Indo-German Energy Programme – Access to Energy for Rural Areas

PN: 2014.2114.8-001.00 **Date: 15.02.2018**

Terms of Reference (ToR) for engaging a firm of consultants to conduct a safeguard analysis in the context of environment and climate change adaptation

Background

The Access to Energy Programme under the Indo-German Energy Programme (IGEN-Access) is a bilateral technical co-operation measure between the Federal Ministry for Economic Co-operation and Development (BMZ), Germany and the Ministry of New and Renewable Energy (MNRE), Government of India. The project aims at improving the sector environment for inclusive rural energy enterprises. The IGEN-Access project is currently being implemented in four states of Uttarakhand, Uttar Pradesh, Bihar and West Bengal. The programme will be implemented over a period of four years (March 2015 – March 2019). BMZ has commissioned GIZ with the implementation of the project. GIZ is a federal enterprise based in Eschborn and Bonn, Germany.

The objective of IGEN-Access is to improve the sector environment for rural energy enterprises, and strengthen the ability of enterprises to deliver renewable energy solutions to rural communities.

1. The areas of activities for IGEN-Access are:

Innovation and Entrepreneurship

This entails working with Rural Energy Enterprises or their networks to enhance their delivery of energy access solutions to rural households. This measure is delivered through training, access to mature and proven technologies, enhancing market intelligence, upgrading logistics and value chains, and business model development. IGEN-Access will facilitate the participation of women as enterprise owners, in particular.

Public support programmes / schemes

The intervention focuses on developing capacities of government agencies to deliver energy related services and supporting relevant institutions in developing and implementing public sector programmes and providing support in effective implementation of energy access solutions.

Access to Finance

This activity entails development of financial products such as loans and lease instruments for rural energy enterprises and consumers. Creating awareness among key stakeholders, particularly from private and public financial institutions is a major measure too.

The programme indicators are:

Outcome Indicators

OC1: 75% of rural enterprises supported by IGEN-Access directly or indirectly confirm that the business conditions (e.g. business models, training programmes, financing, public support programmes, market intelligence) have improved significantly during the programme period.

OC2: 20 rural energy enterprises- six of which are managed by women-which have been trained by programme partners have developed business plans to address 25,000 Households.

OC3: Two financial instrument tailored to the requirements of rural energy enterprises or households has been introduced on a national or state level to allow 10,000 Households access to energy.

OC4: Four national or state level programmes/ regulations (e.g. standards/guidelines) to support access to energy for which development was assisted by IGEN-Access are adopted.

Output Indicators

(OP)A.1: 40 further rural enterprises (of which 12 are managed by women) received technical training and / or business development services from organisations which were supported by the programme.

(OP)A.2: A renewable energy sector network (e.g. CLEAN) offers three services (e.g. trainings, clean cooking forum, access to finance, standards) to sustainably strengthen the sector.

(OP)B.1: Two new business models to use renewable energy for improving access to energy are piloted by energy enterprises (e.g. hybrid model, solar cold storage, solar water pumps).

(OP)C.1: Proposals for four financing instruments tailored to the requirements of rural energy enterprises or households have been presented to financial institutions (e.g. banks, cooperatives, enterprises).

(OP)C.2: Representatives of five different organisations providing financial services (e.g. banks, cooperatives, enterprises) who participated in trainings and awareness events on rural energy finance confirm their increased willingness to fund rural energy enterprises or consumer of energy products.

(OP) D.1: Proposals for the design / implementation of financial and technical guidelines for four national (e.g. on cook stoves) or state level energy access programmes/regulations/standards are available.

(OP)D.2: One action plan for clean cooking energy in India was adopted by the inter-ministerial roundtable.

(OP)E.1: Market intelligences (e.g. market barriers, user requirements) of 3 products or services (e.g. solar water pumps, solar cold storages, energy efficient cook stoves) are prepared and available for enterprises of the sector.

The deliverables achieved by the activity under this tender will be evaluated using (OP) A.2 and (OP) A.1.

Target group(s) and other stakeholders

IGEN-Access will work through enterprises, private sector institutions, corporates, the Central Government, State Nodal Agencies, training institutions, financial institutions and NGOs to improve energy access for and benefit:

- The rural population without access to energy
- Poorest strata of society
- Women

Currently, the IGEN-ACCESS programme is active is states of Uttarakhand, Bihar, Uttar Pradesh, Gujarat and North East Region of India.

Macroeconomic, socio-economic, socio-cultural, political and ecological assessment

In the offer of the IGEN-Access programme, policy markers are defined. They express the level of expectation with regard to the contribution of the project to BMZ's development-policy goals.

The marker system of the BMZ is based on DAC System and uses three levels:

Level 2= Principal Objective; Level 1= Significant Objective and Level 0= not targeted to the objective.

Principal objective means that the programme intends to achieve results directly in this area. Significant objective means that this marker is not decisive for the developmental intervention but anchored in the concept of the project. Both types of the objective should be considered in the conceptualization of the project.

The IGEN-Access programme has two marker with level 2 (LE 2) in the area of Rural Development and Food Security and Climate change mitigation and level 1 in the areas of Socio-Economic Effects, Participative Development and Good Governance, Gender and Protection of Environment and Natural Resources. These are the cross cutting issues (Programme Vorschlag Teil B TZ Modul = Programme offer Part B TC Module, page: 12-13).

a. Rural Development and Food Security (LE - 2)

Rural Development and/or Food Security is a major objective (project objective considering the programme objective) of the intervention and is crucial for its implementation. The improvement of energy access in rural areas contributes to improved agricultural production

(solar pumps) as well as to more food processing (e.g. drying and cooling facilities) and more efficient cooking and improved health conditions of women.

b. Socio-Economic Effects (AO – MSA)

The project indirectly addresses the economic potentials in rural areas and contributes to poverty reduction at sectoral level (e.g. through the development of local value chains, productive uses of energy).

c. Participative Development and Good Governance (PD/GG – 1)

The project will indirectly contribute to improvements in the political frameworks and their implementation and thus pays high attention to participation of all actors in the political as well as private sector. Continuous dialogue with selected actors (financial institutions, private entrepreneurs, start-ups, etc.) will be applied in developing such political frameworks/guidelines.

d. Gender (GG – 1)

New business models will pay attention that women get access to training and other capacity development interventions and the implementation of pilot projects will be gender sensitive and effects of the pilot projects will be gender sensitively monitored.

e. Protection of environment and natural resources (UR – 1)

The project advices the government and private institutions to use more clean and renewable energy technologies/sources (e.g. sun, wind, water, biomass) and this will reduce negative effects on the environment (e.g. reduce pollution of air, soil and water through diesel generators for irrigation etc.).

f. Climate Change (KLM – 2)

Significant contribution through pilot projects and replication of viable business models to increased use of renewable energy which contributes to the reduction of GHG emissions (e.g. energy efficient biomass cook stoves, solar water pumps).

These cross cutting issues have to be considered in formulation and specification of the strategic options as well as in developing activities and work packages.

2. Time Period

IGEN-ACCESS programme has a time period of 3 years with an extension of 1 year. It was commissioned by the BMZ in 2015 and will end by March 2019.

3. Terms of Reference

The IGEN-ACCESS programme is preparing for **a follow up phase** which would be IGEN-ACCESS – Phase 2. A project planning mission for the upcoming follow up phase of IGEN Access will take place from 30th of April, 2018 – 11th of May, 2018.

As a part of Follow-up phase planning, a safeguard analysis has to be performed in the context of environment and Climate Change adaptation. The purpose of the analysis is to help our projects and programmes to be designed to be as sustainable as possible in all their impacts. This also involves protecting projects (in connection with adaptation to climate change), target groups and protected assets against risks and unintended negative impacts. These are identified before placement of the commission and monitored throughout the project cycle.
The aim of the safeguards in the areas of the environment and climate is to ensure that environmental and climate aspects are systematically considered in the planning and implementation of GIZ's development measures.

4. Objectives

- A safeguard analysis in the context of environment and climate change adaptation has been conducted for the IGEN-ACCESS programme of GIZ and options for actions are documented for the Follow-Up phase of the IGEN-ACCESS programme of GIZ;

- The consultant has supported the project planning mission in order to prepare the follow up phase of the IGEN-ACCESS programme.

5. Scope of work

The consultant is expected to analyze the IGEN-ACCESS programme activities, outputs, outcomes and indicators with regards to environment and climate change adaptation. Based on the analysis and below mentioned guiding questions and points, the consultant is expected to formulate options for actions (recommendations/measures) and rank/ priorities the options for actions.

5.1.1 In the context of environment assessment, the consultant is expected to perform following steps:

1. Develop a screening criteria to select activities/projects for the possible environmental impacts analysis of the IGEN-ACCESS programme. The consultant need to develop the screening criteria in consultation with the team of GIZ;
2. Conduct interviews with project managers of the IGEN-ACCESS programme in order to understand project activities, their outputs and outcomes. Interviews with project managers could be conducted either face to face in GIZ office or telephonic or skype based on the mutual agreement between the consultant and respective project managers. Based on the interview and screening criteria, shortlist activities/projects for environment impact analysis

3. Conduct environmental impact analysis of the selected activities/projects in the context of the below mentioned guiding questions. The analysis has to be done through information available after conducting interviews with respective project managers and available literature.

    - What are the most important environmental problems in the project locations affected by the project?
    - Which specific fields of intervention of the programme had an adverse environmental impact?
    - Which fields of intervention of the programme potentially contributed to improving environmental quality, resource conservation or ecological sustainability?
    - What specific potential is there for improving environmental quality, re-source conservation or ecological sustainability?
    - Which of these impacts (and potentials, if appropriate) need to be given particular consideration in the further design of the project?

4. Formulate options for action (recommendations/measures): In this step, the conclusions from the analysis are drawn. Options for action are developed on the basis of analysis with following guiding questions:

    - What options for action/measures can reduce or prevent the environmental risks?
    - What options for action/measures can improve environmental quality and resource conservation and boost environmental sustainability?

5. Rank or prioritise the options for action: options for action are prioritized with the following guiding points:

    - The sustainability of the developed options
    - Weighing of synergies and trade-offs with other development cooperation objectives
    - Cost-benefit ratio of developed options
    - Institutional barriers
    - Political viability
    - Technical/functional viability and credibility

Please note that the guiding questions are not final and the consultant is free to suggest alternatives in consultation with the team of GIZ.

5.1.2 In the context of Climate Change Adaptation, the consultant is expected to perform following steps:

1. Develop a screening criteria to select activities/projects for the possible climate change adaptation of the IGEN-ACCESS programme;
2. Conduct interviews with project managers of the IGEN-ACCESS programme in order to understand activities, its outputs and outcomes. Interviews with project managers could be conducted either face to face in GIZ office or telephonic or skype based on the mutual agreement between the consultant and respective project managers. Based on the interview and screening criteria, shortlist activities/projects for climate change adaptation analysis;
3. Conduct climate change adaptation analysis of the selected activities/projects in the context of the below mentioned guiding questions: The analysis has to be done through information available after conducting interview with respective project managers and available literature.

    - Assess climatic changes happened in the past 20 years in the region in which the projects of the IGEN-ACCESS programme is operating;
    - What biophysical impact had been occurred on the project's component
    - What socioeconomic impacts had been occurred on the project's component
    - How high is the probability of occurrence, the extent of damage, and the adaptive capacity of target groups or ecosystems?
    - In what way may the project impact negatively on the climate resilience of people and/or ecosystems?

4. Formulate options for action (recommendations/measures): In this step, the conclusions from the analysis are drawn. Options for action are developed on the basis of analysis with following guiding questions:

    - What options for action/measures can reduce or minimize the climate change risks
    - What options for actions/measures can improve the adaptive capacity of the people who are or could be affected by climate change events

5. Rank or prioritise the options for action: options for action are prioritized with a following guiding points:

    - The sustainability of the developed options
    - Weighing of synergies and trade-offs with other development cooperation objectives
    - Cost-benefit ratio of developed options
    - Institutional barriers

- Political viability
- Technical/functional viability and credibility

Please note that the guiding questions are not final and the consultant is free to suggest alternatives in consultation with the team of GIZ.

The consultant has supported the project planning mission for the follow up phase of the IGEN-ACCESS programme. The consultant is expected to complete the objective in a following manner:

- Develop a Power Point Presentation on the findings of environment and climate change adaptation analysis
- Desired availability of the consultant from 30th April to 11th May to interact with the planning mission personal. The consultant will be informed in advance about the date and time of the meeting. However, due to some unforeseen events, the date or timing might change. The consultant has to be flexible with respect to dates and time.

bjective	Outputs	Activities	Indicators	Means of Verification
A safeguard analysis in the context of environment and climate change adaptation has been conducted and documented for the Follow-Up phase of the IGEN-ACCESS programme of GIZ	Environmental assessment is conducted for the IGEN-ACCESS programme	Develop a screening criteria to select activities for the possible environmental impacts analysis of the IGEN-ACCESS programme	Screening criteria is developed	Screening criteria is shared with and accepted by GIZ
		Conduct interviews with project managers of the IGEN-ACCESS programme in order to understand activities, outputs and outcomes and also activities are selected for environment impact analysis	Interviews are conducted with project managers responsible for different projects	Interviews are conducted and activities are shortlisted for environment analysis
		Conduct environmental impact analysis in the context guiding questions for the selected activities of the IGEN-ACCESS programme	Environmental impact analysis for the selected activities has been performed	An interim report by 30th April 2018 and a final report by 30th May 2018. Please refer to the deliverables and timeline section for more detail.
		Formulate options for action (recommendations/measures) on the basis of analysis in the context of guiding questions	Options for actions or recommendations based on the analysis has been formulated	
		Rank or prioritise the options for action in the context of guiding points	Options or recommendations are ranked in the above mentioned manner	
	Climate Change adaptation	Develop a screening criteria to select activities for the possible climate change	Screening criteria is developed	Screening criteria is shared with and accepted by GIZ

	assessment is conducted for the IGEN-ACCESS programme	adaptation analysis of the IGEN-ACCESS programme		
		Conduct interviews with project managers of the IGEN-ACCESS programme in order to understand activities, outputs and outcomes and also activities are selected for adaptation analysis	Interviews are conducted with project managers responsible for different projects	Interviews are conducted and activities are shortlisted for climate change adaptation analysis
		Conduct climate change adaptation analysis in the context of the guiding questions for the selected activities of the IGEN-ACCESS programme	Climate change adaptation analysis for the selected activities has been performed	An interim report by 30th April 2018 and a final report by 30th May 2018. Please refer to the deliverables and timeline section for more detail.
		Formulate options for action (recommendations/measures) on the basis of analysis in the context of the guiding questions	Options for actions or recommendations based on the analysis has been formulated	
		Rank or prioritise the options for action in the context of guiding points	Options or recommendations are ranked with the help of guiding points	
The consultant has supported the project planning mission for the follow up phase of the IGEN-	The consultant has supported the project planning mission	Develop a Power Point Presentation on the findings of environment and climate change adaptation analysis	Power Point presentation is prepared	The power point presentation is submitted and accepted by GIZ

ACCESS programme		Desired availability of the consultant from 30th April to 11th May to interact with the planning mission personal	The consultant has attended the meeting as and when required between the mentioned dates	Meeting of the consultant with the planning mission has been successfully concluded.

Supporting Documents

- The terms have been developed based on the User Guide Environment and Climate Safeguard. The User guide is attached with the terms for more understanding and nature of the assignment.

- The consultant will be provided with available and relevant documents (objective, outputs and outcomes indicators, activities etc) of the IGEN-ACCESS programme.

- The consultant will be provided with the initial offer of the concept note, prepared by IGEN Access programme, and which has been submitted to BMZ for the follow up phase of the IGEN-ACCESS programme

Site Visits: No site visits are foreseen in this assignment except consultant travelling to Delhi if the office of the consultant is located outside of Delhi.

Timeline and Deliverables

The consultant is expected to complete the assignment by end of May 2018. Following are the expected deliverables and timelines:

- Screening criteria for selection of activities for conducting environment and climate change adaptation analysis is shared and accepted by GIZ. The deliverable must be completed within 1st week after signing the contract;
- Interviews with project managers are conducted and activities are shortlisted for environment and climate change adaptation analysis within two weeks after signing the contract;
- An interim report not exceeding 20 pages has been submitted and accepted by GIZ by 30th April 2018. The interim report must contain the followings:
    - Analysis of environment impact and climate change adaptation for the selected activities
    - Options for actions (recommendations) for both (environment and climate change adaptation)
    - Ranking/prioritising the options for actions for both (environment and climate change adaptation)
- The consultant has successfully participated in the planning mission from 30th April to 11th May 2018; This will also include a presentation on key findings;
- A final report is to be delivered by 30th May 2018. The final report should not exceed more than 30 pages for both (environment and climate change adaptation).

Quality assurance and other requirements

To ensure the quality of the outputs the firm of consultants has to meet the following requirements:

1. Report or power point presentation or note prepared by the firm of consultants needs to be thoroughly verified prior to submission. Sub-quality deliverables (errors in spellings, grammars, sentences) would not be accepted;
2. It is expected that all documents will undergo a final proof read by the project lead;
3. All the deliverables produced and submitted by the consultant must be accepted by GIZ;

4. The firm of consultants ensures that IGEN-ACCESS staff is briefed continuously on the progress of the project and informed immediately on any changes whatsoever (e.g. delays);
5. The firm of consultants is not allowed to replace project staff without prior approval by IGEN-ACCESS;
6. All deadlines specified in the terms need to be met.
7. GIZ honours intellectual copyrights and strictly prohibits any copyright violations and plagiarism;
8. The consultant must at all times of the assignment possess the copyrights of the documents, pictures, technical papers etc used in the assignment;
9. GIZ will hold the copyrights for all the documents/data collected in the process of assignment as well as the electronic media (photographs, videos etc.).

Organizational Experience

- Average annual turnover for the last three financial year should have at least 70,000 Euro;
- Number of employee as at 31.12 of the previous year must be at least 7;
- Technical assessment is only based on reference projects with a minimum commission value of 30,000 Euro;
- At least 3 reference projects in the technical (Environment and Climate Change) and at least 2 reference projects in the region of India in the last three years;
- At least 5 years of experience working in environment and climate change sector;
- At least 5 years of experience on conducting environmental impact assessment;
- At least 5 years of experience of working on climate change adaptation projects in the context of Decentralized Renewable Energy Sector

Staff requirements

The firm of consultants is expected to provide a pool of experts. The pool of experts should encompass:

1. Project Lead
2. Decentralised Renewable Energy Expert
3. Environment Impact Analysis Expert
4. Climate Change Adaptation Expert

Human days

No.	Personnel	No. of days
1	Project Lead	8
2	Decentralised Renewable Energy Expert	6
3	Environment Impact Analysis expert	10
4	Climate Change Adaptation Expert	10

Qualification of the proposed staff

Project Lead

- Degree in Engineering/post graduate
- Professional experience (>10 years)
- Minimum 10 years of experience of working on environment and climate change sector
- Minimum 10 years of experience of management experience (project management)
- Regional experience : Asia and India
- Language skills: English and Hindi

Decentralized Renewable Energy Expert

- Degree in Engineering/post graduate
- professional experience (>10 years)
- At least 10 years of experience of Decentralized Renewable Energy Sector
- Strong communication and inter personal skills including presentation skills
- Regional experience : India
- Language skills: English and Hindi

Environment Impact Analysis expert

- Degree in Engineering/ post graduate
- Professional experience (>10 years)
- Minimum 10 years of experience of working on Environmental Impact Assessment
- Strong communication and inter personal skills including presentation skills
- Regional experience : India

- Language skills: English and Hindi

Climate Change Adaptation Expert

- Degree in Engineering/ post graduate
- Professional experience (>10 years)
- Minimum 10 years of experience of working on Climate Change adaptation
- Strong communication and inter personal skills including presentation skills
- Regional experience : India
- Language skills: English and Hindi

Note: Please refer to the attached document "Assessing Eligibility of Consulting Firms" and "Technical Assessment Grid" for more details.

Structure of the proposal

The proposal should contain a very brief company profile followed by a detailed approach and methodology to execute the project. Please elaborate the roles and responsibilities of the required team members in the proposal. Qualifications of the organization (information on similar projects) and team qualifications (CVs) should be provided in the annex. The proposal must not exceed 20 pages. We expect the bidders to answer the following questions as part of their proposal.

1. What would be your approach and methodology for conducting the assignment;
2. What are the perceived risks associated with the different tasks under this work package? How does the bidder propose to mitigate these risks? How the firm of consultants does ensures the quality of deliverables (for all processes, indicators and project steps).
3. Please elaborate the roles and responsibilities of different team members for implementation of your proposal.

Note

- In order to select a suitable consultant, GIZ may invite shortlisted consultants to present their methodology and approach to a committee which will help GIZ in making final selection.
- It may also be foreseen that GIZ may consider termination of the contract prematurely in case of any other unforeseen events.