UGANDA WILDLIFE AUTHORITY

REQUEST FOR EXPRESSION OF INTEREST
(CONSULTING SERVICES - FIRMS SELECTION)

Country: UGANDA

Assignment Title: Consultancy to design and supervise Rhino Sanctuary in Ajai Wildlife Reserve

Procurement Reference Number: UWA/SRVS/2022-23/00535

JANUARY, 2023
1. INTRODUCTION

During the pre-independence times until early 1970s, Uganda had a particularly rich and valuable wildlife estate, including some of the best managed and well-visited National Parks in Africa. By that time, the country was home to two species of rhinos living within its protected areas and beyond. The black rhino (Diceros bicornis) of the eastern sub-species Diceros bicornis michaeli was very common in most parts of northern and eastern Uganda, particularly Acholi, Lango and Karamoja sub-regions while the white rhino, (Ceratotherium simum) of the northern sub-species; Ceratotherium simum cottoni occupied parts of West Nile sub-region. These magnificent giants are said to have come to extinction within Uganda’s protected areas in early 1980s with the last rhino recorded in Kidepo Valley National Park (KVNP). In 1997, the Government of Uganda through the then Ministry responsible for wildlife conservation, Uganda Wildlife Authority and Rhino Fund Uganda commenced the re-introduction of rhinos back to Uganda. Eight (8) Southern white rhinos were introduced to Uganda in 2005/6 from Kenya and Disney Animal Kingdom, Florida respectively. Six (6) of these (3 males and 3 females) were placed in a secure sanctuary at Ziwa Rhino Sanctuary as founders for the breeding program while the two (male and female) were placed at UWEC for education purposes. A successful rhino-breeding program has been realized with 33 live births recorded at Ziwa Rhino Sanctuary. Numbers rose from 6 to now 39 individuals despite the loss of (04) individuals due to territorial bullfights. The sanctuary to date holds 35 rhinos as of November 10th 2022. In March 2018, the government of Uganda approved a 10-year National Rhino Conservation and Management Strategy, 2018-2022 to guide the country’s rhino conservation program. The strategy emphasizes, among others, the reintroduction of indigenous species of Eastern Black and the Northern White Rhinos and establishment of additional two rhino sanctuaries within the protected areas under UWA management. In the short term, a ‘composite’ sanctuary that is conducive enough to host both black and white rhinos is the most preferred.

2. CONSERVATION HISTORY OF RHINOS IN UGANDA

a) Eastern black rhinos

With an estimated number of 400 individuals in Uganda in 1962, the black rhinos (Diceros bicornis michaeli) were common in the northern and north-eastern areas of Uganda with highest concentrations in Murchison Falls (north of the Nile river) and Kidepo Valley National Parks respectively. The devastating civil war and armed poaching in the 1970s and early 80s accounted for the extinction of the entire population of black rhinos. The last confirmed sighting of a black rhino was in Narus valley in KVNP in 1983.

Although probably never so numerous or widespread as those in Kenya or Tanzania, the black rhinos were common in northern and north-eastern areas of Uganda until mid-1960s. Within the historical times in Uganda, there was a distinct separation of the range of black rhinos, found only to the North and East of the Victoria Nile and East of
Albert Nile, from that of the northern white rhino (Ceratotherium simum cottoni) that was found only to the West of the Albert Nile. In the earlier part of the 20th century the range of black rhino extended over much of the north-eastern Uganda including the former Acholi, Lango and Karamoja districts. Anecdotal reports indicate a major separation between this part of the range and Southern range of black rhinos around Kagera river (Akagera National Park, Rwanda had about 3 black rhinos in 1980s). The Game Department report of 1925 by Captain WFT Caldwell and Captain CRS Pittman describes black rhinos being plentiful south of Akagera though there is no authentic record of a single animal ever seen or killed north of the Kagera River.

The black rhinos of Uganda were the eastern subspecies Diceros bicornis michaeli and any reintroduction would have to involve animals of this ecotype. According to the African Rhino Specialist Group, 2011 (AfRSG, 2011), the continental population of black rhinos then was estimated at 4,880 individuals spread across 12 countries. Kenya, Namibia, South Africa and Zimbabwe accounted for 98.8% of the continental population.

b) Northern White Rhinos

Uganda was a home and the biggest stronghold of Northern White rhinos (Ceratotherium simum cottoni). The white rhinos were originally geographically confined to the extreme North West of Uganda in former West Nile and West Madi Districts with an estimated population of 300 animals in the early 1950s. Illegal killing of white rhinos was a big concern even then. In 1926, the white rhino was added to the game ordinance list of protected game, thus requiring those interested in hunting the iconic species to obtain a special license from the Game Department as a deliberate attempt to conserve the species. To address poaching threats, a population was introduced to the northern bank of Murchison Falls National Park. Two translocations of the white rhinos were conducted in 1961 and 1964 where 15 animals were relocated to Murchison Falls National Park.

Supplementary to these efforts, in 1965, a 158 square kilometers of Ajai Game Reserve (the present Ajai Wildlife Reserve) was established primarily to protect an estimated 50 remaining northern white rhinos that were living in the Inde area. Although the rhino population did increase for a time, the change in land use (human settlements and crop cultivation) did restrict the range of the rhinos in this area. The restriction in range coupled with intense poaching pressure severely diminished the population. By the end of 1979, there was not a single northern white rhino left in Ajai Game Reserve.

In spite of the earlier reservations expressed about the habitat on the northern section of Murchison Falls National Park, the introduced population of northern white rhinos increased and bred up to 32 individuals by 1972. According to the Game Department reports of 1972-1976, it was common to sight rhinos around Buligi track. In 1977, poaching began to erode this small population and by end of that same year, the number had dropped to 16. Although the anti-poaching operations were intensified at that time, the operations were halted by the Uganda-Tanzania war of 1978/79 and within three
years, all the rhinos were killed thus concluding the most regrettable extinction of these marvelous species in Uganda.

Elsewhere, the northern white rhino continued to have a small hopeful population. The five (05) remaining individuals in Garamba National Park in the Democratic Republic of Congo (DRC) had to be relocated to 01 Pejeta Conservancy in Kenya in 2005 for their safety and protection thus concluding the global extinction of the northern white rhino in the wild. The introduced population at 01 Pejeta failed to reproduce and one of the surviving males died in March 2018. Assisted Reproductive Techniques (ART) was unsuccessfully attempted but still eluding the conservation community. This presents little hope of ever recreating the indigenous northern white rhino species in Uganda. Therefore, the introduction of white rhinos to Uganda will solely involve an out of range ecotype; the southern white rhinos (Ceratotherium simum simum).

3. ROAD MAP FOR RHINO INTRO/RE-INTRODUCTION IN UGANDA

The Uganda Wildlife Policy 2014 whose vision is to sustainably manage and develop wildlife resources and healthy ecosystems in a transformed Uganda provides a framework for formulation and implementation of species-specific national conservation plans, strategies and programs for rare, threatened, endemic, endangered or extinct species. Government through MTWA and UWA formulated the National Rhino Conservation and Management Strategy 2018-2028 as an initial step in the commencement of rhino re-introduction/introduction back to Uganda. UWA further carried out a feasibility study that assessed the habitat suitability of four (4) wildlife protected areas to hold rhinos. Except LMNP, the rest of the PAS assessed had rhinos before the species got locally extinct in Uganda. The protected areas assessed were; Kidepo Valley, Murchison Falls and Lake Mburo National Parks and Ajai Wildlife Reserve. Among others, the feasibility study specifically recommended the followings:

a) Rhino introduction/reintroduction should not disrupt breeding successes achieved at Ziwa rhino sanctuary while at the same time ensuring potential for multiplication in Ajai Wildlife Reserve.

b) Parentage or ancestry records drawn from a family tree should guide selection of individuals for translocation.

c) A two phased introduction/reintroduction in potential breeding batches of 10/12 animals should be observed.

d) Introduction of new rhinos from other range states should be done to ensure high fecundity, maintenance of genetic vigour and viability in rhino populations.

e) Ajai Wildlife Reserve should be reassessed in greater details for parasitic diseases with special attention to tsetse flies and advanced control and surveillance measures instituted at least six months before any introduction/reintroduction is undertaken.

f) Experienced staff currently working with rhinos at Ziwa should train select UWA rhino rangers staring at least 6 months before any rhino is moved to Ajai.
A detailed phased Rhino Re-introduction and Management Roadmap/Plan highlighting key components in the rhino re-intro/ introduction to Ajai Wildlife Reserve was developed. The key implementation components of the intro/ re-introduction of rhinos include:

i. Feasibility study
ii. Carry out Environmental and Social Impact Assessment
iii. Compensation of communities’ resident within the reserve
iv. Habitat management in Ajai Wildlife Reserve and Ziwa Rhino Sanctuary Development of Rhino Communication Plan
v. Awareness raising
vi. Review of the PA General Management Plan to cater for Rhino Management
vii. Sanctuary establishment and staff accommodation within the PAS
viii. Security, Protection and Law Enforcement Operations
ix. Staffing and staff capacity development
x. Rhino introduction and establishment
xi. Biological management
xii. Fencing entire Ajai Wildlife Reserve

These terms of reference are therefore drawn to bring on board a consultant/ contractor in fulfilment of some of the steps mentioned above.

4. THE ASSIGNMENT

The consultant/ contractor is expected to produce architectural designs for the rhino holding facilities, secure approval and construct the rhino facilities within Ajai Wildlife Reserve (AWR) in accordance to the approved plans. The consultant/ contractor is expected to review the relevant literature related to rhino management to understand the assignment better and demonstrate his/ her understanding through the development of appropriate designs and construction works that are the basis of this assignment. Special consideration on soil types in the area, pressure applied on the fence and environmental agents such as wind, water, erosion, weather and termites to inform the type and strength of materials to be used. For avoidance of doubt, the materials for the construction works should be robust and enduring. There should be a compartment for veterinary holding for inspection, treatment, recovery, stress management and acclimatization following recovery. The veterinary holding should have feeding and watering troughs and able to hold 2 - 3 rhinos at a time.

5. GOAL AND SPECIFIC OBJECTIVES

To establish a sanctuary in Ajai Wildlife Reserve for management of a viable population of rhinos. Specifically, the projected is intended to achieve the following objectives:

i. Develop the architectural design for a rhino sanctuary in Ajai Wildlife Reserve. Specifically, the design should include;
shelter(s), mud wallow and free run area o Rhino boma holding facility layout plan inclusive of rhino holding cells, storage for supplement feeds, general store and equipment storage.

- Boma veterinary facility layout plan should include rhino holding pens with a capacity of holding 1-3 rhinos requiring veterinary procedure, drug and equipment storage and examination/operating pen.
  
  i. Develop the Bills of Quantities (BoQs) for the sanctuary that includes the three components mentioned in (i) above iii.
  
  ii. Get approval of the design from the district authorities in accordance to the Physical Planning Act, 2010
  
  iii. Construct the rhino sanctuary according to the approved plan

6. SCOPE OF THE CONSULTANCY

Uganda Wildlife Authority is seeking an experienced and qualified consultant/ firm to undertake the development of the architectural design, BOQ and construction of a rhino sanctuary in Ajai Wildlife Reserve. The Reserve falls within Madi- Okollo district, which was recently curved out from Arua District. The consultant will work closely with the National Rhino Program Coordinator, the Manager Engineering Services and the Chief Warden, Murchison Falls National Park. The Rhino Coordinator will be responsible for coordination between the consultant and UWA management.

7. DELIVERABLES

1. An inception report from the Consultant detailing the understanding of the assignment, brief comments on the Terms of Reference, methodologies to be undertaken to accomplish the assignment, and time lines for undertaking the assignment

2. Comprehensive report with Architectural designs (propose three alternatives with corresponding costs) of a sanctuary capable of holding 30 - 50 rhinos
a) The design should cover 52 square kilometers of land area
b) The sanctuary shall consist of electric perimeter fence
c) The fence will compromise 9-strand, high tensile tight locked fence with cable for borderline
d) The fence should be 2 meters high from the ground
e) Fence pole depth should be at least 2.5 feet deep underground to give it maximum strength and stand over time.
f) Advice on the materials to use for fence poles based on strength, soil type and durability. The fence should have wires that can maintain a 6-7 KV average power at all times. Contractor should give advice on the type of poles to be used after site visit to determine which one would last longer and give costs related to the various options.
g) Costs related to the construction of the boma, water facilities for rhino access to water, clearly graded perimeter surface with a road for routine inspection of the fence, power installation facilities and other infrastructure that is necessary for the normal functioning and protection of the rhinos.

1. A costed fence maintenance plan to address voltage loss, breakage, regular servicing of equipment and gadgets.
2. A costed list of basic sanctuary maintenance tools and training of the maintenance staff.
3. Present a draft report to Uganda Wildlife Authority both in hard and soft copies and prepare to present the same orally at a meeting(s) at UWA Headquarters for comments by UWA.
4. Final report after input by UWA. Consultant/ contractor will be expected to submit 4 hard copies of the report with a soft copy on a flash/ memory stick
5. A well-constructed rhino facility with roads, water points/ dams, water supply systems with water pumping equipment

8. DURATION

The project will last one (01) year from the date of signing the contract but designs report expected before end of the third quarter of this financial year.

9. PERSONAL SPECIFICATIONS/COMPETENCES FOR THE CONSULTANT

- The lead consultant shall demonstrate experience in undertaking similar or bigger projects within the East African region or within Africa or in any rhino range state
- The consultant shall demonstrate appropriate experience in Natural Resource Management and veterinary husbandry techniques.

The team leader shall possess a degree in engineering preferably in the following field; Civil or Electrical disciplines.
• An Expert in the consultancy team should possess at least a degree with 5 years’ experience in similar undertaking.
• The consultancy team should have among others:
  • Civil engineer
  • Electrical Engineer
  • Mechanical Engineer
  • Protected areas/wildlife expert,
  • Veterinarian with wide experience in handling rhino welfare
  • Ecologist
  • Hydrologist
  • Soil scientist
  • Environmental scientists
  • Environmental and social impact assessment specialist

Individuals within the team should have a minimum of a Bachelor’s degree with experience of not less than four years handling their areas of responsibility under this assignment with evidence of published/ jobs/ assignments so far completed through consultancy works.

• Individuals with cross cutting experiences in two fields will be considered as though they are two experts.
• Evidence of academic qualifications and experiences for the team members should be provided
• The consultant, firm or company should have relevant experience in such undertaking of not less than five years. The firm must submit relevant documents that confirm its legal existence according to the laws of Uganda.
• Firm and companies in joint venture are welcome but whichever company that is brought on board should be compliant to the tax regimes and other national and international standards.
• Companies with local content but experienced personnel in their areas of competencies shall be desirable

Quotations must be made in local currency, those in foreign currency will be converted into local currency and evaluated as though they were submitted in the local currency. Please note that all payments shall be done in local currency.

10. BUDGET AND PAYMENTS SCHEDULE

The quotation for the assignment should cover all costs be it professional fees and other incidental costs such as consultations where necessary and consultant associates. The table below shows the payment schedule:

| After contract signing and submission of the final inception report and acceptable designs | 5% of the total assignment cost |
Construction works will be paid in certificates based on completed assignment. Certificates based on work completed/delivered after completion of works are given. All payments shall be effected except for the mandatory retention percentage. Upon completion of defects liability period (one year) and correction of all defects identified, payment of retention funds is made.

### 11. SUBMISSION PROCEDURE

Consultants/ firms that would wish to express their interest in undertaking the prescribed assignment are requested to send hard-copies of the following:

(i) A technical proposal (in a sealed envelope clearly marked "Technical Proposal")
   containing:
   - An understanding and interpretation of the TORs.
   - Methodology to be used in undertaking the assignment.
   - Duration within which they will complete the designs and later the construction works.
   - Curriculum vitae of the consultant to undertake the assignment plus relevant copies of key certificates.

(ii) A financial proposal (sealed in a separate envelope clearly marked "Financial Proposal") that includes all costs related to the design and construction of the rhino facilities in AWR. The costs related to designs should be separated from those related to construction activities.

### 12. REPORTING

The Consultant(s) shall report to the Executive Director UWA but will work closely with the UWA Civil Engineer and any other person/company that UWA may assign supervisory responsibilities.