

# REPUBLIC OF LIBERIA Rural and Renewable Energy Agency (RREA)

# REQUEST FOR EXPRESSIONS OF INTEREST CONSULTING SERVICES – FIRMS SELECTION



## **Liberia Renewable Energy Access Project**

Consultancy Services for the Preparation of The Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for The River Gee Mini Hydropower Project in River Gee County in Liberia

Reference No. RFP NO.: RREA/GOL/LCS/001/2021

Issue Date: July 28, 2021 Closing Date: August 16, 2021

The Rural and Renewable Energy Agency (RREA) has *received* Budgetary Allotment from the Government of Liberia towards the cost of the River Gee Mini Hydropower Project in River Gee County in Liberia, and intends to apply part of the proceeds for consulting services for preparation of Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP)

The objectives of the assignment are:

#### ESIA

The main objective of the ESIA is to provide decision-makers with an indication of the likely consequences of the proposed Project.

Specifically, the ESIA objectives are as follows:

- Document the baseline conditions prevailing before the project construction starts.
- Assess and report on the likely magnitude and significance of impacts, both positive and negative.
- Propose mitigation activities to reduce negative impacts and monitoring of important impacts during and after construction including the main environmental and social impacts identified in the feasibility study;
- Document the process undertaken to inform and engage with project stakeholders;
- Prepare an ESIA report compliant to the relevant authorities (EPA, RREA, etc.), and detailing findings and recommendations.

## RAP

The objective of the RAP is to ensure that the population whose livelihood will be affected by the project is formally consulted and adequately compensated and treated. The RAP will not include the resettlement of people and infrastructures. No protected area is known at the project site or nearby, and no cultural value is reported at the project site. the consultant shall:

- Prepare the RAP that is consistent in policy and context to the laws, regulations, and procedures adopted by the Government of Liberia (GoL);
- Conduct consultations with identified project affected persons (PAPs), based on a census of the affected sites;
- Establish local decision-making bodies who will be part of the RAP implementation valuation and compensation approaches;
- Develop in a participatory manner the proposed grievance mechanism to be covered in the RAP; and
- Complete a baseline socio-economic survey of PAPs and host communities.

The RREA now 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 selection criteria are:

- The consultant must have at least 10 years demonstrable experience in ESIA and RAP preparation for Small Hydro Power Plants and Electricity Transmission and Distribution lines.
- Must have executed ESIA and RAP for at least two similar projects.
- Consultant shall have working knowledge of World Bank Group/African Development Bank Safeguard Policies and Performance Standards and EHS guidelines, and have solid experiences of organizing public consultations and managing stakeholder relations and sensitivities.
- Experience in this field (involving similar projects) with experiences in planning, developing, and managing ESIA processes for large scale projects. Activities that are familiar with national E&S laws and the regulatory context and requirements of Liberia will be an added advantage.

Key Experts will not be evaluated at the shortlisting stage.

The attention of interested Consultants is drawn to Sections 68, 69,70 and 71 of Public Procurement Concession Restated Act of 2010 (PPCA) on the Selection and Employment of Consultants.

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 Least Cost Selection (LCS) method set out in the PPC Act and Regulations.

Further information and the detailed Terms of Reference (TOR) for the assignment can be obtained electronically at the following email addresses and Website, from Mondays to Fridays, from 0900 to 1600 hours GMT:

Email: info@rrealiberia.org Website: www.rrealiberia.org

Expression of Interest; clearly marked Consultancy Services for the Preparation of The Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for The River Gee Mini Hydropower Project in River Gee County in Liberia, must be delivered in a written form to the address below (in hard and or electronic/email copy) on or before 4:00 p.m. Local Time, on August 16, 2021. Only shortlisted firms will be contacted.

**Attn:** Executive Director

Rural and Renewable Energy Agency LEC Sub-station, Newport Street 1000 Monrovia 10, Liberia Email: josephw@rrealiberia.org

Electronic submission should also be copied to the following addresses:

info@rrealiberia.org; stephenp@rrealiberia.org; augustinem@rrealiberia.org

#### Terms of Reference (ToR)

Consultancy Services for the Preparation of The Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) for The River Gee Mini Hydropower Project in River Gee County in Liberia

# **BACKGROUND**

#### **COUNTRY PROFILE**

Liberia is located on the west coast of Africa, bordering Sierra Leone to the West, Guinea to the North and Côte d'Ivoire to the East, and covers an area of approximately 111,369 km². Liberia is a low-income country with a population of 4.24 million, and Gross Domestic Product (GDP) estimated at US\$3.221 billion in 2019. Estimates put Liberia's national wealth per capita at US\$10,227. Liberia ranks relatively high in natural capital (US\$7,037) among African countries, but this is offset by low produced capital (US\$1,219), human capital (US\$3,636), and by net foreign assets (US\$-1,665). Liberia human capital lacks the capacity to transform the natural resources into wealth. The country economy remains vulnerable to external shocks given its dependence on primary commodities, imported foods and fuel, its limited diversification, and the volatility of commodity prices of key exports of iron ore, rubber, and timber. Moreover, because of a legacy of entrenched inequality in access to development opportunities, widespread infrastructure deficits and pervasive poverty have become the binding constraints to growth and prosperity.

The Government of Liberia's (GoL) national development plan for the next five years is articulated in its Pro-Poor Agenda for Prosperity and Development (PAPD) from 2018-2023 that followed Agenda for Transformation (AfT) 2012-2017 and supports the country's long-term vision to become an inclusive middle-income country by 2030. The PAPD is the first step in achieving the goals set out in Liberia Rising 2030, Liberia's long-term vision of socio-economic transformation and development. The objectives of the development plan include: poverty alleviating through enhanced domestic food production and job creation; improved infrastructure, particularly road infrastructure; improved education and health delivery systems; and transparent and accountable governance system. Throughout the Agenda, the strategy focuses on creating more jobs, building infrastructure, generating energy and improving the quality of life that will spread the benefits of growth to all the citizens. This strategy recognizes that investment in energy, to unlock the country's economy, has the greatest return on investment and should be prioritized.

#### SECTORAL AND INSTITUTIONAL CONTEXT

## **Current Situation**

Shortage of electricity is a major constraint to economic and social development in Liberia. The energy sector in Liberia is characterized by a dominance of traditional biomass consumption and low access to poor-quality and expensive modern energy services. Over 95% of the population in the low-income category relies on firewood, charcoal and palm oil for energy needs. Modern energy services based on electricity and petroleum products are predominantly used for economic production and transportation; such services are mainly confined to the Monrovia area. Indeed, about 19.3% at national level, 32% of urban residents and 1.4% of rural residents have currently electricity access largely from self-generation with gasoline or diesel generators using expensive and polluting imported fuel. However, with the increasing urbanization in and around Monrovia as well as the development of the rural areas of the country, the demand for electricity is increasing rapidly.

Liberia's energy access is still today one of the lowest in the world. The rural energy access in Liberia is almost inexistent. Despite some progress on the electrification of Monrovia - the country capital - Liberia has still one of the lowest grid electrification rates in the world with less than 2% of the population connected to grid power. This situation leaves the vast majority of people reliant upon various informal and unreliable systems and leads also to an intensive use of diesel based generators in the less rural areas of the country.

Despite high renewable energy potential, electrical energy cost is one of the highest in the world relying mostly on fossil fuels. Liberia has more than 2.3 GW of hydro potential identified and a widespread solar irradiation and biomass vegetation. Many locations across the country offer the potential for lower cost renewable electricity. However, populations with electricity in Liberia face one of the highest costs of electricity in the world with tariffs of US\$0.36/kWh (a reduction from US\$ 0.52/kwh in 2016) and power mostly generated from fossil fuels.

The PAPD recognizes the country's main development challenges and has prioritized energy infrastructure development for expanding access to reliable and affordable electricity supply. In the energy sector, the PAPD intends to i) increase energy access by 30% and electricity generation from 134MW to 270MW, ii) reduce the cost of electricity by 30% (from US\$0.36/kWh to 0.25/kWh) by 2023, and iii) increase transmission and distribution from 511km to 2279km. The PAPD includes a US\$1.81 billion infrastructure investment program to overcome the constraints imposed by the lack of access to basic services. To achieve the electricity targets, the GoL is following a two-pronged strategy: expansion of grid connected service in Monrovia and priority economic corridors outside of the capital; and development of decentralized electricity service, including off-grid solutions, for towns and rural areas that are not expected to be connected to the national grid in the medium term. Specifically, GoL has developed a Rural Energy Strategy and Master Plan for Liberia (RESMP) for the period 2016 - 2030, (available online at the website: <a href="http://www.liberiaruralenergy.org">http://www.liberiaruralenergy.org</a>), to drive the effort of rural electrification. The RESMP identified 92 projects and a total investment need of US\$ 935 million to electrify 265,000 homes (approximately 1.34 million people) outside Monrovia by 2030.

#### **ONGOING INTERVENTIONS**

GoL, with the support of development partners/donors, has started to develop electricity and lighting services in urban and rural areas, and small towns. Many donors are active in energy sector in Liberia. For example, the African Development Bank (AfDB), the World Bank, the European Union (EU), United States Agency for International Development (USAID) and the Government of Norway (GoN) are assisting the country through various financing instruments for electrification projects. Some of the ongoing and in-the-pipeline electrification initiatives include:

- i. Liberia Renewable Energy Access Project (CIF/World Bank financed) that is underway and supporting the construction of a 2.5MW hydropower plant along with 1.8MW backup diesel facility, 33kV medium voltage distribution network and 10,000 connections to provide access to electricity for about 50,000 people in Lofa County;
- ii. Renewable Energy for Electrification in Liberia Project (CIF/AfDB financed) that is underway and supporting the construction of a 9.34MW hydropower plant along with 33kV evacuation lines in Nimba County to connect to the existing 33kV cross-border transmission line between Liberia and Côte d'Ivoire;

- iii. Sinoe Rapids Small Hydropower Project (EU funded), which is planned for the construction a 2MW hydropower plant on the Sinoe River, along with transmission and distribution facilities in Sinoe County;
- iv. Ganta Gbarnga Grid Extension (USAID funded) that is ongoing and supporting the extension of the 33kV distribution line (77.82km) from the cross-border line in Ganta, Nimba to Gbarnga and Suakoko, Bong County;
- v. Network expansion of the existing cross-border grid from Pleebo, Maryland to Fish Town, River Gee (about 100km), which is ongoing and financed by AfDB;
- vi. Grid extension along the three corridors: i) from Monrovia to Roberts International Airport (46km) financed by AfDB; (ii) from Monrovia to Tubmanburg, Bomi (64 km), and iii) Monrovia to Kakata (52km) both financed by the World Bank, which is under implementation;
- vii. CLSG Interconnector project, which is under-way and (for Liberia) includes the construction of 225 kV interconnection line and 4 sub-stations across Liberia: Mano, Mount Coffee, Buchanan and Yekepa allowing power export initially from Cote d'Ivoire to Liberia.

#### **KEY PUBLIC ENERGY STAKEHOLDERS**

Relevant government institutions of the sector are:

- i. *Ministry of Mines and Energy (MME):* The Ministry is responsible for the overall energy sector development and policy.
- ii. Rural and Renewable Energy Agency (RREA): RREA was established by an Executive Order in 2010 and by an Act of the National Legislature in 2015, as an Autonomous Agency of the GoL, with mandate to facilitate and accelerate the economic transformation of rural Liberia, by promoting the development and supply of modern energy products and services to rural areas with an emphasis on locally available renewable energy resources. RREA's primary function is the planning, development, and promotion of renewable energy projects together with public, private, and community developers.
- iii. *Liberian Electricity Corporation (LEC):* LEC is the State-owned Utility, which by law continues to be the transmission system operator and the national grid company.
- iv. Liberia Electricity Regulatory Commission (LERC): LERC is the newly created regulatory Agency in charge of licensing activities, issuing regulations to implement the electricity law, approving tariff setting methodologies and to establish, monitor and enforce technical, performance and security regulations/standards.

# **CURRENT PROJECT**

In 2018, RREA (in collaboration with the Ministry of Finance and Development Planning, Liberia) submitted an application for the development of River Gee Hydropower project under the sixth cycle of the IRENA/ADFD Project Facility. The project application was competitively selected among others and tendered under the sixth cycle of the IRENA/ADFD Project Facility for submission of full project proposal. Following RREA submission of a full project proposal in 2019, the IRENA/ADFD Project Facility approved the funding request for the development of the River Gee Hydropower project in its sixth cycle. The IRENA/ADFD officially announced and committed a loan of US\$8 million as support to the River Gee Hydropower project at the ninth session of the IRENA Assembly in Abu Dhabi, UAE. The Government of Liberia and ADFD has completed

signing of a financing agreement for effectuality of the loan. As such, the Government of Liberia is now administering this delegated loan (in combination with its financial commitment), for the implementation of the River Gee hydropower project. Committed financing for the project is as follows: US\$8 million as loan secured from ADFD; US\$2.2 million as contribution of Government of Liberia.

The River Gee Hydropower project aims at developing a 2.13MW run-of-river hydropower plant on the Gee River, a tributary of the Cavalla River within River Gee County, which will connect to the currently extended 33kV cross-border transmission line from Pleebo, Maryland to Fish Town, River Gee County. The project will provide a clean, reliable, sustainable and affordable source of energy to River Gee and Maryland counties, thereby securing power supply in the region. It will reduce Liberia's reliance on electricity importation from neighbouring Cote d'Ivoire, allow grid expansion to isolated localities and remote areas, and boost the connection of a larger amount of households, businesses, institutions and industries in the region. The project will provide electricity access to about 30,000 people, including business and institutions in the targeted areas. In addition, the project will contribute to the reduction in fossil fuel consumption and greenhouse gas (GHG) emission, and help ensure increase in universal energy access in the south-eastern region of Liberia.

The River Gee site is remotely located in south-eastern Liberia not far from the border with Côte d'Ivoire (coordinates are Latitude: 7.635° N and Longitude: 4.927° E). It is situated adjacent to an existing main road (and bridge) connecting Fish Town in to the north-west (50 km direct) and Pleebo to the south (50 km direct). The preferred overland route to the site from Monrovia is via Ganta – Zwedru – Fish Town, which is very long (~713km) with the segment from Ganta to Zwedru (~387 km) being in poor condition. Additionally, there is a port at Harper on the Liberian coast directly south of the River Gee site (61 km direct). The site area is relatively flat with low hills. The waterfall is spread over a river reach of approximately 180 m. The waterfall has formed on the underlying igneous bedrock and comprises two main steps, the higher one located about 150 m upstream of the bridge, and the lower one located immediately downstream the bridge. No rock outcrops are observed on the river banks, which are of modest slope and heavily vegetated. The site experiences less dry-wet season variability in rainfall and river flows.

The physical implementation of the River Gee hydropower project will take place through a single contract that follows the design-build project delivery method, similar to that of FIDIC Yellow Book.

# **OBJECTIVES OF THE CONSULTANCY**

#### **ESIA**

The main objective of the ESIA is to provide decision-makers with an indication of the likely consequences of the proposed Project.

Specifically, the ESIA objectives are as follows:

- Document the baseline conditions prevailing before the project construction starts.
- Assess and report on the likely magnitude and significance of impacts, both positive and negative.
- Propose mitigation activities to reduce negative impacts and monitoring of important impacts during and after construction including the main environmental and social impacts identified in the feasibility study;
- Document the process undertaken to inform and engage with project stakeholders;

• Prepare an ESIA report compliant to the relevant authorities (EPA, RREA, etc.), and detailing findings and recommendations.

#### RAP

The objective of the RAP is to ensure that the population whose livelihood will be affected by the project is formally consulted and adequately compensated and treated. The RAP will not include the resettlement of people and infrastructures. No protected area is known at the project site or nearby, and no cultural value is reported at the project site.

The consultant shall:

- i. Prepare the RAP that is consistent in policy and context to the laws, regulations, and procedures adopted by the Government of Liberia (GoL);
- ii. Conduct consultations with identified project affected persons (PAPs), based on a census of the affected sites;
- iii. Establish local decision-making bodies who will be part of the RAP implementation valuation and compensation approaches;
- iv. Develop in a participatory manner the proposed grievance mechanism to be covered in the RAP; and
- v. Complete a baseline socio-economic survey of PAPs and host communities.

# SCOPE OF WORK

#### GENERAL

In order to build capacity within Liberia, the Consultant is strongly encouraged to engage local firm(s) and/or specialists under subcontracts, to assist them in carrying out the work in Liberia. (It should, however, be noted that there is limited access to local specialists in Liberia with possibly topography, geology and environmental and social and gender consultants being the most easily available). The Consultant shall carry out capacity building activities for MME and RREA staff through seminars, report workshops and similar with regards to environmental and social management aspects, as well as gender aspects.

The ESIA and RAP shall be conducted for the River Gee Mini-Hydropower Project, in accordance with the Environmental Protection Agency (EPA) Environmental Impact Assessment Procedural Guidelines (EPA, 2006).

The main infrastructure components of the current River Gee project as relevant for this assignment include:

i. Small hydro power plant of 2.13MW capacity on the Gee River. The proposed layout of this plant is based on a run-of-river concept and consists of i) a low-head, free overflow weir at the top of the falls (maximum height = 2.8m at FSL and 5.2m at abutment crest level; Total length = 142m; spillway length= 45m), ii) water conveyance structures to include headrace canal, forebay and power intake structure located on left abutment of the weir, iii) steel penstock, and iv) a power station downstream. The powerhouse is proposed with 2x 1.12 MW Kaplan turbines (horizontal S-Type with downstream elbow) and 2x 1.3 MVA generators giving a total installed capacity of 2.13MW. The average annual generation is 13.6

GWh (power factor 0.73), which is split between the wet and dry seasons as follows: Dry season (December to April) – average power 1.1 MW, average generation 3.6 GWh (25% of annual average), power factor 0.57, firm power 0.52 MW (90% reliability); Wet season (May to November) – average power 1.86 MW, average generation 10.0 GWh (75% of annual average), power factor 0.81, firm power 0.97 MW (90% reliability). Other salient details include:

- Annual inflows = 7.8 m3/s (90% exceedance); 18 m3/s (50% exceedance average); 38.5 m3/s (10% exceedance)
- Flood estimates = 160 m3/s (construction flood 10 year return period);
   230 m3/s (design flood 100 year return period);
   300 m3/s (maximum flood 1000 year return period)
- Reservoir = Full supply level 63.81 masl, surface area = a few hectare
- Geology = Hard, durable igneous rock (granodiorite) with laterite on abutments
- Gross head = 11.3 m (50% exceedance flow)
- Design turbine flow = 24 m3/s
- **ii.** Electrical Substation: A 33kV substation situated at the hydropower site, and designed to feed generated power to the 33kV cross-border transmission line between Liberia and Côte d'Ivoire.

RREA has completed the full feasibility study for the Hydropower scheme in April 2016.

#### ESIA SCOPE OF SERVICES

The main environmental and social impacts identified in the River Hydropower project feasibility study are:

- The existing waterfall (200 m length) is bypassed by the scheme and will
  experience a significant reduction in flow (particularly during the dry season) –
  this will cause some morphological changes to the riverbed and riverbanks and
  could affect fish passage.
- Construction works will have to take into consideration any potential biodiversity hotspots, with relevant avoidance and mitigation measures.
- Customary law seems to govern land ownership at the project site and customary rights will have to be dealt with during future project planning stages.

#### Collection of Data and Content of ESIA/ESMP

The ESIA Consultant shall gather relevant information, study the available reports and data and prepare an assessment summarising the findings regarding impacts of the mini-hydropower project activities. The Consultant will have access to the feasibility study of the River Gee hydropower project, and should avoid the collection of duplicate data sets. Any necessary mitigation measures shall be proposed and their costs assessed for inclusion in the ESMP. The evaluation should include as a minimum the following items during the construction and operational phases:

- Physical Environment (Downstream and waterflow, water quality, hydrology soil, site and landscape, topography maps, aerial photos and other photos, etc.)
- Biological environment (Aquatic, forest and natural habitats, biodiversity, etc.)

• Social -economic (Downstream and water use, cultural heritage, land use, land holding and customary rights, existing infrastructure, economic activities, stakeholder engagement, etc.)

# **Field Investigations**

Gaps in available data shall be complemented by relevant field investigations needed to complete the data bank for the development of mitigation measures and management aspects.

The above data and information shall be used and compiled in preparing the ESIA reports which shall include all available data and information unearthed in the ESIA preparation process, as well as relevant data collected during the Feasibility Study.

# **Environmental and Social Impact Evaluation, including Gender Impacts** *General*

The consultant shall make an evaluation of the environmental and social implication of the minihydropower project through field investigations, surveys and interviews with selected stakeholders. Collected data shall be gender-disaggregated whenever applicable and appropriate.

Based on the available information, the environmental and social impact assessments shall determine whether the impacts of the proposed project are likely to be significant, and shall identify, and to the extent possible quantify, compensation and mitigation measures according to international best practices.

#### Consultation with local stakeholders

Consultation with local stakeholders shall be established in order to assess the human activities in the catchment of the concerned site and the relevant parts of the river basins and assess the role the local population can play in the development of the mini-hydropower site. The stakeholders shall be given information on the activities related to the EISA, RAP studies and their expressed observations shall be considered with regard to follow-up activities.

Items considered should include fishing, irrigation, water rights, stakeholder participation in planning, land management and catchment protection, land ownership/land rights, care of gauging stations, and possible support in field investigations.

Public consultations, one on the ToR for environmental and social scoping and a second one on the Final Draft Report.

#### **Risk Analysis**

A risk analysis shall be performed to assess risks that might occur during project construction and operation. The Consultant shall outline risk mitigation measures in the ESIA Report and prepare an Emergency Preparedness Plan.

### **RAP SCOPE OF SERVICES**

### RAP/LAP/LRP

The proposed project is expected to require land acquisition for the infrastructure component. Although the direct works at the dam and powerhouse sites are not expected to cause any population impact, given their remote locations and low population density, and other ancillaries will likely require more land acquisition. Resettlement planning will identify all impacts of land acquisition and review relevant legal and policy requirements of the GoL and develop a project entitlement policy and matrix and mitigation measures to address these impacts in a locally appropriate manner.

Leading to the preparation of the RAP, the activity will generate a database of physical (land) and livelihood impacts on affected individuals and households (PAPs).

### Collection of Data and Content of RAP

The Resettlement Action Plan should also include as a minimum the following items during the construction and operational phases:

# i. Potential impacts and mitigation measures

- o Land Acquisition Plan (LAP) and/or Livelihood Restoration Plan (LRP): Relevant disaggregated baseline data shall be collected in order to make an assessment of the social impacts, including gender aspects of the project, and associated facilities;
- o A proposal of alternatives to consider in order to avoid or minimize resettlement;
- Establish a mechanism to minimize resettlement to the extent possible, during project implementation
- Propose measures necessary to prevent land speculation or the influx of ineligible persons at the selected sites;
- Explain affordable and accessible procedures for third-party settlement of disputes arising from resettlement; such grievance mechanisms should take into account the availability of judicial recourse and community and traditional dispute settlement mechanisms.
- Cut-off date

## ii. Socioeconomic study

- Results of the census covering:
- o Identification of the number of people affected by land acquisition, livelihood restoration, and compensation;
- o Information of existing and future occupation of land, land tenure rights and land use, i.e. mining concession, protected area or other land rights and future land uses;
- o Identify patterns of social interaction in the affected communities, including social networks and social support systems, and how they will be affected by the project;
- Because project activities affect and benefit males and females differently, when applicable, ensure that relevant information regarding the socioeconomic study is disaggregated by gender.

### iii. Community Participation

- Describe the strategy for consultation with and participation of resettlers and hosts in the design and implementation of the resettlement activities;
- o Provide a summary of the views expressed and how these views were taken into account in preparing the resettlement plan;

# iv. Legal Framework

Conduct an analysis of the legal framework covering:

 The scope of the power of eminent domain and the nature of compensation associated with it in terms of both the valuation methodology and the timing of payment;

- Provide for a grievance redress mechanism that is accessible to PAPs taking into consideration gender issues and vulnerable groups and illiterate PAPs; guidelines for keeping records of complaints/grievances and responding to them in a timely manner:
- Any legal steps necessary to ensure the effective implementation of resettlement activities under the project, including, as appropriate, a process for recognizing claims to legal rights to land--including claims that derive from customary and traditional law.
- Explain the legal arrangements for regularizing tenure and transferring titles to resettles.

#### v. Institutional framework

The RAP should be clear about the implementation responsibilities of various agencies, offices, and local representatives. These responsibilities should cover (i) delivery of RAP compensation; (ii) appropriate coordination between agencies and jurisdictions involved in RAP implementation; and (iii) measures (including technical assistance) needed to strengthen the implementing agencies' capacities of responsibility for managing facilities and services provided under the project and for transferring to PAPs some responsibilities related to RAP components (e.g. community-based livelihood restoration; participatory monitoring; etc).

## vi. Implementation Schedule

An implementation schedule covering all RAP activities from preparation, implementation, and monitoring and evaluation should be included. These should identify the target dates for delivery of benefits to resettlers and hosts and a clearly defined closing date. The schedule should indicate how the RAP activities are linked to the implementation of the overall project.

### vii. Social Impact Evaluation, including Gender Impacts

#### General

The consultant shall make an evaluation of the social implication of the mini-hydropower project and other project financed activities through field investigations, surveys and interviews with selected stakeholders. Results from the evaluation of social impact should consider gender-disaggregated data/information whenever applicable and appropriate.

Based on the available information, the social impact assessments shall determine whether the impacts of the proposed project are likely to be significant, and shall identify, and to the extent possible quantify, compensation and mitigation measures according to modern international best practices.

#### viii. Consultation with local stakeholders:

Consultation with local stakeholders shall be established in order to assess the human activities in the catchment of the concerned site and the relevant parts of the river basins and assess the role the local population can play in the development of the mini-hydropower site and what impacts there would be as a consequence of civil works. The stakeholders shall be given information on the

activities related to the RAP studies and their expressed observations shall be considered with regard to follow-up activities. Consultations will continue during implementation of the RAP, and the RAP will provide a mechanism for this continuous stakeholder engagement.

Items considered should include fishing, irrigation, water rights, stakeholder participation in planning, land management and catchment protection, land ownership/land rights, care of gauging stations, and possible support in field investigations.

Public consultations: one on the ToR for social scoping and a second one on the Final Draft Report.

# **DELIVERABLES**

### GENERAL REPORTING REQUIREMENTS

Unless otherwise stated in the below, all reports shall be submitted in draft form for review by the Client and his representatives. After receipt of comments from the Client the Consultant shall prepare and submit a final edition of each report.

#### **ESIA DELIVERABLES**

The Consultant shall prepare an *Inception Report* 3 weeks after the commencement of work in which the Consultant shall review actual conditions in the project areas with those anticipated in the Terms of Reference and the Consultant's Proposal, and propose any alterations of the study schedule and any other measures if deemed necessary and decisive for project success.

One month after commencement of the work, the Consultant shall prepare a *Progress Reports* in order to keep RREA and MME and other relevant parties informed about the progress of the ESIA preparation. The necessary content of this Progress Report shall be agreed with the RREA and MME at the outset of the study, but is envisaged to include project progress and staff inputs during the period, any issues which require attention and measured proposed to ensure the success of the studies.

The ESMP includes an outline for the Construction ESMP and an ESMP for the Operational Phase with a detailed budget. The ESMPs propose responsibilities for ESMP implementation. The Contractor should prepare and implement his own Construction ESMP (CESMP). Project data and information shall be compiled in relevant appendices.

Any changes to the reporting schedule and contents shall be raised and agreed in consultation between the Consultant and the Client.

The Consultant shall present the *draft ESIA Report* to the client within 2 months of commencement of the study. The ESIA should follow the outline mentioned in the Environmental Protection Agency (EPA) of Liberia Environmental Impact Assessment Procedural Guidelines (EPA, 2006).

The Consultant shall work in close collaboration with the Client so that the results as presented in the draft report are well known and worked-through by the Client when the draft report is issued. The Consultant shall prepare a *final ESIA Report* within 1 month of the receipt of the Client's comments to the draft report and the final report shall include the results of an evaluation of the comments with any necessary changes. Total duration of the ESIA study is three (3) months.

#### **RAP DELIVERABLES**

The Consultant shall prepare an *Inception Report* after 3 weeks after the commencement of work in which the Consultant shall review actual conditions in the project areas with those anticipated in

the Terms of Reference and the Consultant's Proposal, and propose any alterations of the study schedule and any other measures if deemed necessary and decisive for project success.

One months after commencement of the work, the Consultant shall prepare a *Progress Report* in order to keep RREA and MME and other relevant parties informed about the progress of the RAP preparation. The necessary content of this Progress Report shall be agreed with the RREA and MME at the outset of the study, but is envisaged to include project progress and staff inputs during the period, any issues which require attention and measures proposed to ensure the success of the studies.

The Consultant shall present the *draft RAP Reports* to the client within 2 months of commencement of the study. The report should include annexes of template/sample for summarizing PAP consultations as well as a template for lodging grievances.

The Consultant shall work in close collaboration with the Client throughout the project so that the results as presented in the draft report are well known and worked-through by the Client when the draft report is issued. The Consultant shall prepare a *final RAP/LAP/LRP Report* within 1 month of the receipt of the Client's comments to the draft report and the final report shall include the results of an evaluation of the comments with any necessary changes. The duration for preparation of the Resettlement Action Plan shall not exceed three (3) months.

### REPORTING FORMAT

All reports including appendices, drawings etc., shall be submitted both in paper copy and in electronic copy (editable version – Excel or Word files etc.). All reports/documents shall be prepared in the English language. All reports (except the progress report) shall have executive summaries, with maps and some photographs.

The Draft and Final RAP Report shall each be submitted as separate reports consisting of one Main Volume (A4 format) and with an appropriate number of volumes for appendices, drawings, photographs etc., in A4 or A3 format as appropriate.

Any changes to the reporting schedule and contents shall be raised and agreed in consultation between the Consultant and the Client.

# **KEY EXPERTS**

The Consultant must be a corporate firm or a consortium of firms that satisfies the following criteria:

- Team Leader shall have at least ten (10) years of experience in preparing environmental and social impact assessment for Small Hydro Power Plants and Electricity Transmission and Distribution lines;
- Second Expert shall be an Environmental Specialist preferably a local consultant or one with experience in Liberia and shall have at least five (5) years of experience in ESIA preparation for Electricity Power Systems and Networks;
- Possession of adequate and proven experience in ESIA for small hydropower projects, social studies and RAP, including in particular indigenous peoples, involuntary resettlement and livelihood restoration planning;

- Possession of adequate, qualified and experienced key personnel and logistic resources to carry out the assignment;
- Knowledge of Liberia or at least sub-Saharan Africa, and an appropriate language skill mix within the team to carry out field work, interact with project stakeholders and produce written materials in both English and Liberian local language at the project site;

# AVAILABLE DOCUMENTATION & INFORMATION

The following documentation and information will be made available to the Consultant after start of the Consulting Contract. All listed reports and data are intended as preliminary information, subject to verification by the Consultant.

- i. Feasibility Study of River Gee mini hydropower project (15/04/2016);
- ii. Environmental & Social Management Framework and Resettlement Policy Framework for SREP Liberia
- iii. Basic studies on hydro-electric power development in the Republic of Liberia; November 1975; Japan International Cooperation Agency (JICA)
- iv. Electricity Supply in Liberia, European Development Fund, European Commission and Coordination Office, Geosciences srl, March 1998
- v. Pre-feasibility study on the development of power in Liberian rural areas; November 1983, Decon
- vi. Liberia Energy Sector Support Programme LESSP, Identification of Potential Hydropower Sites in Bong, Nimba and Lofa Counties, January 2011
- vii. The Rural Energy Strategy and Master Plan, published in 2016.

# Annex 1 RIVER GEE MINI - HYDROPOWER PROJECT SITE



