



**REQUEST FOR PROPOSAL (RFP)
(Services)**

Date: September 10, 2021

REFERENCE: **UNDP/UGA/RFP/2021/010**

Dear Sir / Madam:

We kindly request you to submit your Proposal to **Conduct a Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda**

Please be guided by the form attached hereto as Annex 2, in preparing your Proposal.

Proposals may be submitted on or before **Sunday, September 19, 2021** and via email to the address below:

tenders.kampala@undp.org

Your Proposal must be expressed in the English, and valid for a minimum period of 90 days

In the course of preparing your Proposal, it shall remain your responsibility to ensure that it reaches the address above on or before the deadline. Proposals that are received by UNDP after the deadline indicated above, for whatever reason, shall not be considered for evaluation. If you are submitting your Proposal by email, kindly ensure that they are signed and in the .pdf format, attachments should be a maximum of 35MB and free from any virus or corrupted files.

Services proposed shall be reviewed and evaluated based on completeness and compliance of the Proposal and responsiveness with the requirements of the RFP and all other annexes providing details of UNDP requirements.

The Proposal that complies with all the requirements, meets all the evaluation criteria, and offers the best value for money shall be selected and awarded the contract. Any offer that does not meet the requirements shall be rejected.

Any discrepancy between the unit price and the total price shall be re-computed by UNDP, and the unit price shall prevail, and the total price shall be corrected. If the Service Provider does not accept the final price based on UNDP's re-computation and correction of errors, its Proposal will be rejected.

No price variation due to escalation, inflation, fluctuation in exchange rates, or any other market factors shall be accepted by UNDP after it has received the Proposal. At the time of Award of Contract or Purchase Order, UNDP reserves the right to vary (increase or decrease) the quantity of services and/or goods, by up to a maximum twenty-five per cent (25%) of the total offer, without any change in the unit price or other terms and conditions.

Any Contract or Purchase Order that will be issued as a result of this RFP shall be subject to the General Terms and Conditions attached hereto. The mere act of submission of a Proposal implies that the Service Provider accepts without question the General Terms and Conditions of UNDP, herein attached as Annex 3.

Please be advised that UNDP is not bound to accept any Proposal, nor award a contract or Purchase Order, nor be responsible for any costs associated with a Service Providers preparation and submission of a Proposal, regardless of the outcome or the manner of conducting the selection process.

DocuSign Envelope ID: 8F020780-F880-414B-A398-851E61E6FF73) afford an opportunity to appeal for persons or firms not awarded a Purchase Order or Contract in a competitive procurement process. In the event that you believe you have not been fairly treated, you can find detailed information about vendor protest procedures in the following link:

<http://www.undp.org/content/undp/en/home/operations/procurement/business/protest-and-sanctions.html>

UNDP encourages every prospective Service Provider to prevent and avoid conflicts of interest, by disclosing to UNDP if you, or any of your affiliates or personnel, were involved in the preparation of the requirements, design, cost estimates, and other information used in this RFP.

UNDP implements a zero tolerance on fraud and other proscribed practices, and is committed to preventing, identifying, and addressing all such acts and practices against UNDP, as well as third parties involved in UNDP activities. UNDP expects its Service Providers to adhere to the UN Supplier Code of Conduct found in this link :

https://www.un.org/Depts/ptd/sites/www.un.org.Depts.ptd/files/files/attachment/page/pdf/unscoc/conduct_english.pdf

Thank you and we look forward to receiving your Proposal.

Sincerely yours,

Abdourahmane Bouacar Dia

Abdourahmane Dia
Head of Procurement a.i.

9/10/2021

Description of Requirements

Context of the Requirement	<p>The United Nations Development Programme (UNDP) in Uganda is supporting the Government of Uganda through the Uganda-UN Joint Programme titled “Integrating policy and financing for accelerated progress on SDGs in Uganda” to develop an Integrated National Financing Framework (INFF) in line with the Addis Ababa Action Agenda (AAAA) for financing the SDGs. The two-year (2020-2022) Joint Programme is being implemented by Government of Uganda and three UN Agencies —UNDP, UNCDF and UN WOMEN under the technical leadership of UNDP and overall leadership of the UN Resident Coordinator (RC). The Joint Programme aims at supporting Government of Uganda’s efforts to enhance the implementation of SDGs through aligning planning, policies, and financing; ensuring effective public finance management; enhancing domestic resource mobilization and alignment of private flows with national priorities; and enhancing accountability mechanisms.</p> <p>The SDG Fund project is premised on two outcomes and 4 outputs. Outcome 1: National and sub national planning, budgeting, policy functions, processes, systems and finance are integrated to deliver national priorities and respond to the needs of most at vulnerable groups of people has three outputs: Output 1.1: The governance mechanisms and tools that align policies and annual budget to the national development plan are strengthened; Output 1.2: Institutional frameworks to support effective public finance management and integrated financing reinforced; and Output 1.3: The capacity of oversight institutions, legislative organs and citizens especially inclusion of the most vulnerable groups to monitor progress towards national priorities and SDG strengthened. Outcome2: Diverse sources of development finance mobilized to implement interventions contained in the NDP III and District Development Plans (DDPs), has two outputs namely: Output 2.1: Enabling environment created to attract private and innovative financing to national priorities; and Output 2.2: Increased mobilization and contribution of Local Government (two selected DINU LGs) own-source revenue towards SDGs implementation.</p> <p>Specifically, under Output 2.1, the JP aims to facilitate development of bankable projects identified in the NDP III for private sector engagement. To this end, UNDP in collaboration with the National Planning Authority (NPA) intend to conduct a Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda, which will contribute to the implementation of the strategic intervention of strengthening systems for management of vectors, pests, and diseases under NDP III objective one of increasing agricultural production and productivity.</p> <p>The Livestock industry is an important component of Uganda’s agro-industrialization agenda and holds great potential towards realization of the country’s long-term goal of upper middle-income status by 2040. The third National Development Plan (NDP III) identifies dairy and beef as priority commodity value chains for investment to enhance farm incomes, increase food security and export earnings. Livestock contributes about 13.7 percent of agricultural value added and 4 percent of GDP and is one of the fastest growing sectors in agriculture. The sub-sector is projected to grow even faster in the medium and long-term driven by the increasing demand for animal-based foods and proteins due to growth in population, rise in incomes of households and urbanization.</p> <p>However, attainment of these envisaged outcomes requires addressing critical bottlenecks along the livestock value chain that have hampered the commercialization of the sector. These bottlenecks include livestock diseases, vectors, and pests; limited access and use of improved breeds; shortage of land; low use of improved purchased inputs; and reliance on low value markets characterized by poor food safety, sanitary and phytosanitary standards.</p> <p>Livestock diseases, vectors and pests are endemic in Uganda and greatly constrain livestock production and productivity and contribute to heavy losses at farm and national level. These diseases and vectors include: Ticks and tick-borne diseases, Food and Mouth disease (FMD), New castle disease for poultry, African swine fever (ASF) for pigs, Contagious Bovine Pleuropneumonia (CBPP), Peste de petit ruminants (PPR) among others. Effective control of these diseases requires access to adequate quantities of quality, safe and efficacious veterinary medicines and vaccines and their rational use. Vaccines act by stimulating the host immunity against target pathogens and have been used to save hundreds of millions of animals worldwide and subsequently sustaining livestock-based livelihoods. Adequate control of live-stock diseases using vaccines is mainly challenged by local pathogen strain diversity, their evolutionary trends across the various landscapes and the low investment into innovative vaccine research prospects.</p> <p>To reduce on the animal disease burden, the Government of Uganda has supported research and development efforts in livestock disease vaccine development by National Agriculture Research Organization (NARO) and Universities. To date, through these investments, NARO has developed three candidate tick vaccines namely NARO-RA, NARO-BD, and NARO-AV for the control of R. Appendiculata’s (Brown ear tick), R. Boo. Decoloratus (Blue tick) and Amblyomma variegatum (Bont-legged tick) respectively. These candidate tick vaccines have been sufficiently evaluated under well</p>
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	<p>adult tick stages belonging to the Brown ear, Blue and Bont-legged tick species. Pilot production commenced and Clinical trials on the candidate vaccines are ongoing country wide by region. The tick candidate vaccines will check the development of ticks' resistance to acaricides, which is another bio-logical phenomenon the country is currently battling with.</p> <p>In the research for FMD vaccine production, NARO is still in the applied research phase where scientists have assembled an FMD virus pathogen bank comprising of 40 FMD Virus samples. Identification and characterization of at least 20 FMD virus isolates from 4 regional outbreaks for propagation on the most efficient cell line to enable selection of multiple viruses that can be aligned for seed vaccine candidates is in progress. More research on the East coast fever vaccine and the African Swine fever vaccine is in its primary stage.</p> <p>Vaccine development and commercialization has the following phases: Priority setting, basic and applied research, pilot production, clinical evaluation, full scale pro-duction and commercialization. Through government investments, the first four stages have been undertaken and yielded products that need to be scaled out and commercialized for onward distribution and marketing, and subsequently farmer access and utilization. This undertaking requires the identification of suitable models and partners for investments in the commercialization of the vaccines.</p> <p>Towards this endeavor, the Government of Uganda through National Planning Authority and with support from United Nations Development Program (UNDP) seeks to undertake a feasibility study to assess the economic, technical, financial, environ-mental, and social viability of investments in commercialization of livestock vaccines specifically anti-tick vaccines developed by NARO.</p>		
Implementing Partner of UNDP	National Planning Authority		
Brief Description of the Required Services	A firm to conduct a Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda		
List and Description of Expected Outputs to be Delivered	<i>Deliverable</i>	<i>Expected Completion</i>	<i>Review and Approvals Required</i>
	1. An acceptable inception report on the assignment detailing the understanding/interpretation of the assignment, the proposed methodology for carrying out the assignment, work plan, tools, and implementation schedule	Within 2 weeks of contract start date	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
	2. Acceptable Draft Reports including: i) Detailed project Concept note and profile, ii) Comprehensive Prefeasibility and feasibility study reports, iii) Financial and economic analysis models Ms-Excel sheets, iv) Industrial Master Plans and Engineering designs for the project (architectural, structural, mechanical, electrical), v) Report on Equipment requirements for the project, vi) Strategic Environmental Social Impact Assessment (SESA) report	Within 2 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
	3. Acceptable report on the all the required stakeholder consultations and validation exercises with key stakeholder comments and how they were addressed	Within 3 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
	4. Acceptable final reports final feasibility study report incorporating comments received from the stakeholders on the draft report.)	Within 4 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
	5. Acceptable process report	Within 4 months	Manager, Project Development, and Investment Planning, NPA

Person to Supervise the Work/Performance of the Service Provider	<i>The National Planning Authority and UNDP will be responsible for the coordination and overall supervision of the assignment</i>
Frequency of Reporting	<i>As needed, based on planning of the assignment</i>
Progress Reporting Requirements	Update on the milestones and detailed plans
Location of work	Kampala
Expected duration of work	4 calendar months
Target start date	1 st October 2021
Latest completion date	1 st February 2022
Travels Expected	N/A
Special Security Requirements	N/A
Facilities to be Provided by UNDP (i.e., must be excluded from Price Proposal)	<input checked="" type="checkbox"/> Access to information relevant to assignment All costs needed to achieve the deliverables set forth in this RFP are to be included in the financial proposals from the offerors (professional fees, equipment lease, communication, consumables, etc.)
Implementation Schedule indicating breakdown and timing of activities/sub-activities	<input checked="" type="checkbox"/> Required. To be included in the Technical proposal. Note: the detailed Terms of Reference are depicted in Annex 4 of this RFP
Names and curriculum vitae of individuals who will be involved in completing the services	<input checked="" type="checkbox"/> Required. Technical proposals must identify who in the organization would be taking the role of Team Leader and specify the roles of the different staff proposed.
Currency of Proposal	<input checked="" type="checkbox"/> Local Currency (UGX)
Value Added Tax on Price Proposal	<input checked="" type="checkbox"/> must be exclusive of VAT and other applicable indirect taxes
Validity Period of Proposals (Counting for the last day of submission of quotes)	<input checked="" type="checkbox"/> 90 days In exceptional circumstances, UNDP may request the Proposer to extend the validity of the Proposal beyond what has been initially indicated in this RFP. The Proposal shall then confirm the extension in writing, without any modification whatsoever on the Proposal.
Partial Quotes	<input checked="" type="checkbox"/> Not permitted
Payment Terms	A lump sum payment, in three tranches, shall be made upon successful completion and certification of work done as indicated in this Terms of Reference.

	Payment Releases	Percentage (%)	Timing (after contracting)
	Upon submission of an inception report, with a detailed work plan and agreement on the methodology for the assignment	20	Within 2 weeks of contracting
	Upon submission of the First draft report	30	Within 2 months of contracting
	Upon certification of completion of the final feasibility study and process reports.	50	Within 4 months of contracting
Person(s) to review/inspect/ approve outputs/completed services and authorize the disbursement of payment	UNDP Strategic Policy Unit Team leader and overall reporting to UNDP Resident Representative		
Type of Contract to be Signed	<input checked="" type="checkbox"/> Contract for Professional services		
Criteria for Contract Award	<input checked="" type="checkbox"/> Highest Combined Score (based on the 80% technical offer and 20% price weight distribution) <input checked="" type="checkbox"/> Full acceptance of the UNDP Contract General Terms and Conditions (GTC). This is a mandatory criterion and cannot be deleted regardless of the nature of services required. Non-acceptance of the GTC may be grounds for the rejection of the Proposal.		
Criteria for the Assessment of Proposal	<u>Technical Proposal – 1000 points (70%)</u> <input checked="" type="checkbox"/> Experience of the Firm- 300 points <input checked="" type="checkbox"/> Methodology, Its Appropriateness to the Condition and Timeliness of the Implementation Plan- 400 points <input checked="" type="checkbox"/> Management Structure and Qualification of Key Personnel - 300 points <u>Financial Proposal 30 points (30%)</u> To be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.		
UNDP will award the contract to:	<input checked="" type="checkbox"/> One and only one Service Provider		
Contract General Terms and Conditions	<input checked="" type="checkbox"/> General Terms and Conditions for de minimis contracts (services only, less than \$50,000) Applicable Terms and Conditions are available at: http://www.undp.org/content/undp/en/home/procurement/business/how-we-buy.html		
Annexes to this RFP	<input checked="" type="checkbox"/> Form for Submission of Proposal (Annex 2) <input checked="" type="checkbox"/> Technical criteria scoring table (Annex 3) <input checked="" type="checkbox"/> Detailed Technical Specifications (Annex 4)		
Contact Person for Inquiries (Written inquiries only)	ug.procurement@undp.org Any delay in UNDP's response shall be not used as a reason for extending the deadline for submission, unless UNDP determines that such an extension is necessary and communicates a new deadline to the Proposers.		

<p>DocuSign Envelope ID: 8F020780-F880-414B-A398-851E61E6FF73</p> <p>Other Information</p>	<p>bmit the following documents/information to demonstrate their qualifications in one single PDF document</p> <ul style="list-style-type: none"> • Technical proposal consisting of background information about the company other similar projects handled and CVs of the persons who will be engaged in this assignment; A section explaining the organization’s competence and experience in handling similar assignments; Proposed strategy / methodology, work plan, timeline, and training plan; Personal CVs of the Team leader and the support team indicating all experience as well as the contact details (email and telephone number) of the team members and at least three (3) professional references. • Financial proposal that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, and the budget for the assignment. • The proposal should be sent via email with the following subject heading: “Financial Proposal for Firm as per the RFP subject heading and RFP reference number” latest by 19th September 2021. • Proposals received after the deadline will be rejected. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal should be all-inclusive and include a breakdown. The term ‘all-inclusive’ implies that all costs (professional fees, travel related expenses, communications, utilities, consumables, insurance, logistical costs related to organizing the validation workshop that could possibly be incurred by the Contractor, etc).
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FORM FOR SUBMITTING SERVICE PROVIDER'S PROPOSAL*(This Form must be submitted only using the Service Provider's Official Letterhead/Stationery)*

[insert: Location].

[insert: Date]

To: [insert: Name and Address of UNDP focal point]

Dear Sir/Madam:

We, the undersigned, hereby offer to render the following services to UNDP in conformity with the requirements defined in the RFP dated [specify date] , and all its attachments, as well as the provisions of the UNDP General Contract Terms and Conditions:

A. Qualifications of the Service Provider

The Service Provider must describe and explain how and why they are the best entity that can deliver the requirements of UNDP by indicating the following:

- a) Profile – describing the nature of business, field of expertise, licenses, certifications, accreditations.*
- b) Business Licenses – Registration Papers, Tax Payment Certification, etc.*
- c) Latest Audited Financial Statement – income statement and balance sheet to indicate its financial stability, liquidity, credit standing, and market reputation, etc.*
- d) Track Record – list of clients for similar services as those required by UNDP, indicating description of contract scope, contract duration, contract value, contact references.*
- e) Certificates and Accreditation – including Quality Certificates, Patent Registrations, Environmental Sustainability Certificates, etc.*
- f) Written Self-Declaration that the company is not in the UN Security Council 1267/1989 List, UN Procurement Division List or Other UN Ineligibility List.*

B. Proposed Methodology for the Completion of Services

The Service Provider must describe how it will address/deliver the demands of the RFP; providing a detailed description of the essential performance characteristics, reporting conditions and quality assurance mechanisms that will be put in place, while demonstrating that the proposed methodology will be appropriate to the local conditions and context of the work.

C. Qualifications of Key Personnel

If required by the RFP, the Service Provider must provide:

- a) Names and qualifications of the key personnel that will perform the services indicating who is Team Leader, who are supporting, etc.*
- b) CVs demonstrating qualifications must be submitted if required by the RFP; and*
- c) Written confirmation from each personnel that they are available for the entire duration of the contract.*

Deliverable	Quantity	Lumpsum cost
1. An acceptable inception report on the assignment detailing the understanding/interpretation of the assignment, the proposed methodology for carrying out the assignment, work plan, tools and implementation schedule	1	
2. Acceptable Draft Reports including: i) Detailed project Concept note and profile, ii) Comprehensive Prefeasibility and feasibility study reports, iii) Financial and economic analysis models Ms-Excel sheets, iv) Industrial Master Plans and Engineering designs for the project (architectural, structural, mechanical, electrical), v) Report on Equipment requirements for the project, vi) Strategic Environmental Social Impact Assessment (SESA) report	1	
3. Acceptable report on the all the required stakeholder consultations and validation exercises with key stakeholder comments and how they were addressed	1	
4. Acceptable final reports final feasibility study report incorporating comments received from the stakeholders on the draft report.)	1	
5. Acceptable process report	1	
Total costs		

**This shall be the basis of the payment tranches*

E. Cost Breakdown by Cost Component (This must total to table D above)

Description of Activity	UOM	Quantity	Unit Price (UGX)	Total Amount (UGX)
I. Personnel Services				
Veterinary Expert (Team Leader)	Persons	1		
Financial and Economic Analysis Expert (Assistant Team Leader)		1		
Environmental Expert		1		
Legal Expert		1		
Civil Engineering Expert		1		
Mechanical Engineering Expert		1		
Chemical/Industrial Process Expert		1		
II. Other costs				
Travel related expenses	Lumpsum	1		
Communications	Lumpsum	1		
Utilities	Lumpsum	1		
Consumables	Lumpsum	1		
Insurance	Lumpsum	1		
Management costs of not more than 8% of the total cost	Lumpsum	1		
logistical costs related to organizing the validation workshop that could possibly be incurred by the Contractor	Lumpsum	1		
III. Other Related Costs (if applicable)				
Overall total				

[Name and Signature of the Service Provider's Authorized Person]

[Designation]

[Date]

Technical Evaluation Criteria

Summary of Technical Proposal Evaluation Forms		Points Obtainable
1.	Bidder's qualification, capacity, and experience	300
2.	Proposed Methodology, Approach, and Implementation Plan	400
3.	Management Structure and Key Personnel	300
	Total	1000

Section 1. Bidder's qualification, capacity, and experience		Points obtainable
1.1	Demonstrated understanding and experience with List of projects completed in the three(3) areas of: <ul style="list-style-type: none"> - Project planning and management (10) - Feasibility studies (10) - Local Economic Development (10) 	200
1.2	Good understanding of Public Investment Management Framework, Uganda's development framework and Agriculture value chains.	50
1.3	Good understanding of Global and National design requirements for vaccine Manufacturing plants.	25
1.4	Institutional Quality <ul style="list-style-type: none"> - Sound legal status (1) - strong financial management (2) - Demonstration of good technical, managerial and project management capabilities (2) 	25
Total Section 1		300

Section 2. Proposed Methodology, Approach, and Implementation Plan		Points obtainable
2.1	Adequate methodology corresponding to all aspects of the TOR listed under the Methodology	200
2.2	Understanding of Uganda's Public Investment Management Processes for appraisal of similar projects	50
2.3	Adequacy of proposed Workplan	150
Total Section 2		400

Section 3. Management Structure and Key Personnel		Points obtainable
3.1	Composition and structure of the team proposed. Are the proposed roles of the management and the team of key personnel suitable for the provision of the necessary services?	10
3.2	Qualifications and experience of key personnel proposed	
3.2 a	Technical Team	

	<p>Minimum requirements</p> <ul style="list-style-type: none"> • A minimum of a master's degree in veterinary medicine or related discipline, • A PhD in Veterinary medicine, Animal Health and or related field is an added advantage. • Registered with the Veterinary Registration Board • Good written and oral proficiency in English and good communication skills. <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 10 years' experience working experience postgraduation in practice, research, and consultancy services. • Experience in planning and implementing projects of a similar nature especially related animal vaccine will be desirable preferably in the Eastern and/or Southern Africa. • Knowledge of Uganda's development planning frameworks 	110
	<p>Financial and Economic Analysis Expert (Assistant Team Leader):</p> <p>Minimum requirements</p> <ul style="list-style-type: none"> • A minimum of a master's degree in economics, finance, business administration or any related discipline. • Possession Professional Qualification such as CFA, ACCA, CPA, or CIMA or related professional qualification. • Good written and oral proficiency in English and good communication skills. <p><u>General professional experience</u></p> <ul style="list-style-type: none"> • At least 10 years working experience post-graduation in the relevant field. • Experience in conducting planning and implementing projects of a related nature will be desirable. • Have specific experience in economic and financial analysis for industrial projects, preferably in the Eastern and/or Southern Africa 	60
	<p>Environmental Expert</p> <p>Minimum requirements</p> <ul style="list-style-type: none"> • A minimum of a master's degree in Environment and Conservation Management, Forestry, Environmental Economics, Engineering, or related fields • Registered with NEMA as a Team Leader • Good written and oral proficiency in English and good communication skills. <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 8 years working experience postgraduation in conducting environment impact assessment with demonstrated knowledge of the environment and natural resource landscape of Uganda. • Have specific experience in conducting environmental and impact assessments for industrial projects, preferably in the Eastern and/or Southern Africa 	20
	<p>Legal Expert:</p> <p>Minimum requirements</p> <ul style="list-style-type: none"> • A minimum of a Master's degree in law. Speciality in Land and Environmental law shall be an added advantage • Diploma in Legal Practice Good written and oral proficiency in English and good communication skills. <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 8 years of working experience postgraduation in the field of law. Experience in Legal and Commercial structuring of infrastructure projects, preferably in the Eastern and or Southern Africa. will be desirable. 	20

	<p>Minimum requirements</p> <ul style="list-style-type: none"> • A minimum of a Master's degree in Civil Engineering and/ or a related field as per the Engineering Registration Board -Uganda Civil Engineering disciplines categorization is an added advantage. • Registered or Chartered Civil Engineer • Good written and oral proficiency in English and good communication skills. <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 10 years working experience postgraduation experience in Civil or building engineering design and construction works. • Must have specific experience in pre-feasibility studies for industrial projects, preferably in the Eastern and/or Southern Africa 	20
	<p>Mechanical Engineering Expert</p> <p>Minimum requirements</p> <ul style="list-style-type: none"> • Master's degree in Mechanical Engineering, Industrial Engineering, Automotive and Power Engineering and/ or a related field as per the Engineering Registration Board -Uganda Mechanical Engineering disciplines categorization • Registered or Chartered Mechanical Engineer • Good written and oral proficiency in English and good communication skills. <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 8 years working experience postgraduation in industrial processes and equipment selection. • Graduate degree in Mechanical engineering or related engineering discipline and have specific experience in pre-feasibility studies for industrial and projects, preferably in the Eastern and/or Southern Africa 	20
	<p>Chemical/Industrial Process Expert</p> <p>Minimum requirement</p> <p>A minimum of a Bachelor's degree in Industrial Chemistry, Chemical Engineering, Mechanical Engineering, or a related field.</p> <p>Master's degree in Industrial Chemistry or Chemical Engineering or a related field.</p> <p><u>Professional experience</u></p> <ul style="list-style-type: none"> • At least 8 years' experience in Industrial/chemical process facilities. • Experience in operation of Chemical process facilities, preferably in the Eastern and/or Southern Africa. • Specific experience in operation of Pharmaceutical and or Vaccine's manufacturing plants projects is an added advantage. <p>Demonstrated experience in plant process safety design and management are an added advantage</p>	20
3.3	Adequate participation of nationals among key proposed experts	20
Total Section 3		300

TERMS OF REFERENCE

Location: Kampala
 Description of the assignment: Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda
 Additional Category: Strategy and Policy Unit
 Type of Contract: Contract for professional services
 Languages Required: English
 Starting date: 1st October 2021
 Expected Duration of Assignment; 4 calendar months.

INTRODUCTION:

1. BACKGROUND

The United Nations Development Programme (UNDP) in Uganda is supporting the Government of Uganda through the Uganda-UN Joint Programme titled “Integrating policy and financing for accelerated progress on SDGs in Uganda” to develop an Integrated National Financing Framework (INFF) in line with the Addis Ababa Action Agenda (AAAA) for financing the SDGs. The two-year (2020-2022) Joint Programme is being implemented by Government of Uganda and three UN Agencies —UNDP, UNCDF and UN WOMEN under the technical leadership of UNDP and overall leadership of the UN Resident Coordinator (RC). The Joint Programme aims at supporting Government of Uganda’s efforts to enhance the implementation of SDGs through aligning planning, policies, and financing; ensuring effective public finance management; enhancing domestic resource mobilization and alignment of private flows with national priorities; and enhancing accountability mechanisms.

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Specifically, under Output 2.1, the JP aims to facilitate development of bankable projects identified in the NDP III for private sector engagement. To this end, UNDP in collaboration with the National Planning Authority (NPA) intend to conduct a **Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda**, which will contribute to the implementation of the strategic intervention of strengthening systems for management of vectors, pests, and diseases under NDP III objective one of increasing agricultural production and productivity.

The Livestock industry is an important component of Uganda’s agro-industrialization agenda and holds great potential towards realization of the country’s long-term goal of upper middle-income status by 2040. The third National Development Plan (NDPIII) identifies dairy and beef as priority commodity value chains for investment to enhance farm incomes, increase food security and export earnings. Livestock contributes about 13.7 percent of agricultural value added and 4 percent of GDP and is one of the fastest growing sectors in agriculture. The sub-sector is projected to grow even faster in the medium and long-term driven by the increasing demand for animal-based foods and proteins due to growth in population, rise in incomes of households and urbanization.

However, attainment of these envisaged outcomes requires addressing critical bottlenecks along the livestock value chain that have hampered the commercialization of the sector. These bottlenecks include livestock diseases, vectors and pests; limited access and use of improved breeds; shortage of land; low use of improved purchased inputs; and reliance on low value markets characterized by poor food safety, sanitary and phytosanitary standards.

Livestock diseases, vectors and pests are endemic in Uganda and greatly constrain livestock production and productivity and contribute to heavy losses at farm and national level. These diseases and vectors include: Ticks and tick-borne diseases, Food and Mouth disease (FMD), New castle disease for poultry, African swine fever (ASF) for pigs, Contagious Bovine

...) among others. Effective control of these diseases requires access to adequate quantities of quality, safe and efficacious veterinary medicines and vaccines and their rational use. Vaccines act by stimulating the host immunity against target pathogens and have been used to save hundreds of millions of animals worldwide and subsequently sustaining livestock-based livelihoods. Adequate control of livestock diseases using vaccines is mainly challenged by local pathogen strain diversity, their evolutionary trends across the various landscapes and the low investment into innovative vaccine research prospects.

To reduce on the animal disease burden, the Government of Uganda has supported research and development efforts in livestock disease vaccine development by National Agriculture Research Organization (NARO) and Universities. To date, through these investments, NARO has developed three candidate tick vaccines namely NARO-RA, NARO-BD and NARO-AV for the control of *R. appendiculatus* (Brown ear tick), *R. Bo. Decoloratus* (Blue tick) and *Amblyomma variegatum* (Bont-legged tick) respectively. These candidate tick vaccines have been sufficiently evaluated under well controlled on-station experiments and have been found to have an efficacy of 90% in the control of larval, nymph and adult tick stages belonging to the Brown ear, Blue and Bont-legged tick species. Pilot production commenced and Clinical trials on the candidate vaccines are ongoing country wide by region. The tick candidate vaccines will check the development of ticks' resistance to acaricides, which is another biological phenomenon the country is currently battling with.

In the research for FMD vaccine production, NARO is still in the applied research phase where scientists have assembled an FMD virus pathogen bank comprising of 40 FMD Virus samples. Identification and characterization of at least 20 FMD virus isolates from 4 regional outbreaks for propagation on the most efficient cell line to enable selection of multiple viruses that can be aligned for seed vaccine candidates is in progress. More research on the East coast fever vaccine and the African Swine fever vaccine is in its primary stage.

Vaccine development and commercialization has the following phases: Priority setting, basic and applied research, pilot production, clinical evaluation, full scale production and commercialization. Through government investments, the first four stages have been undertaken and yielded products that need to be scaled out and commercialized for onward distribution and marketing, and subsequently farmer access and utilization. This undertaking requires the identification of suitable models and partners for investments in the commercialization of the vaccines.

Towards this endeavor, the Government of Uganda through National Planning Authority and with support from United Nations Development Program (UNDP) seeks to undertake a feasibility study to assess the economic, technical, financial, environmental and social viability of investments in commercialization of livestock vaccines specifically anti-tick vaccines developed by NARO.

1.1. PROBLEM STATEMENT

Livestock diseases, pests and vectors present the biggest challenge to the growth of the livestock industry in Uganda and the realization of its great potential for increased farm incomes, food security and export earnings. Livestock farming enterprises experience considerable production losses due to outbreaks of infectious tropical diseases over large geographical area stretching the sub-Saharan Africa (Morrison and McKeever, 2006). For example, East Coast Fever (ECF) a tick-borne disease occurs in 11 countries in sub-Saharan Africa and causes up to 100% mortality among naive exotic cattle breeds which are most preferred for high production and productivity. In Uganda, the burden of ticks and tickborne diseases is estimated at UGX 3 trillion annually because of the costs of treatment of cattle, loss in productivity due to sickness, death of animals and lost potential market opportunities due to presence of the disease in the country.

It is estimated that, in a single district with active livestock and livestock product sales, annual revenue of UGX 21.3 billion which would be attained from meat and milk sales is lost due to a six-month quarantine restriction due to FMD (Agriprofocus, 2014). The loss due to CBPP occurrence is approximately UGX 16 billion annually (Ssemadali *et al.*, 2017). The annual loss due to death of domestic birds due to NCD is estimated at UGX 0.8 billion (AU-IBAR, 2013). ASF kills between 80 and 100percent of the affected pig herds and is the biggest threat to the pork industry. Additionally, the country spends approximately US\$ 93.7 million on importation of animal vaccines and drugs indicating that there is a great market potential for local investment.

Due to inadequate investments over the years in livestock vaccines development to address the scourge of pests, diseases and vectors, the country spends approximately US\$ 93.7 million annually on importation of animal vaccines and drugs. Therefore, development of robust prevention and disease control measures offers significant rewards for import replacement, exports and development of efficient and profitable livestock production systems. Additionally, the development and use of efficacious vaccines tailored to the diverse aetiological pathogen strains and agro-ecological conditions will offer green solutions for prevention of these diseases. Additionally, vaccine use is sustainable, guards against overreliance on toxic pharmacological drugs and pesticides.

The Government of Uganda in 2018 supported research into livestock vaccine development in its Agriculture research arm, NARO. Success has been made in the anti-tick vaccine research where controlled trials showed 90% vaccine efficacy against

... yielded positive results. However, the next stage of scaling up vaccine production and commercialization requires, adequately researched and well understood vaccine commercialization models including nature of government or private investment and partnerships. This will guide decision making on whether the investment is financially, technically, and economically viable and sustainable. It is against this background that government seeks to undertake a study to understand the technical, financial, social, and economic feasibility of undertaking vaccine commercialization in the country.

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Due to inadequate investments over the years in livestock vaccines development to address the scourge of pests, diseases and vectors, the country spends approximately US\$ 93.7 million annually on importation of animal vaccines and drugs. With adequate production of vaccines locally, the country can invest these import savings in other areas of the agricultural development value chain where investment is needed most. Most importantly, more investment could be in production and value addition. This would help increase farmer incomes. This will help to directly address key specific areas of the Sustainable Development Goals (SDGs) on addressing poverty, and decent work and economic growth among others.

Therefore, development of robust prevention and disease control measures offers significant rewards for import replacement, exports and development of efficient and profitable livestock production systems. Additionally, the development and use of efficacious vaccines tailored to the diverse etiological pathogen strains and agro-ecological conditions will offer green solutions for prevention of these diseases. Additionally, vaccine use is sustainable, guards against overreliance on toxic pharmacological drugs and pesticides. This directly contributes to the SDG goal on good health and well-being and environmental sustainability.

In Uganda's pursuit of achievement of the 17 UN Sustainable Development Goals (SDGs), it is posited that the development of livestock vaccines could support both agro-industry and research and development in Uganda. During the development of the third National Development Plan (NDPIII), the National Planning Authority (NPA) undertook system dynamics modeling and developed the iSDG model to provide scenarios of Uganda's SDG achievement into 2030; as part of this exercise, the intervention areas identified to most rapidly and synergistically contribute to SDG achievement, or "SDG Accelerators" were Governance, Environment, and Industry. Indeed, the development of livestock vaccines in Uganda would contribute directly to the Environment and Industry accelerator areas through enhancing agro-industrialization.

To further this aim, Government of Uganda in 2018 supported research into livestock vaccine development in its Agriculture research arm, NARO. Success has been made in the anti-tick vaccine research where controlled trials showed 90% vaccine efficacy against the ticks, while field trials are ongoing and have so far yielded positive results. However, the next stage of scaling up vaccine production and commercialization requires, adequately researched, and well understood vaccine commercialization models including nature of government or private investment and partnerships. This will guide decision making on whether the investment is financially, technically, and economically viable and sustainable. It is against this background that government seeks to undertake a study to understand the technical, financial, social and economic feasibility of undertaking vaccine commercialization in the country.

1.2. Justification

The project of livestock vaccine manufacturing and commercialization is one of the core projects of the NDPIII under the agro-industrialization programme. This project addresses the first component of core project no.5, on page 53 under the Agro-industrialization programme of the agro-industrialization programme on production, testing, and commercialization of pesticides, acaricides, and herbicides project.

of the strategic intervention of strengthening systems for management of vectors, pests, and diseases under objective one of increasing agricultural production and productivity. The NDP III particularly sets out to increase production, testing and commercialization of pesticides, acaricides, and herbicides in form of a project. This is further aligned with the SDG-related aims of NDP III, by specifically targeting SDG Accelerator areas of Industry and Environment via agro-industrialization and research and development.

1.3. Expected outcome

Investments in livestock vaccine manufacturing and commercialization is envisaged to deliver several outcomes. These outcomes are:

- a) Increased availability of efficacious and quality livestock vaccines in the country
- b) Reduction in livestock vaccine imports
- c) Increased employment opportunities
- d) Increased revenues for investments in agricultural research and development
- e) Increased foreign exchange earnings through exports of livestock vaccines

1.4. Benefits

It is envisaged that investment in in-country vaccine production and commercialization will increase the availability of quality and efficacious livestock vaccines that match the strains of the circulating pathogens in the country, increase the efficiency of Ugandan scientists, provide employment opportunities, and improve livestock productivity, among others. The Feasibility study will further help to quantify the socio-economic benefits arising out of the project in form of; export revenue, import replacement, jobs created for youth, women and for persons with special abilities among others. Overall, the project will help to address SDG areas on poverty, health, environment, and industry among others.

1.5. Progress in the development and evaluation of the anti-tick vaccine by NARO

NARO scientists have developed three tick candidate vaccines namely NARO-RA, NARO-BD, and NARO-AV for the control of *R. appendiculatus* (Brown ear tick), *R. Boo. Decoloratus* (Blue tick) and *Amblyomma variegatum* (Bont-legged tick) respectively. The candidate tick vaccines have been sufficiently evaluated under well controlled on-station experiments and have been found to have an efficacy of 90% in the control of larval, nymph and adult tick stages belonging to the Brown ear, Blue and Bont-legged tick species. These tick candidate vaccines don't only constitute sustainable and green solutions for tick control in Uganda, but will also be used in the eastern, central, and southern Africa for the control of ticks and tick-borne diseases and consequently check the development of ticks' resistance to acaricides.

Current efforts are focusing on possibilities to integrate the three vaccines into one broad spectrum tick vaccine to effectively control all the three tick species in Uganda and the region.

Table 1: Progress in the Ticks Vaccine Development process has three phases

Phases	Status	Expected completion date	Remarks
1. Phase 1. Constitute the vaccine <ul style="list-style-type: none"> Develop candidate vaccine 	Three candidate vaccines have been developed. <ul style="list-style-type: none"> NARO – RA NARO – BD NARO – AV These candidate vaccines are for the control of three tick species <ul style="list-style-type: none"> <i>R. appendiculatus</i> (Brown ear tick). Transmits East Coast Fever <i>R. Boo. Decoloratus</i> (Blue tick) transmits Babasiosis (red water) <i>Amblyomma variegatum</i> (Bont-legged tick) transmits heart water 	Completed	<ul style="list-style-type: none"> The burden of ticks and tick-borne diseases is estimated at UGX 3 trillion annually
2. Phase II. Pre-clinical trials. Involves three sub-phases <ul style="list-style-type: none"> Testing the vaccines on rats Testing the vaccines on rabbits Testing the vaccines on limited number of cows (like 5 cows) 	<ul style="list-style-type: none"> Completed Completed Completed 		

Involves 2 levels: <ul style="list-style-type: none"> On-station based clinical trials using many cows, for example, 50 Field based clinical trials 	<ul style="list-style-type: none"> Assembled the animals Building the structures On-station trials are expected to start in January 2019 Field based trials are expected to start in December, 2019 	<ul style="list-style-type: none"> Completed in June, 2019 	
4. Manufacturing and Commercialization of the drug	To be informed by this study		

1.6. Public financing of vaccine manufacturing and commercialization

There are various models of public financing of vaccine manufacturing and commercialization. These include sole government investments where the government has full ownership and control of vaccine manufacturing and the private sector is involved in marketing and distribution including wholesale and retail. Secondly, the government might also partner with the private sector through public-private-partnership (PPP). The study will explore the most suitable and viable for government.

2. DESCRIPTION OF THE ASSIGNMENT

The assignment is to undertake a Feasibility Study on Livestock Vaccines Manufacturing and Commercialization in Uganda. The feasibility study is aimed at determining whether the project is technically feasible and economically justifiable ahead of its implementation. The study will be undertaken by a consultancy firm that has expertise in Livestock Vaccines feasibility studies and related fields. The study shall be delivered in close collaboration with the Ministry of Agriculture, Animal industry and fisheries as the implementing agency.

2.1. OBJECTIVE OF THE CONSULTANCY

The overall objective of the assignment is to undertake a feasibility study that assesses the financial, technical, environmental, and economic viability of investment in livestock vaccine commercialization.

2.1.1. SPECIFIC OBJECTIVES

The specific objectives include to:

- Analyze the market for Uganda's livestock vaccines highlighting the size and nature of vaccine demand and supply, chain of access and distribution, and level of utilization.
- Assess the availability of supportive infrastructure, technology, utilities, skills, financial and fiscal incentives for establishment of livestock vaccine manufacturing and commercialization in the country.
- Analyze the legal, policy and institutional environment supportive for livestock vaccine manufacturing and commercialization in the country and identify issues/factors that may encourage or hinder livestock vaccine manufacturing and commercialization in the country.
- Assess the viable livestock vaccine manufacturing and commercialization models including Public-Private Partnerships, joint ventures, sole government, or private investments that are applicable to in Uganda.
- Analyze the economic and social factors that should be adhered to, to ensure success of vaccines manufacturing and commercialization in Uganda.
- Assess and profile the roles of all stakeholders involved in the livestock vaccine value chain including researchers, farmers, the private sector, and Government, and identify appropriate institutional arrangements to foster effective partnerships for livestock vaccine manufacturing and commercialization.
- Examine the financial viability and economic impact of in country vaccine production and commercialization including the effect on the welfare and livelihoods of the farmers, the agricultural sector and whole economy.

2.2. REQUIRED SERVICES

This study will require procurement of a firm that has experience in undertaking feasibility studies of a similar nature preferably in areas of agro processing, pharmaceutical production, vaccines production or related fields. The firm should also demonstrate adequate experience in Project Planning and management.

2.3. Firm experience

The Consultant will be a firm or consortium of firms with diversified experience and technical competencies in areas including: Project planning and management, Feasibility studies, Local Economic Development, among others. Further, the firm should demonstrate the following.

- List of completed feasibility studies related to Local Economic development.

iii) Good understanding of Global and National design requirements for vaccine Manufacturing plants.

iv) Sound legal status, strong financial management and institutional stability.

v) Demonstration of good technical, managerial and project management capabilities

The Firm shall provide the full range of multi-disciplinary consultancy services required for this assignment, providing specific services of the various consultants as indicated.

3. SCOPE OF THE STUDY

The selection of the specific study areas shall be subjected to a technical discussion between the Task Team and the consultant during the inception phase.

4. METHODOLOGY

The consultancy firm is expected to employ an appropriate methodology that will, among others, entail the following:

The consultancy services will include but not be limited to:

- i. Collect data and review documents that are relevant to the assignment, including Vision 2040, NDPII, NDPIII and PIAPS, Agriculture related plans, relevant laws, regulations and policies, and other ongoing initiatives in livestock vaccines / agro – industrialization related initiatives.
- ii. Identify existing/potential for livestock vaccines based on existing initiatives.
- iii. Define and Map the project value chain clearly illustrating the forward and backward linkages.
- iv. Identify, analyze, and project revenues and costs associated with the project.
- v. Define and illustrate the plant production chain including key machinery requirements for the manufacture of Animal vaccines.
- vi. Identify, prioritize, and cost in terms of Bill of Quantities (BoQs) the infrastructure and equipment requirements for the project.
- vii. Identify and undertake costing of all equipment necessary to get the project running.
- viii. Undertake an Environmental Social Impact Assessment (ESIA) for the project.
- ix. Conduct financial, economic, stakeholder, and distributive analysis for the project.
- x. Analyze policy, legal and regulatory requirements necessary to effectively implement the project.
- xi. Define the human resource, management, and sustainability requirements of the Vaccines processing plant.
- xii. Conduct project risk analysis and provide a risk mitigation plan.
- xiii. Conduct key stakeholder engagements, meetings, and workshops, including validation of the draft project documents/results of the study
- xiv. Identify key stakeholders for the development of the sites
- xv. Highlight the necessary human resource requirements for project implementation
- xvi. Coordinate the feasibility study and ensure that all reports rhyme and do not conflict
- xvii. Preparation of draft and final project documents
- xviii. Printing and dissemination of the final project documents/results for key stakeholders.
- xix. Demonstrate adequate understanding of Government of Uganda Public Investment Management Guidelines and processes.

5. DELIVERABLES

Deliverables		
<i>Deliverable</i>	<i>Expected Completion</i>	<i>Review and Approvals Required</i>
1. An acceptable inception report on the assignment detailing the understanding/interpretation of the assignment, the proposed methodology for carrying out the assignment, work plan, tools, and implementation schedule	Within 2 weeks of contract start date	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
2. Acceptable Draft Reports including: i) Detailed project Concept note and profile, ii) Comprehensive Prefeasibility and feasibility study reports, iii) Financial and economic analysis models MS-Excel sheets, iv) Industrial Master Plans and Engineering	Within 2 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the

Design for the project (architectural, structural, mechanical, electrical), v) Report on Equipment requirements for the project, vi) Strategic Environmental Social Impact Assessment (SESA) report		Director, Development Planning, NPA
3. Acceptable report on the all the required stakeholder consultations and validation exercises with key stakeholder comments and how they were addressed	Within 3 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
4. Acceptable final reports, final feasibility study report incorporating comments received from the stakeholders on the draft report.)	Within 4 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA
5. Acceptable process report	Within 4 months	Manager, Project Development, and Investment Planning, NPA and Economic Advisor, UNDP under the overall supervision of the Director, Development Planning, NPA

2. WORKING ARRANGEMENTS

Institutional Arrangement

The preparation of the reports will be under the leadership of the Government of Uganda through the National Planning Authority (NPA). A multidisciplinary and multi-agency Technical Working Group led by NPA and comprising of key government, development partners and private sector will be established under the overall leadership of NPA. The stakeholders include NPA, NARO, MAAIF, NDA, UDC, MoSTI, MoFPED, OWC, PDF, UNDP, FAO, UNDP and selected private sector players.

The Consultant shall submit all draft and final reports and deliverables to the Executive Director, National Planning Authority (NPA) through the Manager, Department of Project Development, and Investment Planning, NPA.

3. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

The consultant shall possess the following expertise as part of the core team: i) veterinary expert, ii) Financial and Economic Analysis Expert, iii Environmental Expert, iv) Legal Expert and v) Engineering/Technical Expert vi) Mechanical Engineer, Vii) Chemical Process Expert. The firm shall possess at minimum the following expertise as part of the core team:

Veterinary Expert (Team Leader)

Minimum requirements

- A minimum of a master's degree in veterinary medicine or related discipline,
- A PhD in Veterinary medicine, Animal Health and or related field is an added advantage.
- Registered with the Veterinary Registration Board
- Good written and oral proficiency in English and good communication skills.

Professional experience

- At least 10 years' experience working experience postgraduation in practice, research and consultancy services.
- Experience in planning and implementing projects of a similar nature especially related animal vaccine will be desirable preferably in the Eastern and/or Southern Africa.
- Knowledge of Uganda's development planning frameworks

Financial and Economic Analysis Expert (Assistant Team Leader)

Minimum requirements

- A minimum of a master's degree in economics, finance, business administration or any related discipline.
- Possession Professional Qualification such as CFA, ACCA, CPA, or CIMA or related professional qualification.
- Good written and oral proficiency in English and good communication skills.

General professional experience

- At least 10 years working experience post-graduation in the relevant field.
- Experience in conducting planning and implementing projects of a related nature will be desirable.
- Have specific experience in economic and financial analysis for industrial projects, preferably in the Eastern and/or Southern Africa

Environmental Expert

Minimum requirements

- A minimum of a master's degree in Environment and Conservation Management, Forestry, Environmental Economics, Engineering, or related fields
- Registered with NEMA as a Team Leader
- Good written and oral proficiency in English and good communication skills.

Professional experience

- At least 8 years working experience postgraduation in conducting environment impact assessment with demonstrated knowledge of the environment and natural resource landscape of Uganda.
- Have specific experience in conducting environmental and impact assessments for industrial projects, preferably in the Eastern and/or Southern Africa

Legal Expert

Minimum requirements

- A minimum of a Master's degree in law. Speciality in Land and Environmental law shall be an added advantage
- Diploma in Legal Practice Good written and oral proficiency in English and good communication skills.

Professional experience

- At least 8 years of working experience postgraduation in the field of law. Experience in Legal and Commercial structuring of infrastructure projects, preferably in the Eastern and or Southern Africa. will be desirable.

Civil Engineering Expert

Minimum requirements

- A minimum of a master's degree in Civil Engineering and/ or a related field as per the Engineering Registration Board - Uganda Civil Engineering disciplines categorization is an added advantage.
- Registered or Chartered Civil Engineer
- Good written and oral proficiency in English and good communication skills.

Professional experience

- At least 10 years working experience postgraduation experience in Civil or building engineering design and construction works.
- Must have specific experience in pre-feasibility studies for industrial projects, preferably in the Eastern and/or Southern Africa

Mechanical Engineering Expert

Minimum requirements

Industrial Engineering, Automotive and Power Engineering and/ or a related field as per the Engineering Registration Board -Uganda Mechanical Engineering disciplines categorization

- Registered or Chartered Mechanical Engineer
- Good written and oral proficiency in English and good communication skills.

Professional experience

- At least 8 years working experience postgraduation in industrial processes and equipment selection.
- Graduate degree in Mechanical engineering or related engineering discipline and have specific experience in pre-feasibility studies for industrial and projects, preferably in the Eastern and/or Southern Africa

Chemical/Industrial Process Expert

Minimum requirement

- A minimum of a Bachelor's degree in Industrial Chemistry, Chemical Engineering, Mechanical Engineering or a related field.
- Master's degree in Industrial Chemistry or Chemical Engineering or a related field.

Professional experience

- At least 8 years' experience in Industrial/chemical process facilities.
- Experience in operation of Chemical process facilities, preferably in the Eastern and/or Southern Africa.
- Specific experience in operation of Pharmaceutical and or Vaccine's manufacturing plants projects is an added advantage.
- Demonstrated experience in plant process safety design and management are an added advantage

Competencies required for all experts:

- Excellent analytical skills and strong commitment to sharing expertise and experience to develop capacity of others, and work as a member of a team.
- Strong communication skills and able to write concisely and make presentations in a simple non-technical manner
- Excellent analytical, organizational and negotiation skills. Ability to demonstrate tact and diplomacy.

Language requirements

- Fluency in written and spoken English.

4. PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

A lump sum payment, in three tranches, shall be made upon successful completion and certification of work done as indicated in this Terms of Reference.

Payment Releases	Percentage	Timing (after contracting)
Upon submission of an inception report, with a detailed work plan and agreement on the methodology for the assignment	20	Within 2 weeks of contracting
Upon submission of the First draft report	30	Within 2 months of contracting
Upon certification of completion of the final feasibility study and process reports.	50	Within 4 months of contracting