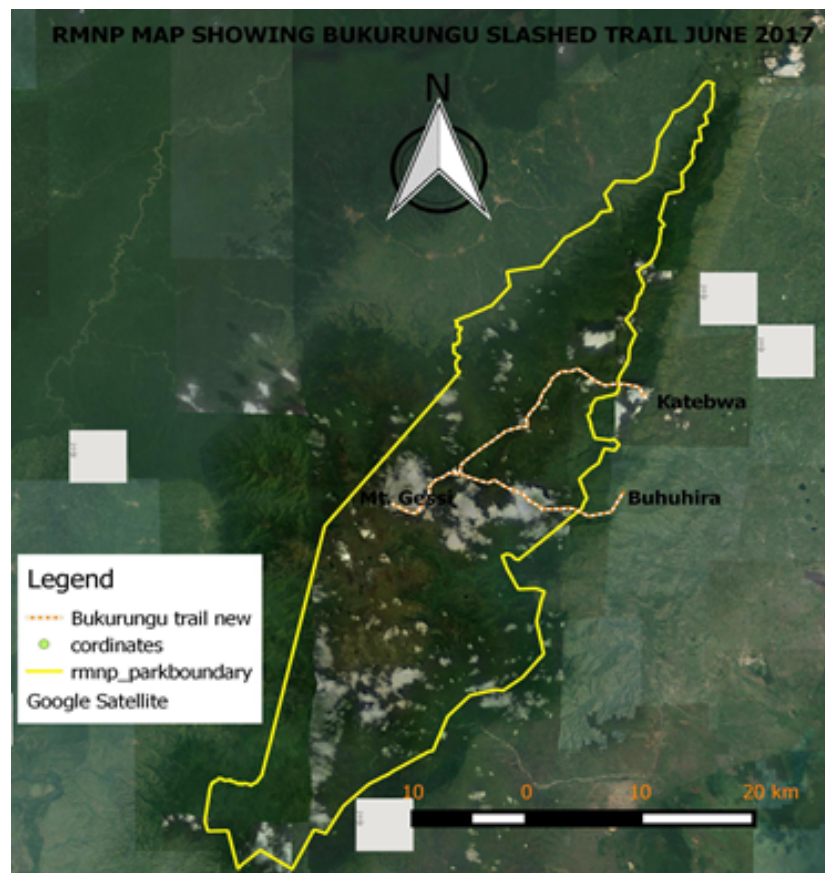




UGANDA WILDLIFE AUTHORITY
RWENZORI MOUNTAINS NATIONAL PARK
"A WORLD HERITAGE SITE"



TERMS OF REFERENCE FOR THE DEVELOPMENT OF ARCHITECTURAL AND STRUCTURAL DESIGNS AND BUILDING ACCOMMODATION FACILITIES, CAMPSITES, BRIDGES, BOARDWALKS, LADDERS, AND WASTE PITS AND THEIR BILLS OF QUANTITIES FOR BUKURUNGU TRAIL IN THE RWENZORI MOUNTAINS NATIONAL PARK, WESTERN UGANDA



INTRODUCTION:

Rwenzori Mountains National Park (RMNP) has secured funding from World Wide Fund (WWF) to develop 61km of Bukurungu Trail. WWF has mobilized funds under the project- Sustainable Financing of Rwenzori Mountains National Park project (SFRMNP) and has earmarked some funds for developing Bukurungu trail infrastructure. The 61km trail traverses through the different vegetation zones with longest being the heather zone which is 40km. Other vegetation zones covered by the trail are 7km Bamboo, 6km of forest, 5 km of Afro montane and 3km of the alpine zones.

These terms of reference (TOR) cover the objectives, the specific deliverables expected in the development of architectural designs, Bills of Quantities and building of tourism infrastructure along the trail.

The evaluation criteria for the winning service provider will be price competitiveness, high performance, ability to work independently and good working relationship with the local Bakonzo communities surrounding the PA. See Annex 1: Description of needed infrastructure, Annex 2: Map of Bukurungu trail and its description, Annex 3: General terms of reference for the trail and Annex 4: Specifications guide for construction of accommodation facilities.

OVERALL OBJECTIVE:

To develop a master plan for Bukurungu trail infrastructure that blends with the environment and tourism in the northern spurs of Rwenzori Mountains National park.

SPECIFIC OBJECTIVES:

1. To develop architectural and structural designs for bridges, boardwalks, ladders, buildings, campsites, resting shelters and waste pits
2. Develop Bills of Quantities (BOQs) for all bridges, boardwalks, ladders, buildings and campsites and waste pits
3. Undertake the construction of the structures designed in 1 above based on the architectural designs and the bills of quantities

MAIN DELIVERABLE

1. Architectural and structural designs for:
 - i. Bridges (one standard design for flood and fire proof bridge)
 - ii. Boardwalks (one standard design for flood and fire proof boardwalks),
 - iii. Ladders (one standard design for flood and fire proof ladders),
 - iv. Nine (9) accommodation facilities/buildings with kitchen, toilets and bathrooms, etc
 - v. Campsite with toilets and washrooms (one standard for a campsite)



- vi. A standard design for a resting shelter
 - vii. Waste pits (one standard design for a non-biodegradable and degradable waste)
2. Bills of Quantities (BOQs) for all bridges, boardwalks, ladders, buildings and campsites and waste pits
 3. Structures in 1 (i-vii) constructed as per architectural designs, BOQ and any other specifications in these TORs

LOGISTICAL SUPPORT FROM RMNP

The contractor, support staff and local communities involved in the above will be provided free entrance to the park throughout this exercise.

LOGISTICAL SUPPORT FROM WWF

WWF will provide funding for the cost of the work.

TIMELINE, SUPERVISION AND SUBMISSION

Financial and technical proposals (2 hard copies) for development of architectural and structural designs for bridges, boardwalks, ladders, buildings, campsites and waste pits together with their BOQs and building should be submitted by 18th September 2017 at 4.00 pm to:

Either:

**WWF Uganda Country Office,
Plot 2 Sturrock Road Tel: (+256) 0200510800
P.O. Box 8758,
KAMPALA**

Or:

Rwenzori Mountains National Park Offices in Rwakingi, Kasese

EVALUATION CRITERIA

1. Price competitiveness
2. Track record of high performance in the mountainous terrain
3. Ability to work well with the local Bakonzo communities



EUROPEAN UNION

4. Ability to work independently
5. Experience in the design and layout of trail infrastructure in a mountainous landscape



Annex 1

Annex 1: Description of needed infrastructure

Bridges:

The trail goes through large rivers like River Lamia, River Rwimi and several streams that make it difficult to walk through. These sports require bridges to simplify the movement of tourist through the trail. The team recorded 27 river crossing point with total distance of 454m as shown in the table below. During the clearing of the trail, the contractor constructed some temporal bridges and ladders using local materials to easy their movement during field work.

List of sites for bridges



| WP | Latitude | Longitude | Observation | Size in meters |
|-----------------------|----------|-----------|-------------|----------------|
| 1 | 395614 | 930747 | Bridge | 10 |
| 2 | 398449 | 933032 | Bridge | 8 |
| 3 | 0.400505 | 29.93666 | Bridge | 9 |
| 4 | 0.417267 | 29.95223 | Bridge | 25 |
| 5 | 0.425349 | 29.95697 | Bridge | 20 |
| 6 | 0.42791 | 29.96202 | Bridge | 10 |
| 7 | 0.436525 | 29.97261 | Bridge | 15 |
| 8 | 0.437099 | 29.97361 | Bridge | 10 |
| 9 | 0.43781 | 29.97633 | Bridge | 5 |
| 10 | 0.441482 | 29.9802 | Bridge | 15 |
| 11 | 0.462528 | 30.00183 | Bridge | 5 |
| 12 | 0.472195 | 30.02505 | Bridge | 5 |
| 13 | 0.474597 | 30.02649 | Bridge | 25 |
| 14 | 0.475118 | 30.03098 | Bridge | 25 |
| 15 | 0.475357 | 30.0314 | Bridge | 5 |
| 16 | 0.507567 | 30.04796 | Bridge | 30 |
| 17 | 0.509351 | 30.04824 | Bridge | 20 |
| 18 | 0.523923 | 30.06412 | Bridge | 41 |
| 19 | 0.412724 | 30.03001 | Bridge | 10 |
| 20 | 0.427164 | 30.00145 | Bridge | 20 |
| 21 | 0.427905 | 30.00056 | Bridge | 20 |
| 22 | 0.429364 | 29.9978 | Bridge | 20 |
| 23 | 0.429777 | 29.99723 | Bridge | 19 |
| 24 | 0.430174 | 29.99661 | Bridge | 20 |
| 25 | 0.430143 | 29.99654 | Bridge | 22 |
| 26 | 0.430806 | 29.99383 | Bridge | 20 |
| 27 | 0.433473 | 29.97041 | Bridge | 20 |
| Total Distance | | | | 454 |

Ladders:

To certify the tourist, the trail was designed to go through unique beautiful scenery including the valleys, ridges and deferent stratified vegetation. Some places are gently flat while others are stiff that require ladders. Seven (7) sites covering area measuring a total of 77m were identified that require ladders and temporal ladders were constructed using local materials. .



Drainage channels were opened to prevent erosion along the trail, drainage channels were constructed by means of offshoots and water basins in slopes and steep sites.

List of ladders

| WP | Latitude | Longitude | Observation | Distance |
|-----------------------|----------|-----------|-------------|-----------|
| 1 | 0.46734 | 30.00677 | Ladders | 4 |
| 2 | 0.499214 | 30.03927 | Ladders | 15 |
| 3 | 0.500352 | 30.03989 | Ladders | 5 |
| 4 | 0.501338 | 30.04089 | Ladders | 2 |
| 5 | 0.508366 | 30.04798 | Ladders | 10 |
| 6 | 0.406609 | 30.07113 | Ladders | 19 |
| 7 | 0.426996 | 30.00343 | Ladders | 22 |
| Total Distance | | | | 77 |

Boardwalks:

Bukurungu trails traverses swamps, lakes and boggy areas which are soft and full of mud. Four (4) boggy sites were recorded covering 1600m long. These sites require board walks to enable use of the trail with minimum negative impacts. The sites are as shown in the table below.

List of boardwalks

| WP | Latitude | Longitude | Observation | Length in m |
|-----------------------|----------|-----------|-------------|-------------|
| 1 | 0.399172 | 29.93646 | Board walk | 1000 |
| 2 | 0.5213 | 30.05732 | Board walk | 200 |
| 3 | 0.465051 | 30.00733 | Board walk | 150 |
| 4 | 0.426101 | 29.95739 | Board walk | 250 |
| Total Distance | | | | 1600 |



Proposed Camps from Katebwa gate to Mt. Gessi and to Buhuhira

From Kasokero Gate, the first camp is proposed to be in Imbembero 200m from the gate. The camp is meant to serve the tourists who are hiking to the peaks, interested in chimp activities, cultural activities, birding, and accommodation for leisure. The camp is located at the forest zone and it takes two hours to walk from Katebwa ranger post to the camp.

The second camp is proposed to be at Yerya river site located in heather zone after the bamboo vegetation belt. The site has beautiful scenery and it's good for birding, overview for Kabarole, Bundibugyo and DRC. On this day you will view the plains of Semuliki and Kabarole district while in the camp. The site is flat on a ridge; Water at this camp is within a distance of 150meters. The MTN mobile network is very strong here for communication and tourists can use it for internet access.

The third day you proceed to Green Lake Camp through the heather zone crossing seasonal rivers that require ladders and bridges then have a night at green camp located at beautiful area next to the green lake that provides habitat to various bird species. While in the camp you hear beautiful sounds of different birds that make it one of the reach camps. The camp is proposed to be in the flat hill next to the lake that can act as water source. The site has both MTN and Airtel network which can help in communication for both tourists and staff while in the field.

The fourth camp is at Alfarosis Camp located in heather zone at an altitude of 3438m.asl. The journey starts with a climb along a slope through the misty route with beautiful views of the Portal peaks along the trail. This camp is on top of the ridge before Lake kyungyu. While in the camp you will be able to view DRC ranges and Rwiimi area.

The Fifth Camp is located Lamia river. The journey starts with a climb along the river Lhume, the early morning hours of the day leaves you strong and with urge to climb the only steep Muguli bypass on this new trail. As you think of slopping down to the Muguli Lake, the MTN mobile network is very strong here that gives clients a chance to call their beloved once at home. There are several unnamed beautiful peaks which can easily be climbed by those interested as they acclimatize for Portal and Gessi Mountains. Around the camp, you can easily explore the water falls which gives the real taste of the Rwenzori waters. You spend a night at the camp dreaming of the past and your next destination

The sixth camp is located at Bukurungu East camp a few meters away from the lake in an altitude of 3786m.asl. The camp is ideal for camping; camping pads shall be made to easy putting up tents. It is set in the middle of the two mountains- Portal and Gessi, an interesting point for camping to start a hike on either mountain. Five hours from Lamia camp takes you through a very gentle crossing passing the vegetation of the alkamilan and several lobelia species. It is from this camp that the next day on your trip chose to do the Portal peaks and come back to the camp. The next morning you are set for Mt Gessi through Lake



Bukurungu west. If the weather is clear you view Margherita glaciers on Mt. Stanley, Portal peaks and Sovoa Glaciers.

The tussocks will be cut down to clear the area for the camping pads with the capacity to accommodate 40 people.

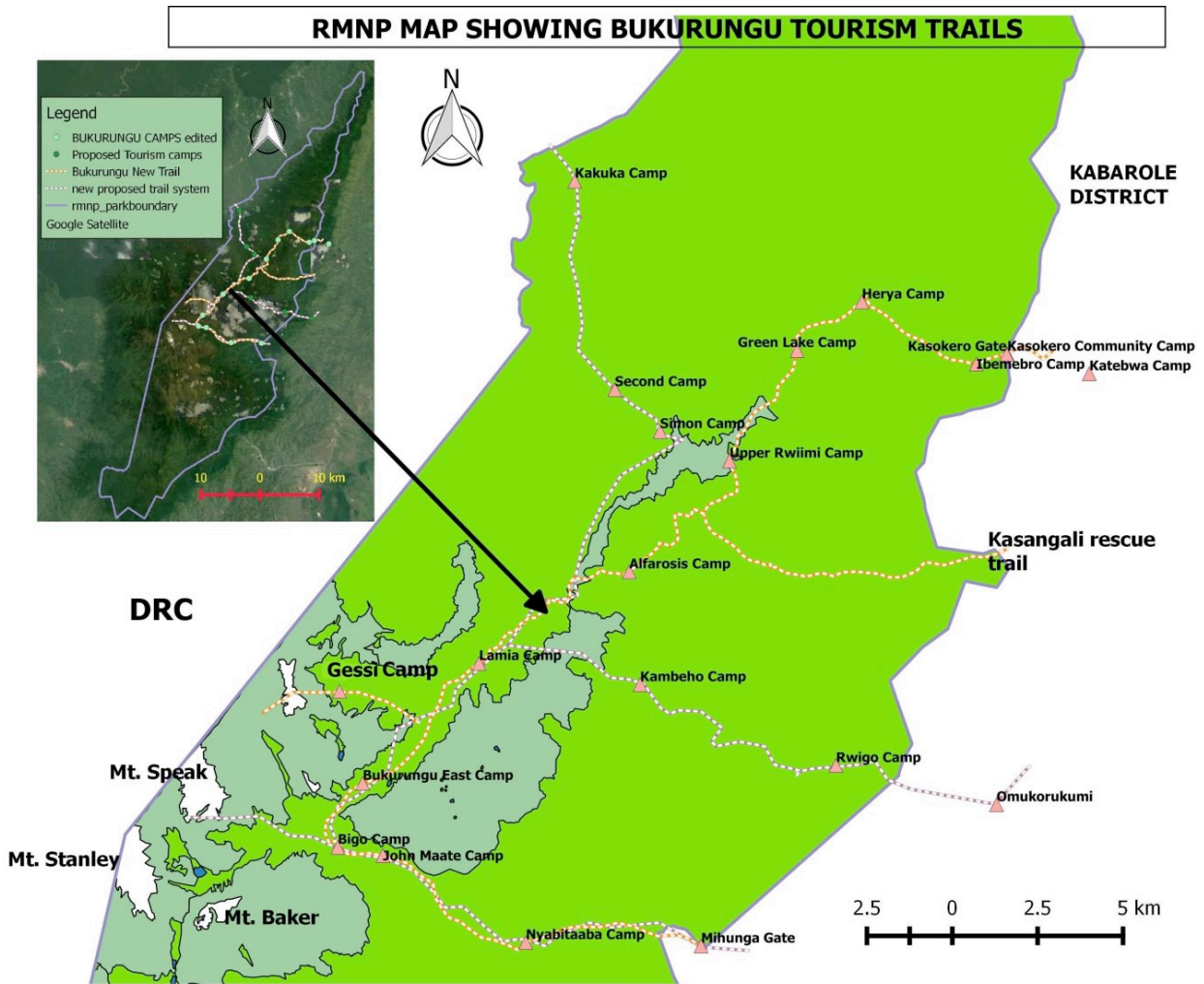
The Seventh camp is at Mt. Gessi camp, set to hike Mt Gessi. If the weather and time allow, you will do the peaks and return to Mt Gessi base camp for an overnight. Both Portal and Gessi require vigilance, experience and determination as there is not enough snow. One can do Mt. Gessi hike and enjoy the natural cool breath and beautiful view of the area including the Margherita peak.

The eighth camp is located at Kambeho at 3700m at heather zone. Getting to this camp takes you through the heather trees (*Ericathiasis*) with lots of moss hanging - over these trees like the old man beard. The zone is characterized by views of hanging valleys and it is through the same zone where both varieties of monkeys can be met- The black colubus monkeys, Black and white, and Vavet monkeys. It is the zone of the Rwenzori Turracco, a rare beautiful bird in the park. On this day you will see the first garden of lobelias along the trail, rock shelters which were used by the old men of the Rwenzoris, visit each of these sites led by a guide for the mysterious stories surrounding the rock shelters. Water at this camp is within a distance of 150meters and a good number of eric trees would be cut down to establish camping pads and also provide a good view of the surrounding to the visitors.

The ninth camp is at Rwigho Camp next to River Rwigho. The next morning, it will take you only 6-7 hours to come out through Mukarukumi in Buhuhira area.



Annex 2: Map of Bukurungu trail and its description



Trail Description

The trail enters the park at Kasokero in Bukara parish and traverses through forest, Bamboo, heather, to the peaks through several ridges of Rwenzori Mountains. The trail is ideal for chimpanzee viewing, birding and other wildlife species for example there is a notable presence of Rwenzori duiker. The trail is also ideal for Nature walk, exploration of cultural shrines and caves and hiking the various ridges to the spectacular mountain peaks that can be viewed at the end of the trail. The trail starts from Kinyampanika out post and will enter the Park through the proposed Kasokero Gate. From Kasokero gate, the trail passes through the forest to Imbembero camp. This distance is suitable for full day's hike. From Imbembero the trail climbs



through the bamboo thickets and heather zone to a proposed camping site at Yerya camp during a second day of hiking. The trail continues to the Green Lake Camp where visitors can spend a third night. The trail goes through Upper Rwimi where visitors can camp during the fourth night of hiking and then at the Alfarosis camp on the fifth day. On the sixth day visitors can camp at Lamia where they can loop down to Mukorukumi through Kambeho and Rwigho Camps. Alternatively, visitors will continue on an upward hike from Lamia camp to Bukurungu camp for the seventh night. On the eighth day visitors can continue to hike on the trail and stay overnight at Mt Gessi camp where they can explore Mt Gessi and Mt Speke.

The trail traverses 61 kilometers within the Rwenzori Mountains National Park. The trail head which begins at Kasokero continues to Mt Gessi Camp between Mountains Gessi and Speke. The trail traverses through the different vegetation zones with longest being the heather zone which covers 40km, Bamboo zones 7km, forest zone 6km, Afro montane 5 km and alpine zone 3 km



Annex 3

General terms of reference for the trail

Trail user profile

The trail will be used by tourist, guides, porters, researchers, PA administration, Rangers for patrol and other tour operators who bring tourist to the Park.

Quality

Bukurungu trail will be a foot trail opened 2 meters wide with switch backs at twenty metre interval depending on the slope and terrain, resting points, waste bins, camps, latrines and interpretative boards.

Access

This will be one of the trails starting from Kabarole district and can be accessed through Kinyapanika in Kabonero sub-county. One can also join it from Mukorukumi, Rwigho, Kambeho camps.

Safety

In case of emergency, Airtel and MTN network is available in most places starting from the entrance up to Gessi Mountains. This will help in communication and monitoring of tourist while in the mountain. Rescue routes are many that make it easy to save life in case of emergency. In steep areas along the trail, Ladders will be put in places, hanging bridges would be constructed across the rivers, trail diversion from dangerous place and switch backs will be thought of. Ropes, Rescue team, Helipads, warning signs, First aid kit, Fire prevention, fire assembly site, stretchers, and oxygen kit shall be provided for safety of tourist.

Benefits

Economic benefits

The trail has potential to economically benefit UWA, communities and other stake holders in terms of revenue generation. Neighboring communities shall develop Community camps, local products such as hand crafts/ food will be sold to tourists, and Communities will provide Labor to maintain the trail, escorting tourist which will earn them leaving financially. Generally the economic benefits will be realized by communities, local government and all stake holders.

Environment and heritage benefits

Bukurungu trail will improve on the management of resource, frequent monitoring of the site and promoting conservation of World Heritage values including the cultural values shall be realized when people see the importance of conservation. Communities shall embrace cultural practices as they promote cultural tourism. General environment and heritage benefits shall be encouraged through sensitization, community involvement in PA management.



Social benefits

Sustainability Demand



EUROPEAN UNION

Both community will have pride to have tourism trail starting from Kabarole, hotels will be developed for social activities, cultural performance during tourism. The trails shall provide an opportunity to develop community groups who shall perform different social interaction between natives and visitors and this will grow community pride and help people connect through community groups.

There is a high demand of this trail by Kabarole communities, local leaders, tour companies, and tourist who have ever used the trail before developing. Other stake holders like WWF, researchers have earmarked chimpanzee and cultural value products. The trail that traverses



ANNEX 4: Specifications guide for Construction of Accommodation buildings

The buildings should be cold proof for safety in the cold and high altitude areas between 1600-4500 metres above sea level

- 10 beds will be using shared dormitory bathrooms.
- 10 self-contained accommodation

Each of the units should have:

- A store for items for at least 20 tourists
- A Kitchen and Dining for at least 20 tourists
- A warming / heating site with chimney for at least 20 tourists
- An external toilet (pit fitted with a seat or flashing toilet)
- An external bathroom for the porters
- Internal bathroom for non-self-contained rooms
- Soak way pits and septic tanks as per architectural design
- Rubbish pit for biodegradable and incinerators for non-bio-degradable
- Other fittings and gadgets as deemed necessary and in comparison with other sites along other trails.

Accommodation, Store and Kitchen shelters and appropriate interior space for 50 porters and guides in dormitory style is recommended.

Good quality timber which is made to adapt to high altitude weather conditions is recommended. Timber should be procured from legal sources.

Attach an A4 draft architectural drawing for all sites and structures

Other structures should be adapted to climate change disasters like fire and floods

The costing of structures will include among others

- | | |
|-------------------------------------|---------------------------|
| • Site preparations | • Furniture and Beddings |
| • Sub structure | • Rain water harvesting |
| • Super Structure | • Carrying of Materials |
| • Roofing Fittings and Fixtures | • First aid and Emergency |
| • Wall and floor finishes | • Waste management |
| • Ceiling construction and finishes | • Food |
| • Electrical installations | • VAT |
| • Plumbing installations | |