of biomass in the country, generation of energy from this waste remains a challenge.

The Biogas project seeks to facilitate low-carbon investments and public-private partnerships in the production and utilization of biogas from agro-waste in the districts of South-eastern Botswana. It has been realized that there are no suitable demonstration projects for technology penetration as the current use of biogas in Botswana is limited to small-scale applications and there is no institutional biogas plant operating at either an abattoir or a landfill. Also, there is insufficient knowledge among various stakeholders (Government, private companies, farmers, communities, women, consumers) about the benefits of biogas and the available technologies. The project therefore, will assist Government of Botswana in addressing these challenges through three project components:

- Institutional strengthening and capacity development
- Facilitation and establishment of biogas plants
- Setting up of utilization and knowledge platforms.

Botswana having ratified the United Nations Framework on Climate Change Convention (UNFCCC) has the obligation to promote production of green energy and reduce on the Green House Gases (GHGs) emissions. Though Botswana is a minor emitter of greenhouse gases (GHGs), the country as other countries is negatively impacted by climate change, efforts should be made to reduce on the emissions. The outcomes of the project will include the implementation of effective waste-management policies and guidelines with operational regulations; capacity to design and develop biogas projects in South-Eastern Botswana; first best practice public-private partnership established; reduction in greenhouse gas emissions (direct and indirect) of 1.65 million tCO₂e; and increased incomes through the use of small-scale biogas and bio-fertilizer, especially for women.

The Project is implemented by Botswana Institute of Technology, Research and Innovation (BITRI) with United Nations Development Programme overseeing the quality assurance of the project.

The Small-sized biogas digesters range from 4-300 m³ and are operated by households, small-scale agro-business, and small-scale livestock producers with dairy and or beef, schools and other institutions;

Medium-sized biogas digesters range from 300-5,000 m³ and are operated by agro-industry in partnership with Councils and additional interested stakeholders;

The Biogas Project is seeking a local consultant to assist in collecting data and analyzing it to identify potential beneficiaries of small scale digesters for biogas production in South Eastern Botswana.

Once selected, the bidder will populate the developed matrix with information on the potential beneficiaries of the 1000 biogas digesters. This will be used to roll out the project target and diffuse the technology to ordinary Botswana.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK

2. OBJECTIVES, SCOPE OF WORK, AND RESPONSIBILITIES

2.1 Objective

The main objective of the study is to collect and analyse data to identify 1000 potential beneficiaries of small-scale biogas digesters in South-Eastern Botswana who would be willing to finance their small-scale digesters and utilize biogas.

2.2 Scope of Work

Working with a Project Management Unit (PMU) and UNDP, the Consultant will collect, analyze data and complete the attached template (Annex 4) with information for the 1000 potential beneficiaries who are willing to finance and construct small scale biogas digesters in their households, farms, agri-businesses etc. within South-Eastern Botswana.

2.3 PROJECT DELIVERABLES

The following are the project deliverables:

- Inception Report after one (1) week of the initial meeting with a detailed Work Plan explaining how planned activities are to be undertaken. Work plan to indicate dates for activities and submission of deliverables
- A draft report inclusive of the following:
 - Results of the survey undertaken (proof of face to face meetings with potential beneficiaries)
 - Matrix indicting the beneficiaries that will construct small scale biogas digesters.
- A Final Report. Submitted one (1) week after receiving comments on the draft report.

All graphics to be included in the reports should be of a professional high standard and quality. They shall be presented in either A4 or A3 format in the report. Maps shall also be digitized in a format compatible with ArcGIS and with Metadata. All reports should be accompanied by an electronic copy. The Reference Group will provide comments and approval on whether to proceed to the next stage on all reports within one (1) week of submission.

All reports are to be submitted in hard and soft copy to Biogas Project based at Botswana Institute for Technology, Research and Innovation (BITRI) in Gaborone.

For detailed information, please refer to Annex 1

3. Time schedule and period of the consultancy

The consultancy will be undertaken for two and half (2.5) months from the date of signing the contract

4. Duty Station

The individual consultant will be based in Gaborone.

5. Supervision

The Consultancy will be supervised by Biogas Project Management Unit with the assistance of UNDP Country Office.

6. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

I. Academic Qualifications:

Engineer: As a Lead Consultant, the Sociologist/Mechanical/Environmental/ Renewable Energy/Biogas Engineer should have at least a minimum of 8 years' work experience in the field. Demonstrated experience in undertaking renewable energy related consultancies especially where people engagement was the main activity. Specific experience in conducting similar studies will be an added advantage. He/She shall coordinate the production of the various outputs of the study in a timely manner

II. Minimum Master's degree

II. Years of experience:

Lead Consultant should at least have:

- III. 8 years demonstrable experience in undertaking feasibility studies of similar scope.
- IV. Good understanding of biogas production, utilization and low carbon development issues.
- V. Excellent skill of working with communities
- VI. Broad general background in agro-waste management

Excellent project administration and management skills

VII. Competencies:

- Excellent analytical, coordination and organizational skills, with experience in managing multi-disciplinary teams
- Excellent oral, and effective presentation/facilitation, communication and report-writing skills; and
- Ability to work with people from different backgrounds and inter-personal skills.

4. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS.

Interested individual consultants must submit the following documents/information to demonstrate their qualifications:

1. Proposal:

- Explaining why he/she is the most suitable for the work. Please describe how the experience is applicable to the Scope of Work.
- Provide a detailed methodology on how they will approach and conduct the work demonstrating understanding of the assignment.
- Work plan that is consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan.

2. Financial proposal

The financial proposal will specify the daily fee of the Consultant and support staff based on the number of days worked, cost of travel and daily subsistence fees

3. Personal CV including past experience in similar projects and at least 3 references

5. FINANCIAL PROPOSAL

- **Contracts based on daily fee**

The financial proposal will specify the daily fee, travel expenses and per diems quoted in separate line items, and payments are made to the Individual Consultant based on the number of days worked.

Travel:

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed

6. EVALUATION

The consultancy will be evaluated according to the Criteria below,

Technical Capability of the Firm to deliver the required consultancy outputs evaluated on a scale of 0-70 points wherein the qualifying mark is 70%. The criteria to be used are shown below:

Criteria for evaluation	Weight	Max. Point
Context - Knowledge of the biogas concepts and environmental/economic/social issues on the production and utilization of biogas	20	20
Technical Competence/ Methodology – Detailed methodology/strategy to be adopted in executing the mandate during the period. Methodology to be used in analyzing the data collected. Demonstrate understanding of the assignment/terms of reference.	30	30
Relevant Professional /Work Experience - Provide information regarding previous assignments of a similar nature (including those listed in the Qualifications), including country/location, technology deployed, capacity installed, customer name and year commissioned.	20	20
Detailed Workplan - Propose the timelines for the main activities of the assignment, their	20	20

<p>content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports.</p> <p>Work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan.</p>		
<p>Presentation & Packaging – good writing, interpretation and communication skills.</p>	10	10