



TECHNICAL ASSISTANCE FOR CONSULTANCY SERVICES FOR SUPERVISION FOR THE RESTORATION AND REHABILITATION ACTIVITIES FOR GIKONDO, RWAMPARA, RUGENGE-RWINTARE, NYABUGOGO AND KIBUMBA WETLANDS IN THE CITY OF KIGALI, RWANDA.

TERMS OF REFERENCE

1. Background

Kigali, the capital of the Republic of Rwanda, has a population of over 1 million people and an average annual growth rate of 4%¹. Contributing to 50% of the country's GDP2, the City of Kigali (CoK) is the financial and economic hub of Rwanda.

Kigali is founded on hills and mountains, with three mountains in the south and west (Mt Rebero, Kigali and Jali), covered by sub-catchments with a total area of about 730 km². The city experiences a tropical climate and receives relatively high annual average rainfall of 1,000 mm and annual average temperature of 20°C. The rainfall regime is bimodal, with seasonal convective rainfall occurring mainly during the months of March to May (main rainy season) and October to December (secondary rainy season). Typical rainfall events are characterized by high intensities of short duration with high temporal and spatial variability, which leads to pluvial flooding. These high intensity storms lead to fast runoff along the steep slopes of Kigali, resulting in flash flooding at locations where the storm water cannot be conveyed fast enough.

The lowlands of Kigali tend to be the main recipients of storm water runoff and urban drainage, with wetlands found at a many of these locations. However, human activity has significantly impacted natural processes, through wastewater drainage or development of these areas of economic benefit.

Wetlands are part of "greenbelts" or "green corridors" that provide ecological functions essential to the survival of all ecosystems. Ecological functions of Rwanda urban areas include the provision of slow & steady water source for downstream beneficiaries, protecting water quality & quantity, buffering storm-water runoff, and providing a critical habitat for

² Ministry of Environment. Nyabugogo Catchment Management Plan (2018-2024), October 2018.



¹ National Institute of Statistics of Rwanda (NISR), Ministry of Finance and Economic Planning (MINECOFIN) Rwanda. Rwanda Fourth Population and Housing Census. Thematic Report: Population size, structure and distribution, 2012.





various fragile species such as breeding grounds for birds. Wetland functions are particularly critical where natural drainage has been restricted by such human activities as building structures and roads that are found in urban areas.

Sustainable utilization of rehabilitated wetlands may include the establishment of recreation parks with low impact infrastructure for leisure and environmental education purposes that would promote public awareness on biodiversity, water provision and quality and other functions. REMA has earmarked the Nyandungu wetland as a pilot area for the self-sustaining climate-resilient urban wetland recreation and eco-tourism park with full ecological functionality.

In October 2020 the World Bank and the Government of Rwanda (GoR) signed the legal agreement for a second phase of the Rwanda Urban Development Project (RUDP II). As part of this project, the Government of Rwanda will receive funds to rehabilitate four wetlands in the City of Kigali, namely Gikondo, Rugenge-Rwintare, Nyabugongo, and Kibumba wetlands.

In May 2021 the Nordic Development Fund (NDF) and GoR signed a financing agreement for Kigali Flood Control and Integrated Urban Catchment Management Project (KFCIUCM) under Rwanda Urban Development Project (RUDP II). As part of this project, the Government of Rwanda will receive funds to rehabilitate one wetland in the City of Kigali, namely Rwampara wetland.

The project has currently reached the stage of developing detailed designs and tender documents for the 5 wetlands mentioned above.

The urban rehabilitation works will be implemented as one project having two different payment modalities due to different sources of funding as indicated above. Therefore, a successful supervision firm will cover the 5 wetlands. Apart from the different sources of financing, the rest including the timeframe of the project, objectives, and other technical aspects are the same.

The two funds support the Government's initiative to rehabilitate urban wetlands with aim of achieving four main objectives namely: (i) Flood mitigation, (ii) Biodiversity enhancement, (iii) Water quality improvement, and (iv) promotion of recreational activities among others.







By these Terms of References, REMA is seeking to hire a competent consulting firm to undertake the assignment of supervising rehabilitation works in above mentioned 5 wetlands.

2. Site Context and Location

The wetlands targeted for rehabilitation forms part of a large inter-connected system of wetlands in the City of Kigali as illustrated in Figure 1, below.



Figure 1: Map illustrating the five wetlands to be rehabilitated as part of this assignment.







Five wetlands are targeted for the purposes of this assignment and includes the Gikondo, Rugenge-Rwintare, Kibumba, Rwampara and Nyabugogo wetlands. The size of each wetland, as well as the name of the watercourses that traverse them, and the administrative districts to which they belong are provided hereunder.

Project	Wetland Name	River/Stream	Area (Ha)	Administrative Districts
RUDP II wetlands	Gikondo	Rugenge	162	Kicukiro and Gasabo
(WB Funds)	Rugenge- Rwintare	Rugenge-Rwintare	65	Nyarugenge and Gasabo
	Kibumba	Kibumba- Rwezangoro	68	Gasabo
	Nyabugogo Lower	Nyabugogo	131	Nyarugenge and Gasabo
KFCIUCM Wetland (NDF Funds)	Rwampara	Rwampara	65	Nyarugenge and Kicukiro

3. Objective(s) of the Assignment

The main objective of the assignment is to ensure the effective implementation of the rehabilitation works for 5 wetlands through the supervision of works undertaken by the contractor.

Each of the designed rehabilitation works aims at achieving one or multiple objectives and it is the responsibility of the supervising firm to ensure that these works are implemented in a way that ensures the attainment of the intended objectives.

4. Scope of Services, Tasks (Components), and Expected Deliverables

The supervision services will be done on 5 wetlands as indicated below.

4.1 Supervision of Works

The supervisor will ensure continuous and consistent follow-up of the Works carried out by the Contractor, including:

 Ensure the quality of works are carried out in accordance with the quantities, drawings, technical and administrative specifications provided in the design, contract, and supporting documents;







Republic of Rwanda

- Ensure that best construction, social and environmental practices are implemented whilst complying with national laws and regulations;
- 3. Review and approve the method statements, work plans and contingency measures proposed by the Contractor;
- 4. Inspect and approve all materials and equipment the Contractor brings to the site, and reject any substandard materials;
- 5. Review, advise and approve any design changes proposed by the Contractor that may be required during the construction, and review and approve any budgetary implications in consultations with the client;
- 6. Inspect and approve all completed works for compliance with the specifications/ bills of quantities indicated in the contract;
- 7. Maintain a daily log book of activities, including a detailed recording of the events of the day, which will be made available to the Client upon request;
- 8. Maintain a database of digital color photographs to visually document the works.

4.1.1. Works to be supervised

In general, the consultant firm will perform supervision of the execution of works for the rehabilitation of the above-mentioned wetlands, such as but not limited to:

- Installation of gabions to stabilize drains flowing into the wetlands;
- Construction of sediments traps and flow-spreading structures at the inlets of the main drainages;
- Earthworks to remove backfills, block drains and channels and re-profile the wetland;
- Earthworks along the wetland edge to re-shape planned recreational areas and opportunity nodes;
- Re-profiling of rivers and stabilization of banks;
- Infilling of existing eroded/incised channels and construction of new stable meaning river course;
- Excavation of depressions, dams and expansion of existing lakes and ponds;
- Construction of temporary and permanent water conveyance and spreading structures;
- Elimination/management of invasive plant species,
- Establishment and management of nurseries for plant propagation;
- Planting of native plant species;
- Development of infrastructure to support recreational activities (footpaths, cycle paths, benches, pedestrian bridges, lighting, environmental education signage, etc.).
- Landscaping works;
- Various tests performed by contractor;







 Other activities related to the rehabilitation of wetland as described by detailed design for each wetland.

A zoning map is provided in Annex 1 to describe works to be considered for each wetland.

4.2 Monitoring of the Contractor's ESMP

The consultant will ensure that the Contractor delivers its ES obligations under its contract. This includes the following activities:

- Review the Contractor's Environment and Social Management Plan (C-ESMP), including all updates and revisions at frequencies specified in the Contractor's contract (normally not less than once every 3 months);
- Review all other applicable contractor's documents related to ES aspects including the health and safety manual, security management plan, and SEA prevention and response action plan;
- Review and consider the ES risks and impacts of any design change proposals and advise
 if there are implications for compliance with ESIA, ESMP, consent/permits, and other
 relevant project requirements;
- Undertake audits, supervisions and/or inspections of any sites where the Contractor is undertaking activities under its contract, to verify the Contractor's compliance with ES requirements (including relevant requirements on Sexual Exploitation Abuse/Sexual Harassment);
- Undertake audits and inspections of Contractor's accident logs, community liaison records, monitoring findings, and other ES related documentation, as necessary, to confirm the Contractor's compliance with ES requirements (including relevant requirements on Sexual Exploitation Abuse/Sexual Harassment);
- Determine remedial actions and their timeframe for implementation in the event of a non-compliance with the Contractor's ES obligations;
- Organize and ensure appropriate representation at relevant meetings including site meetings, and progress meetings to discuss and agree appropriate actions to ensure compliance with ES obligations;
- 8. Ensure that the Contractor's actual reporting (content and timeliness) is in accordance with the Contractor's contractual obligations;
- Review and critique, in a timely manner, the Contractor's ES documentation (including regular reports and incident reports) regarding the accuracy and efficacy of the documentation;
- 10. Undertake liaison, from time to time and as necessary, with project stakeholders to identify and discuss any actual or potential ES issues;







- Monitor the establishment and operationalization of the contractor's grievance redress mechanism including types of grievances to be recorded and how to protect confidentiality e.g. of those reporting allegations of Sexual Exploitation Abuse/Sexual Harassment;
- 12. Carry-out the following activities in accordance with the works contract to be supervised, including the following:
 - (a) support the contractor to organize a Sexual Exploitation Abuse/Sexual Harassment meeting, ensure appropriate representation at such meetings, and follow up on any agreed actions by the attendees;
 - (b) monitor contractor's compliance with its Sexual Exploitation Abuse/Sexual Harassment Prevention and Response Obligations in the Works contract, and take appropriate contractual actions if non-compliance is identified, including upon identification of potential non-compliance by a dispute board;
 - (c) ensure that any allegations of Sexual Exploitation Abuse/Sexual Harassment that are received are documented, maintaining appropriate confidentiality, and promptly submitted to the supervisor and the Client;
 - (d) prior to its engagement for the Works, verify that, any proposed subcontractor named in the contract, is qualified in accordance with the provisions of the Sexual Exploitation Abuse/Sexual Harassment performance declaration for subcontractors;
 - (e) Provide appropriate support and relevant documents that a dispute board may need in reviewing sexual Exploitation Abuse/Sexual Harassment contractual compliance.

4.3 Management of Works Contract

The Supervising firm shall:

- Supervise the activities of the Contractor on behalf of the client and in accordance with the Works contract between the Employer and the Contractor;
- Organize formal joint bi-weekly meetings between the Client, supervising firm, and Contractor (and any other relevant parties) to monitor the progress of works. The Supervising firm will ensure that invitations are sent in a timely manner, document the meeting with minutes that are to be shared with all the concerned parties;
- To participate in client's meetings with stakeholders and make presentations of the work progress;
- Maintain a complete record of all correspondence between the Client, the Supervising firm and the Contractor, as well as any contractual information, technical data, work







- stoppages, weather records, accidents, visitors, and any other documentation related to the project.
- Maintain a list of the Contractor's equipment deployed on-site, including a description of its functionality and fitness for purpose;
- Review and approve all work plans and schedules to be provided by the Contractor and inform the Client of any projected delay;
- 7. Review all of the Contractor's applications for extension of time, or claims for budget variations, providing the Supervising firm's analysis of each request with the recommended ruling, and advise the Contractor on the Client's decision.
- Ensure all guarantees and insurances of the Contractor remain valid throughout the duration of the contract;
- Prepare weekly, monthly and quarterly progress reports for the Client, which provide
 a clear understanding of the technical and financial performance of the Contract, as
 well as any issues encountered during construction, the status of the consulting
 contract, reporting on the ESMP (including any mitigation measures);
- Prepare provisional and final handover reports and inspection reports during the liability period.

4.4 Review and Approve Payment Requests and Related Issues

The Supervising firm will:

- Review and approve the Contractor's request for payments (invoices) by verifying the
 contractor's report (i.e., accuracy of the quantities, measurements, units and cost
 calculations etc) and ensure completeness of supporting documentation to be
 submitted to the Client before recommending interim payment certificate (IPC) to the
 Employer.
- 4.5 Review and Approve Completed Activities and Remedial Works
 The Supervising firm will:
 - Arrange for a formal joint inspection of completed works with the Client and the
 Contractor for acceptance of works, identification of defects, development of snag lists
 and subsequent remedial measures at both substantial completion and at the end of
 the defect liability period. The meeting minutes and report shall be submitted to the
 client for documentation/filing however remedial works proposed must be
 communicated to the client before their implementation.
 - To prepare and submit the handover reports as well as certificates and defect liability certificates to the client.
 - Review and approve a complete set of as-built drawings developed by the Contractor for submission to the Client (in hard and soft copies).





 To prepare the final account of the executed works and submit final report with as build drawings to the client.

4.6. Reporting Requirements and Time Schedule for Deliverables

The Supervising firm will develop and transmit brief Weekly reports as well as comprehensive Monthly and Quarterly reports throughout the project to keep the Client abreast of the progress of works.

The reports will include the following but not limited to:

- The physical advancement of works,
- The updated schedule for future works,
- The financial advancement of the works and disbursements,
- The financial advancement of the consultancy contract and disbursements,
- A report on the respect of the ESMP,
- The equipment and staff currently deployed for the works
- · A summary of the issue register,
- A summary of the claims register
- A summary of the reporting period's correspondence and Minutes of Meetings

Reports will be provided in one (1) soft and one (1) hard copy to REMA HQ by the 5th day following the reporting period for Monthly and Quarterly Reports. The brief weekly reports will be provided every week.

Regarding the ESMP, in addition to the Monthly and Quarterly Reports, the Supervising firm shall:

- (a) Immediately notify and advise the Client of any failure by the Contractor to comply with its SEA and SH obligations;
- (b) Immediately notify and advise the Client of any allegation, incident or accident, which has or is likely to have a significant adverse effect on the environment, the affected communities, the public, Client's Personnel, Contractor's Personnel or Experts. In case of Sexual Exploitation Abuse/Sexual Harassment, while maintaining confidentiality as appropriate, the type of allegation (sexual exploitation, sexual abuse or sexual harassment), gender and age of the person who experienced the alleged incident should be included in the information. The Supervising firm shall provide full details of such incidents or accidents to the Client within the timeframe agreed with the Client.
- (c) Immediately inform and share with the Client notifications on ES incidents or accidents provided to the Supervising firm by the Contractor, and as required of the Contractor as part of the Progress Reporting;





- (d) Share with the Client in a timely manner the Contractor's ES metrics, as required of the Contractor as part of the Progress Reports.
- 5. Required Experience, Team Composition & Qualification Requirements for the Key Experts (and any other requirements which will be used for evaluating the Key Experts under Data Sheet 21.1 of the ITC).

One competent consulting Firm will carry out the supervising services across the 5 wetlands and the following are the evaluation criteria of the supervising firm and experts within the firm:

Required Experience of the Supervising Firm

- Should have minimum 3 certificates of good completion with contracts in supervising large-scale projects of above 2 billion Rwandan Francs related to wetlands rehabilitation, urban flood management or urban landscaping.
- Provide a company brochure indicating photos and a short description of at least four completed projects by the firm in wetlands rehabilitation, urban flood management or urban landscaping supervised by the firm. (The brochure should be colored and submitted in hard copies at the client's premises before 1hour to the deadline date and time.)

Team Composition & Qualification Requirements

An overview of key positions that will need to be fulfilled for this assignment are outlined below. The Supervising firm may propose any additional experts required for the completion of the project of which the client shall review and approve during contract negotiation.

It is to be noted that all CV's must be signed by the experts and the authorized representative, confirming their experience and availability of the expert during all the works duration.

Position K-1: Team Leader

- Should have at least a Master's degree in landscape architecture, urban landscape engineering, environmental engineering or civil engineering.
- Must have a minimum experience of 8 years in project management including wetland rehabilitation projects or urban landscape rehabilitation projects requiring a team with a diverse range of skill sets proven by a signed CV.







 Should have at least three certificates of good completion (supported by relevant contracts) in the supervision of large-scale project of above 1 billion Rwandan Francs in wetlands rehabilitation projects or urban landscape rehabilitation projects.

Position K-2, K-3: Permanent Site/Resident Engineer (2 positions)

- Should have at least a master's degree in urban landscape engineering, hydraulic engineering or civil engineering.
- Must have a minimum experience of 6 years in site supervision proven by a signed CV and recommendation letter.
- Should have at least three certificates of good completion/recommendations for wetlands rehabilitation projects, urban landscape rehabilitation projects or urban flood risk mitigation projects.

Position K-4: Landscape Architect (1 position)

- Should have a master's degree in Engineering Landscape architecture, Landscape Architecture and Urbanism, Sustainable Architecture and Landscape Design.
- Must have a minimum experience of 6 years in the wetland and landscape designs, restoration, and management projects proved by signed CVs and / recommendations.
- Should have at least two certificates of good completion/recommendations for wetlands rehabilitation projects, urban landscape rehabilitation projects or urban flood risk mitigation projects.

Position K-5, K-6: Clerk of Works - (2 positions)

- Should have as a minimum bachelor's degree in civil engineering.
- Must have a minimum experience of 6years each in site supervision of activities relevant to this assignment proven by signed CVs or recommendation letter.

Position K-7: Wetland Specialist (1 position)

- Should have a minimum master's degree in Wetland Science, Ecology or Botanical Science.
- Must have experience of 6 years in wetland rehabilitation projects or ecosystem management projects proved by signed CVs and recommendation letter.
- Should have at least two certificates of good completion/recommendations in similar assignments.







Position K-8: Hydraulic Engineer (1 position)

- Should have a minimum master's degree in hydraulic engineering.
- Must have experience of 6 years in storm water management and fluvial engineering projects proved by signed CVs and recommendation letter.
- Should have at least two certificates of good completion/recommendations in similar assignments.

Position K-9: Botanist Expert (1 position)

- Should have a minimum master's degree in botany or plant science.
- Must have experience of 1 years in restoration / landscaping / management of plant nurseries proved by signed CV and recommendation letter.
- Should have at least two certificates of good completion/recommendations in similar assignments.

Position K-10: Geotechnical Engineer (1 position)

- Should have a minimum master's degree in geotechnical engineering.
- Must have experience of 6years relevant experience in wetland rehabilitation, storm water management and fluvial engineering projects proved by signed CVs and recommendation letter.
- Should have at least two certificates of good completion/recommendation in similar assignments.

Position K-11: Environnemental Expert (1position)

- Should have a master 's degree in Environmental Science, or Environmental Engineering.
- Must have minimum 5 years' work experience in developing Environmental Impact
 Assessments and monitoring Environmental and Social Monitoring Plans proved by
 one approved ESIA, ESMP or EA. (Provide one certificate of good completion or work
 service completion).

Position K-12: Social Expert (1 position)

- Should have a master's degree in Social Sciences, Development Studies.
- Must have minimum 4 years' relevant work experience in resettlement and land acquisition in developing countries proved by signed CVs and contracts.
- Must speak fluent Kinyarwanda, English, and French.

Position K-13, K-14: Surveyor (2 positions)

- Should have a bachelor's degree in Surveying.
- Must have minimum 3 years' experience in topographic and cadastral surveying proven by signed CVs and recommendation letter.

12





Position K-15, K-16: Quantity Surveyor (2 positions)

- Should have a bachelor's degree in Quantity Surveying.
- Must have a minimum of 3 years' relevant work experience in similar assignments proven by signed CVs and recommendation letter.

Position K-17: Health and Safety expert (1position)

- Should have a bachelor's degree in Environmental Health, social works or public health.
- Must have a minimum of 3 years' relevant work experience in similar assignments proven by signed CVs and recommendation letter.

N.B: All professionals under this assignment must be registered in a recognized body or country with valid certificates where applicable.

6. Indicative time requirements for consultant team

An indication of required time commitments for the consultant team is provided below (Table 1). The consultant is however requested to prepare a detailed resourcing plan as part of their proposal which indicates that planned resourcing of staff across the contract period and associated contractual activities (Table 2). This resourcing schedule will be reviewed and refined on a quarterly basis in consultation with the SPIU.

Table 1: Indicative List of Professional Staff and respective time input

S/n	Position	Time input/Months			Repartition in 5 wetlands					
		Number of experts per position	Total time require d (month)	Total	Rwampara	Gikondo	Rugenge- Rwintare	Kibumba	Nyabugogo	
1	K-1 – Team leader	1	24	24	4.5	6	3	3.5	7	
2	K-2-3 Permanent/Resid ent Site Engineer (2)	2	24	48	10	12	5	7	14	
3	K-4: Landscape Architect	1	12	12	2.5	3	2	1.5	3	
4	K-5-6 - Permanent Clerk of Works (2)	2	24	48	10	12	6.5	7.5	12	







5	K-7- Wetland Specialist	1	12	12	2	3	1.5	1.5	4
6	K-8- Hydraulic engineer	1	12	12	2	3	1.5	1.5	4
7	K-9- Botanist Expert	1	12	12	3	3	1.5	1.5	3
8	K-10- Geotechnical Engineer	1	12	12	2	3	1.5	1.5	4
9	K-11 – Environmental expert	1	12	12	2	3	1.5	1.5	4
10	K-12 -Social expert	1	12	12	2	3	1.5	1.5	4
11	K-13-14-Surveyor (2)	2	12	24	4	6	3	4	7
12	K-15-16- Quantity Surveyor (2)	2	12	24	4	6	3	4	7
13	K-17- Health and security expert	1	8	8	1	3	1	1	2
	TOTAL		188	260	49	66	32.5	37.5	75

- The Supervising firm may propose any additional experts in support of these principal experts and should specify in this proposal and will be approved during the negotiation.
- For any staffs allocated with time less than 24 months, their time will be spread across 24 months.

7. Duration of the assignment

The overall assignment of supervising firm in all five wetlands are expected to be completed in 30 months. This includes:

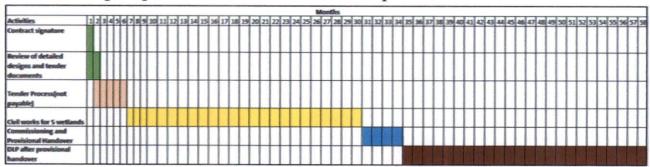
- Supervising firm will start the assignment at the date of the contract signature;
- Review of detailed designs and tender documents will take 2 months commencing from the start of the assignment;
- Months 2 to 6 are allocated for tender processes for hiring the contractor and are not included in the total time input of the supervising firm.
- Construction works will take 24 months commencing from Month 7;
- There will be a Defects Liability Period (DLP) of 24 months starting from the date of provisional acceptance of the works.







Table 2: Indicating the planned work timeframe of the supervision firm



8. Performance guarantee

The successful bidder will be required to submit a performance security in form of a bank equivalent to 7% of final negotiated contract price.

9. Payment modalities

The supervising firm contract will be implemented hand in hand with construction contract therefore, the consultant will prepare and submit monthly progress report of works on each payment and the report must be submitted to REMA (Both soft and hard copies).

Payments for the consultant firm will be made according to the different funding from both NDF and World Bank, following their financing agreements with the Government of Rwanda. Therefore, invoices to be submitted shall be separated accordingly meaning considering 4 wetlands financed by WB and 1 wetland financed by NDF.

10. Client's Input

The Client will coordinate and facilitate any authorizations required from Ministries and/or the City of Kigali necessary for the completion of works, provided the relevant documentation and information has been provided by the Consultants.

The Client will provide the Consultant with access to all available data, information, maps, drawings, and internal documents relevant to the consulting services. The Consultant must treat the materials with confidentiality and use them for the purpose of this assignment only. The consultant must not share the data and materials with any third party without approval of the client.







11. Technical and Financial proposal

The successful supervising firm shall be required to provide both technical and financial proposal covering all 5 wetlands separately. For the purposes of the financial proposal, costs must however be broken down into 5 tasks (Table 3). This is required as the financing of the different tasks is originating from different financial sources.

Table 3: Financial proposal per Task

S/N	TASK	SCOPE
1.	Task 1	Gikondo Wetland
2.	Task 2	Kibumba Wetland
3.	Task 3	Nyabugogo Wetland
4.	Task 4	Rugenge-Rwintare Wetland
5.	Task 5	Rwampara Wetland

