



Integrated Fisheries Sector Strengthening Project (IFSSP)
National Fisheries & Aquaculture Authority
P. O. Box 10-1384
United Nations Drive, Bushrod Island
1000 MONROVIA 10, LIBERIA



Terms of Reference

For

The conduct of

Feasibility and Environmental and Social Impact Assessment (ESIA)

for the construction of a Modern Fish Processing Factory in Buchanan, Grand Bassa County.

under the

Integrated Fisheries Sector Strengthening Project (IFSSP)

15809P

June 3, 2025

1. Background

Liberia's fisheries sector offers significant economic and food security potential. However, the absence of adequate processing and preservation infrastructure leads to high post-harvest losses and missed market opportunities. To address this gap, the Government of the Republic of Liberia has received funding from the OPEC Fund for International Development for the implementation of the "Integrated Fisheries Sector Strengthening" Project and intends to apply part of the proceeds of this fund for eligible payments under the contract for Consulting services for the conduct of A feasibility study and an Environmental and Social Impact Assessment (ESIA) for the issuance of an environmental permit for the construction and operation of a modern fish processing factory in Buchanan, Grand Bassa County. The feasibility analyses (FA) will provide the decision makers with the necessary baseline and information to justify the proposed investment from a technical, economic, environmental and social development point of view, including the proposed financing and implementation modalities. A key component of the study is to determine economic and financial feasibility based on projections of financing, operating costs, revenues, and profitability, as well as sensitivity analyses in relation to key internal and external parameters and constraints, and the investment impacts on the economic objectives of the country. The FA will inform the choice of design and scale of the fish processing factory.

To ensure the project is viable and sustainable, this assignment will deliver a comprehensive Feasibility Study along with an Environmental and Social Impact Assessment (ESIA). This integrated TOR outlines the scope, methodology, and deliverables required to guide evidence-based planning and responsible implementation of the project.

2. Objectives of the Assignment

The assignment has three primary objectives:

1. To assess the technical, economic, market, and operational feasibility of establishing a modern fish processing factory in Buchanan.
2. To propose several options for the design and operation of the processing factory, including the governance arrangements to run the economic activities in a sustainable manner that provide shared benefits for all actors of the fisheries sector including small-scale operators.
3. To develop a comprehensive Environmental and Social Impact Assessment (ESIA) in accordance with national regulations and international best practices, ensuring the proposed project is environmentally and socially sustainable.

3. Scope of Work

The consultant/firm shall undertake the following tasks, organized into two main components:

Component 1: Feasibility Study

1. Assess the current situation and identify the current and future fisheries resources based on the existing data and estimate likely sustainable yields for each fish catch/species taking into consideration the impact of illegal fishing and climate change. Estimate the results on offshore infrastructure requirements.
2. Collect, analyze and describe the most current technical and socio-economic information available on the project's geographic location and the project beneficiaries.
3. Assess the markets and revenues and identify financial and economic risks and mitigation measures.
4. Assess the infrastructure intended and determine whether it is favorable socially, technically and economically, and provides the most financial and economic benefits to Liberia.
5. Analyze the lessons drawn from other similar structures in the region.
6. Estimate operating costs and potential revenues from the infrastructure investment and prepare a business plan for the fish processing factory.
7. Assess the skills gaps within Liberia and particularly in the project area to operate the infrastructure and the possibility of a PPP/ leasing arrangement and make recommendations.
8. Carry out initial consultations with key project stakeholders and beneficiaries of the proposed investment. Provide records of stakeholder consultations.
9. Prepare an assessment report based on the technical, financial, economic, and institutional feasibility of the proposed infrastructure investment.
10. Prepare various scenarios of management plans and discuss with the stakeholders for the most suitable choice based on sound sustainability indicators.
11. Make recommendations on the scale of the infrastructure, proposing various options, and including scale and type of facilities, associated facilities, scale of social infrastructure, and the factory design, layout, and capacity.

Component 2: Environmental and Social Impact Assessment (ESIA)

The proposed activities are on the Environmental Protection Agency (EPA) of Liberia mandatory list of projects, activities and undertakings that are subjected to the conduct of an ESIA. A full ESIA is therefore required for the proposed construction, operation, and decommissioning activities covering:

1. Identification of the extent of the site suitability in relation to construction and operational activities of the project design, including land ownership and title deeds;
2. Geotechnical investigation for the study area to determine the soil properties (load-bearing capacity stratigraphy, and porosity/permeability characteristics for the borewell, including water tests);

3. Assess the potential impacts of the overall project operations and other ancillary facilities,
4. Environmental, social, health and safety management of construction, operation activities, and decommissioning.

The ESIA report will be prepared to satisfy the requirements of the World Bank Environmental and Social Framework (ESF), the World Bank Group General Environment, Health, and Safety Guidelines (EHSGs), the EHSGs for Fish Processing, and National environmental laws and regulations. The ESIA will also be prepared to be fully compliant with all relevant national environmental policies, laws, and guidelines, including the Environmental Protection and Management Law of Liberia and the EPA EIA Procedural Guidelines.

3.2.1 Indicative Outline of the ESIA

The objectives of the ESIA are to ensure that all environmental, health and safety and social risks and impacts due to construction, operation and decommissioning of the proposed cluster of activities are evaluated and mitigation measures provided in the form of an Environmental and Social Management Plan (ESMP) including an Occupational Health and Safety Plan (OHS Plan), which also should address Community Health and Safety Risks.

The assignment will include the following tasks:

Task 1: Project Description Statement (PDS). Concise description of the proposed project and its geographic, environmental, social and temporal context, including any offsite investments that may be required (e.g. access roads, power and water supply), as well as the project's primary suppliers. Through consideration of the details of the project, the ESIA must indicate the need for any plan to meet the requirements of ESSs1 through 10. Include the project site and the areas that may be affected by the project's direct, indirect, and cumulative impacts. Include a summary of the Feasibility Study and the preliminary design. The PDS shall provide a description of the proposed development as follows:

- a. Current topographic survey of the project site at a scale not smaller than 1:1000 showing all salient features, including but not limited to access within the town area, utilities, existing buildings etc.;
- b. Details and cross-sections of existing structures within the project area;
- c. Details and cross sections of planned fish processing factory;
- d. Detailed geotechnical description of the site;

- e. Layout, size and capacity of resource networks if present in the area;
- f. Detailed traffic analysis in and around the project area with special reference to the quantification of traffic flows, quantification of pedestrian flows, identification of committed routes and existing property boundaries.

Task 2: Baseline Data. The consultant shall evaluate and present baseline data on the relevant national and site-specific environmental, social and economic characteristics which include a *minimum* the following chapters:

- Climatic characteristics
- Morphological and Topological characteristics
- Geological characteristics
- Freshwater and Seawater environment, as appropriate
- Air environment
- Noise
- Biotic environment
- Socioeconomic environment
- Technical infrastructures
- Assess risks and impacts of pit latrines on groundwater and recommend appropriate locations for situating latrines;
- Assess the suitability of boreholes and conduct groundwater sampling for physio-chemical parameters and bacteriological quality. A detailed borehole report must also be inclusive; and
- Existing pressures on the human and natural environment
- **Gender-based violence (GBV)** screening and assessment

Task 3: Environmental and Social Risks and Impacts. Analysis should take into consideration all relevant environmental and social risks and impacts of the project. Analysis shall include the environmental, social and health and safety risks specifically identified in ESSs2 to 8, and any other environmental, social, health and safety risks and impacts arising because of the specific nature and context of the project, including risks and impacts identified in ESS1, paragraph 28.

Task 4: Mitigation Measures. Identifies mitigation measures and significant negative residual impacts that cannot be mitigated and, to the extent possible, assess the acceptability of those residual negative impacts. Identifies differentiated measures so that adverse impacts do not fall disproportionately on the

disadvantaged and vulnerable. Assesses the feasibility of mitigating the environmental and social risks and impacts; the capital and recurrent costs of proposed mitigation measures, and their suitability under local conditions; the institutional, training and monitoring requirements for the proposed mitigation measures. Specifies issues that do not require further attention, providing the basis for this determination.

Task 5: Stakeholder analysis. Identify the various groups who may be directly affected by the project and those that have an interest or a stake in the project. Examine opportunities and conditions for participation by stakeholders – particularly the poor and vulnerable – in the development process (e.g. contributing to project design, implementation and/or monitoring; influencing public choices and decision-making; etc.). Assess potential social conflict/tensions associated with the construction of the fish processing factory. Propose stakeholder plan to facilitate engagements before, during and after project implementation.

Task 6: Analysis of Alternatives. Compare feasible alternatives to the proposed project site to inform design and operation – including the “without project” situation – in terms of their potential environmental and social impacts. Assesses the alternatives’ feasibility of mitigating the environmental and social impacts; the capital and recurrent costs, and their suitability under local conditions; the institutional, training and monitoring requirements for the alternative mitigation measures. For each of the alternatives, quantifies the environmental and social impacts to the extent possible and attach economic values where feasible.

Task 7: Design Measures. Sets out the basis for selecting the particular project design proposed and specifies the applicable EHSGs or recommended emission levels and approaches to pollution prevention and abatement that are consistent with GIIP.

Task 8: Prepare an Environmental and Social Management Plan (ESMP), which includes an Occupational Health and Safety Plan, also addressing Community Health and Safety, as a stand-alone document, since it needs to be included in the Bidding Documents and Contractor Contracts. The ESMP should include a set of mitigation, monitoring and institutional measures to be taken during construction, operation and decommissioning of the Project. The ESMP also should include measures and actions to implement these mitigation measures.

Task 9: Monitoring. The ESMP specifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the ESIA and the mitigation measures described in the ESMP.

Task 10: Capacity development and training. The ESMP should provide a detailed and specific description of institutional arrangements, the requirement for the different parties to establish and implement an Environmental and Social Management System as required by ESS1, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g., operation, supervision, enforcement, monitoring of implementation), remedial action, financing, reporting and staff training.

Task 11: Implementation schedule and cost estimates. For all three aspects (mitigation, monitoring and capacity development) the ESMP provides: a) implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans (e.g., some mitigation measures need to be integrated in the detailed design to mitigate impacts during operation); and b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP.

Task 12: Integration of ESMP with project. Integrate the ESMP in the Environmental and Social Commitment Plan (ESCP) and finalize the ESCP.

Task 13: ESIA and ESMP disclosure and public consultation - Consults affected population, stakeholders, NGOs and other interested groups at least twice: (a) shortly after environmental screening and (b) once a draft ESIA report and ESMP are prepared. Disclosure and consultations should be carried out in compliance with the requirements of the World Bank policy ESS 1, and ESS 10.

Task 14: Vehicle Traffic Studies: The consultant must also conduct a detailed traffic analysis in and around the project area with special reference to the quantification of traffic flows, quantification of pedestrian flows, identification of committed roads, baseline air quality data and noise levels at selected points and identification of development planning likely to generate excess traffic.

Task 15: Socio-economic Studies: conduct an assessment of the population, land use, particularly agricultural land use in the area, planned development activities, settlement and community structures, employment, distribution of income, goods, and services, recreation, health and cultural properties.

Task 16: Stakeholders Engagement Plan. The Consultant shall develop a Stakeholders Engagement Plan (SEP) that provides an inclusive process for engaging stakeholders throughout the project life cycle. The SEP must be designed in a culturally appropriate, clear, and transparent manner that demonstrates the significance of the project development objectives. The SEP must be prepared in accordance with the 10th

standard (ESS 10) of the World Bank Environmental and Social Framework (ESF) and the Environmental Protection and Management Law of Liberia, 2002 and the Revised Environmental Impact Assessment Guidelines of Liberia, 2022.

Task 17: Resettlement Action Plan. The consultant will prepare a Resettlement Plan proportionate to the subprojects impacts on economic/physical displacement due to land acquisition or land use restriction per ESS5 requirements. The Resettlement Plan will identify the project affected persons (PAPs), engage them in participatory discussions regarding the plan and formulating a plan of action to adequately compensate people for their losses. Specifically, the consultant will:

- Review relevant project documents. The documents to be reviewed would include project related document, resettlement policy framework, environmental and social management framework project feasibility study, the preliminary project design, and relevant socioeconomic and legal documents etc.
- Carry out various socioeconomic surveys and studies. Various studies need to be carried out for preparation of the RAP, including socioeconomic survey and inventory survey. The socioeconomic studies and consultations should be carried out in a gender sensitive manner. The studies should identify and gather information (numbers, current socio-economic status, skills etc) on vulnerable groups in order to be able to design specific assistance measures for these groups.
- Develop the methods for valuing the affected assets. The consultant should develop and describe in detail the methods used in valuing those assets that will be eligible for compensation either as per national or World Bank regulation on Land Acquisition and Involuntary Resettlement (ESS 5).
- Carry out consultations with various project stakeholders, including project-affected people, on resettlement options, compensation standards, livelihood and income restoration measures, institutional arrangements, and grievance redress mechanisms.
- Develop the resettlement measures. The consultant will need to design a package of resettlement measures for income restoration, livelihood rehabilitation, and relocation for each category of eligible displaced persons to achieve the resettlement policy.
- Design Grievance Redress Mechanisms (GRM) applicable to local social context based on the GRM previously developed for the entire project.

Task 18: Labor Management Procedures: The Labor Management Procedures (LMP) shall be developed in accordance with the World Bank Environmental and Social Standards 2: Labor and Working Conditions.

It must set out the approach to meeting national requirements as well as the objectives of the World Bank's Environmental and Social Framework. The LMP must labor risks as it relates to labor and working conditions and occupational health and safety.

3.2.2 Expected outputs and deliverables

The environmental and social impact assessment consulting firm will be responsible for the standard of workmanship of the output of the specialist sub-contractors and consultants hired to carry out any of the fieldwork.

3.2.3 Stakeholder Engagement Plan (SEP)

The consulting firm and the Government are required to engage with stakeholders as an integral part of the project's environmental and social assessment and project design and implementation, as outlined in ESS1 and 10 of the World Bank Environmental and Social Framework. The consultant will be required to develop a SEP that facilitates this engagement throughout the life of the project. The consulting firm will be required to submit a draft SEP along with the Final Draft ESIA Report. The ESIA/ESMP needs to explain how stakeholder concerns and proposals have been addressed in the ESIA/ESMP.

3.2.4 Labour Management Procedure

Labour Management Procedure (LMP) under ESS2 on Labour and Working Conditions is required for this project. The purpose of the LMP is to facilitate planning and implementation of the project. The consulting firm will be required to update and incorporate the project LMP along with the Final Draft ESIA. The Contractor will be required to prepare and implement a Labour Management Plan. This requirement will be part of the Bidding Documents.

4. METHODOLOGY

4.1 Feasibility studies

In order to carry out the above tasks, the firm will be required to propose several options (design, location, etc.) for the subject infrastructure and adopt the Fisheries Infrastructure Assessment Tools (FIAT), which provides a useful framework and checklist as the core methodological guide to implement the assignment. Additionally, the firm should apply methodologies that incorporate the following so as to meet the objective of this consultancy:

4.1.1 Technical Feasibility Assessment

- a. Prepare technical feasibility assessment for the fish processing factory infrastructure investments, including long-term sustainability of operation and maintenance, and possible cost recovery.
- b. Assess gender needs, roles, and dynamics with attention to constraints, risks and opportunities for women.

4.1.2 Economic and Financial Feasibility Assessment

In accordance with guidelines acceptable to the client and the OPEC Fund and as per good international industry practices (GIIP), the firm will carry out an economic and financial assessment of the options discussed for the proposed investments. The firm will do so by using economic and financial valuation methods that can best demonstrate all expected outcomes in costs and positive effects between the interventions and project beneficiaries within a time horizon that is long enough to justify the project interventions and derive development impacts. The firm will create a baseline scenario including:

- Identification of all assets to be financed by the OPEC Fund, including all initial costs (infrastructure, equipment, marketing, training, institutional strengthening, etc.) required to commence operation of the fish processing factory (i.e. total estimated project cost)
- Development of a fully allocated operating model (including employment).
- Construction of a financial model that enables forecasting of cash flow, revenue, and profitability requirements against current and incremental operating costs, debt repayments, and dividends over a period of at least 10 years. The model should provide for cost overruns and other contingencies, and
- Application of the financial model for sensitivity analyses with respect to key operating and financial parameters, based on volumes of fish landings, the 2024 fish stock assessment results, fish prices on domestic and export markets, labor and utility costs, and variation in sales volumes, for which the following parameters will be finalized:
 1. Net Present Value (NPV) considering a 15% discount rate;
 2. Benefit-Cost Ratio (BCR) considering a 15% discount rate; and
 3. Internal Rate of Return (IRR).
- Using the data generated to prepare a business plan for the different proposed options of the fish processing factory. The business plan should be structured around, but not limited to, the following

key components: Business Description, Market Analysis, Products and Services, Operations Plan, Marketing and Sales Strategy, Management and Organization, Financial Plan, Risk Analysis and Mitigation, and Implementation Timeline.

4.1.3. Institutional and management feasibility assessment

- a. Outline the capacity needed for the planning, operations, management and maintenance of the proposed infrastructure.
- b. Assess institutional capacity for overall gender awareness and particularly in fisheries governance and management. Identify gender gaps and recommend relevant measures for filling the gaps including gender integration and capacity building and suggest optimum levels of female participation and staffing in the operations, management and maintenance of the proposed infrastructure.
- c. Develop an operational/management plan for management of the fish processing factory that will enable it to operate on a self-sustaining basis.
- d. Develop an outline of the capacity building plan for the proposed staffing needs of the factory with a timeline that meets the management and operational needs of the fish infrastructure.

4.2 ESIA studies

4.2.1 Detailed methodology, outputs/deliverables for vehicle traffic impact studies

A detailed traffic analysis in and around the project areas during construction and operations will be required, with special reference to:

- quantification of current and projected traffic flows (trucks and private vehicles);
- quantification of pedestrian flows between the site and the main road;
- identification of committed arterial routes within the town limits;
- baseline air quality data;
- noise levels at selected points, including noise from auxiliary engines;
- identification of development planning likely to generate excess traffic.

4.2.2 Detailed methodology, outputs/deliverables for socio-economic studies

The implementation of the landing site is expected to have major positive results on the fisheries sector. The socio-economic studies will cover the project proposals holistically and will include the anticipated effects on:

- The labour market during the construction and operational phase;

- The adverse impacts on human habitation around the project sites during both construction and operation due to increased noise and air pollution;
- The housing market and real estate during the operational phase;
- Socio-cultural activities and places of worship;
- The potential for traffic accidents (at sea and on the access road);
- The generation of increased wastes of all types.

5. Deliverables

The Consultant will produce the following deliverables (described further below):

1. Inception Report for Feasibility Assessment and ESIA
2. Draft Feasibility Assessment Report and ESIA
3. Final Feasibility Assessment Report and ESIA

The preparation and delivery of the above documents will be organized and presented in three steps, as follows:

1. Inception Report submitted within 6 (six) weeks of contract signing: The Consultant will submit an Inception Report detailing the methodological approach for the entire assignment covering all items under "Scope of Services" and "Methodology" as outlined in this Terms of Reference. The Inception Report will inter alia describe the method of data collection including field work plan, verification, field work with project stakeholders and beneficiaries, and analysis. The Inception Report will provide an outline of the team tasks and team members' inputs and deliverables. The Inception Report will provide a list of the available/collected information, identify studies to be carried out and timeline to fill in the gaps. It will comment on the TOR and propose changes / clarification (if any) to the TOR. This Inception Report will be subject to review and comment by the NaFAA and the OPEC Fund for International Development. The Consultant will revise the inception report based on those comments. The final Inception Report will be submitted to the NaFAA after incorporation of comments.
2. Draft Feasibility Assessment (FA) Report and scoping report and ESIA submitted **4 (four) months** after contract signing. The Consultant will prepare a Draft FA Report covering all tasks under the assignment with specific recommendations on the feasibility of project interventions. It will be accompanied by a draft executive summary. After submission of the draft reports, a presentation

shall be disseminated to the Client for obtaining feedback. The Client's comments on the draft final report will be incorporated in the final report.

3. Final Feasibility Assessment Report and ESIA, including the final scoping report submitted **6 (Six) months** after contract signing. This deliverable should include all the review comments and suggestions by the client, OPEC Fund for International Development and other relevant stakeholders. It will include all relevant data in a tabulated format used by the Consultant for the baseline, raw and processed data, toolkits and questionnaires used for the social-cultural assessment, and other supplemental information that will constitute the project file. The ESIA will be submitted to the EPA by the Consultant for approval and permit. The Reports will be prepared in the English language.

6. Team Composition and Qualifications

In order to complete the feasibility study, the firm will assemble a multi-disciplinary team of technical design engineer, financial and economic, environmental and social, and Marine ecological and biodiversity experts with substantial experience (no less than 8 years) and adequate educational backgrounds (Master's degree and higher) who will ensure the services are carried out in a professional and timely manner. The leader of the feasibility and ESIA studies shall have at least 15 years of relevant experience, and 10 years of experience for other key staff in similar fisheries infrastructure development or related projects.

7. CLIENT RESPONSIBILITIES

The client, NaFAA, will provide timely access to available data, reports and information, and to relevant personnel of NaFAA and officials of government institutions with important roles in achieving the objectives of this term of reference. NaFAA will also provide a favourable work environment and logistical support for the consultant, and support/facilitate stakeholder consultations. NaFAA will review all draft reports and provide comments and suggestions to enable the consultant to finalize the reports.

8. CONSULTANT RESPONSIBILITIES

Data, personnel, facilities and services will be provided by the Consultant as detailed in this ToR. The Consultant will mobilize the necessary expertise for the effective delivery of the services as stipulated in the scope of works and ToR. The Consultant will carry out the services in the best interest of the Client, the GoL represented by NaFAA, with reasonable care, skills and diligence in line with sound professional, administrative and financial practices. Field surveys and field data collection will be carried out in

coordination with the Department of Statistics & Research, NaFAA. The Consultant will be responsible to the client for the execution of the contract according to the terms and conditions spelled out therein. The consultant will organize presentations and dissemination events to enable the monitoring of progress and study results by the relevant NaFAA personnel.

9. PAYMENT SCHEDULE

Payment will be made according to the following schedule:

- i. 10% after signing the contract and upon submission of an advance payment guarantee
- ii. 30% after submitting the Inception report
- iii. 40% after submitting the draft feasibility and ESIA reports
- iv. 20% after submitting the final reports

All the payments will be made only after acceptance of the reports and deliverables by the Client.

10. DURATION OF CONSULTANCY: Six months

11. LOCATION: Monrovia, with occasional travel to project community

12. PROCUREMENT METHOD: Quality and Cost Based Selection (QCBS)