Rwenzori Mountains National Park

SITE INFORMATION

Country: Uganda
Inscribed in: 1994
Criteria: (vii) (x)

Site description:
The Rwenzori Mountains National Park covers nearly 100,000 ha in western Uganda and comprises the main part of the Rwenzori mountain chain, which includes Africa's third highest peak (Mount Margherita: 5,109 m). The region's glaciers, waterfalls and lakes make it one of Africa's most beautiful alpine areas. The park has many natural habitats of endangered species and a rich and unusual flora comprising, among other species, the giant heather. © UNESCO
SUMMARY

2014 Conservation Outlook

Good with some concerns

The conservation outlook remains robust, given the natural attributes and resilience of such an inaccessible and rugged place, with its wide range of elevation, and linkages with other components of Africa’s most diverse trans-frontier protected area complex. There remain significant uncertainties over the likely long-term impact of climate change, which may result in loss of the glaciers and snowfields by 2030 and have far-reaching long-term effects on plant community dynamics. Concern over the possible restoration of copper mining within the site remains, while other threats such as the growing impact of tourism, and illegal hunting are being addressed.

Current state and trend of VALUES

Low Concern
Trend: Data Deficient

The scenic values of the site, epitomized by the occurrence of glaciers and snowfields on the Equator, are being compromised as the ice melts (and the glaciers are expected to disappear altogether by 2030). There are insufficient data to assess likely changes to the site’s biodiversity resulting from climate change, but rare endemic plants in the Afro-alpine zones may be in decline, while birds and mammals endemic to the western (Albertine) Rift forests may be benefiting from an expansion of forest at lower elevations.

Overall THREATS

Low Threat

The park’s remote and rugged geography, combined with its very limited potential for alternative use means it is not highly threatened. Climate change is melting the glaciers (which are projected to disappear altogether by 2030), and will alter vegetation communities in the long term. There are some issues with
illegal hunting and other resource use by local communities and impacts from a growing number of visitors. There is a possibility that an old copper mine at Kilembe could resume operations within the park in the future.

**Overall PROTECTION and MANAGEMENT**

**Mostly Effective**

The remote and rugged nature of the terrain ensures a high level of natural protection against unsustainable resource use, so the need for management intervention is limited. The park has a good current management plan, but implementation is falling short of expectations due to budget and staffing constraints. Visitor numbers and revenues are growing strongly but the park is still heavily dependent on international NGO partners and donor support to cover recurrent and investment costs.
FULL ASSESSMENT

Description of values

Values

World Heritage values

► Spectacular mountain scenery
   Criterion:(vii)

The park protects some of Africa’s most spectacular mountain scenery, including Africa’s third highest peak (Mount Margherita, 5,109m), and an abundance of glaciers, lakes, snow-capped peaks, waterfalls and bog-filled valleys. Unlike most other high African mountains, the Rwenzori range is not of volcanic origin but was created through tectonic movements in the Earth’s crust associated with the formation of the Western arm of the Great Rift Valley. The mountain range includes multiple peaks, and its location on the edge of the Congo Basin is associated with very high rainfall and the development of exuberant Afro-alpine vegetation with impressive giant Senecio and Lobelia plants growing in the high bogs, and great cushions of colourful moss perched on the leaning branches of giant heathers (SoOUV, 2011).

► Rich montane flora, with many endemic species
   Criterion:(x)

The park has the richest montane flora of any site in Africa, including many endemic species. The heaths and Afro-alpine vegetation zones that extend from around 3,500m to the snowline (at around 4,400m) represent the rarest vegetation types on the African continent. Prominent constituents of this extraordinary vegetation are several endemic species of giant groundsels (Senecio) and Lobelias, which punctuate the landscape like giant candelabra
Rare and endemic birds

Criterion: (x)

Although the total number of species of birds recorded (217 spp.) is not especially high, the avifauna includes two Red Data Book species (Shelly’s Crimsonwing, Cryptospiza shelleyi, classified as Vulnerable; and Lagden’s Bush Shrike, Malacronotous lagdeni, classified as near-threatened; IBA Factsheet 2012), as well as 15 of the 24 species endemic to the Western (Albertine) Rift 1996) area of central Africa (Howard et al. (1996) (Eds.) (SoOUV, 2011).

Rare and threatened mammals

Criterion: (x)

The Rwenzori range is especially important for its rare and endangered mammals, including an unusually rich small mammal fauna and some prominent larger mammals. The small mammal fauna includes 28 species of rodent and 12 shrews, of which nine species are endemic to the western (Albertine) Rift and three (Micropotamagole ruwenzori, Paracricidura maxima and Ruwenzorisorex suncoides) are extremely rare (Howard et al. (Eds.), 1996). Large mammals of conservation concern include elephants, chimpanzee, Rwenzori black-fronted duiker and l’Hoests monkey (SoOUV, 2011).

Diversity of habitats

Criterion: (x)

There is an exceptional diversity of habitats on account of the range of altitude (2,100 to 5,100m), equatorial location and high rainfall. These are montane forest, bamboo, tree heather, Afro-alpine and Nival zones at increasing altitude, each with its own special characteristics and associated flora and fauna (SoOUV, 2011).
Assessment information

Threats

Current Threats
Low Threat

The park’s rugged terrain and long history of protection as a vital water catchment area have resulted in generally low levels of threat. The park covers steep, cold, high altitude land with little potential for commercial forestry or agricultural use, and has never been subject to significant pressure for anything more than subsistence use of a few non-timber forest products such as bamboo, building poles, firewood, honey and medicinals. There is some illegal hunting and collection of some non-timber forest products continues under management agreements with local communities, which is thought to be within sustainable limits. Tourism is increasing and there are some associated problems with litter, waste management and trampling of vegetation. There is also a degree of commercial poaching for bushmeat sold in the Democratic Republic of Congo, poaching, particularly for medicinal reasons. The biggest long-term threat to the park is climate change, which is predicted to cause the disappearance of the glaciers by 2030, and result in a general shift in vegetation zones to higher elevations, reducing the area of the unique Afro-alpine communities.

► Habitat Shifting/ Alteration, Droughts, Temperature changes

- Data Deficient
- Inside site
- Outside site

Global warming is raising temperatures and melting the park’s glaciers, which are projected to disappear by 2030. In the longer term climate change is expected to cause a general shift of vegetation zones to higher elevations reducing the area of the rare high-altitude Afro-alpine vegetation communities. At the same time it is likely to increase the feasibility of
cultivation close to the park boundary (on land that was previously too cold for most crops). There may be increased incidence of landslides and flooding if precipitation falls as rain instead of snow (SOC report, 2009; Taylor et al., 2009).

► **Commercial hunting, Subsistence hunting**
  
  **High Threat**
  
  **Inside site**
  
  **Outside site**

  Low-level subsistence hunting is a way of life for the local Bakonjo people, and its impact is limited due to the extremely rugged terrain and difficulty of capturing prey species. Hunting is generally carried out with wire snares, and guns are not widely used in traditional hunting (P. Howard, pers. obs.). There is also a degree of commercial poaching for bushmeat sold in the Democratic Republic of Congo, poaching, particularly for medicinal reasons (A. Mugisha, pers. obs).

► **Crops**
  
  **Low Threat**
  
  **Outside site**

  Agricultural encroachment affects only a few of the lower valleys and ridges, in the immediate vicinity of the lower park boundary within the buffer zone, but tends to be limited to cultivation of wheat on some of the ridge tops. Elsewhere the land inside the park is too steep and inaccessible for cultivation, and the climate unsuitable. Most of the local population lives in the valleys, quite far from the park, where they benefit from better access and better provision of services and the soils are generally poor. With increasing human population pressures, agricultural encroachment is likely to become a more significant threat.

► **Other Biological Resource Use**
  
  **Low Threat**

  Non-timber forest products, notably bamboo, natural fibres, mushrooms, honey and the like, make an important contribution to local livelihoods and these products may now be harvested from designated zones under the terms of 14 community-use Memoranda of Understanding. Off-take is
monitored by park rangers, but there are few data on which to base harvesting quotas (State Party report, 2012).

**Forestry/ Wood production**
- **Low Threat**
  - Inside site
  - Outside site

The montane forests of lower elevations are not generally suitable for commercial exploitation, but a few trees are felled to satisfy local demand for building poles and sawn timber.

**Tourism/ visitors/ recreation**
- **Low Threat**
  - Inside site
  - Outside site

Tourism numbers are still low compared with East Africa’s other great mountains - the drier, higher Mounts Kilimanjaro and Kenya. However, some areas are affected by unsustainable firewood collection; litter and waste management; and trampling of vegetation (especially through the extensive bogs).

**Fire/ Fire Suppression, Dams/ Water Management or Use**
- **Data Deficient**
  - Inside site
  - Outside site

N.A.

**Water Pollution**
- **Data Deficient**
  - Inside site
  - Outside site

N.A.

**Erosion and Siltation/ Deposition**
- **Data Deficient**
Potential Threats

Data Deficient

Mining is the greatest potential threat, since the park includes significant known copper ore reserves and a large existing mine which could be re-opened. The possibility of further insurgency activity cannot be ignored, since the park has already suffered a six-year closure on account of insecurity and the region has a long history of periodic instability. With increasing human population pressures, agricultural encroachment is likely to become a more significant threat.

Mining/ Quarrying

Data Deficient

The Kilembe mine used to operate an extensive network of deep mine shafts extracting copper ore from strata in the Kilembe River Valley within the area now designated as World Heritage. The mine was closed as a result of the economic difficulties which afflicted Uganda during the 1970s and 1980s and has never been re-opened. However, significant reserves of copper ore remain, and the Uganda Investment Authority sought bids for the assets of the holding company Kilembe Mines Ltd as recently as 2009 (www.tradeinvestafrica.com).

War, Civil Unrest/ Military Exercises

Low Threat
Inside site

The park is located in a volatile part of central Africa, with insurgency activity on both sides of the international border erupting from time to time. The park was closed to visitors and all conservation projects ceased for six years from 1998 to 2003 as a result of insecurity on the Ugandan side, and the property was inscribed on the List of World Heritage in Danger between 1999 and 2004 (Decisions 23.COM VIII.1-2 and 28COM15C.3). The park is now secure and tourism and management activities are unaffected by security concerns (SP report, 2012).

Protection and management

Assessing Protection and Management

▶ Relationships with local people
  Mostly Effective

Community relations have improved in recent years, with the economic benefits of tourism accruing to community-based groups managing park concessions for accommodation, porter and guiding services. Fourteen communities around the park have agreed Memoranda of Understanding, allowing access to park resources (bamboo, honey, mushrooms etc) within designated zones. A programme to support linkages between culture and conservation has been initiated (with support from Fauna Flora International), through which cultural values are being promoted and culturally-important (sacred) sites protected within the park (SP Report, 2012).

▶ Legal framework and enforcement
  Mostly Effective

The legal framework is strong. Originally protected as a Forest Reserve in 1941, it became a National Park under Statutory Instrument No. 26 of 1991, amended by Statutory Instrument No 3 of 1992. No cultivation or settlement is permitted within the park. The park is managed by the semi-autonomous Uganda Wildlife Authority (UWA), established under the Uganda Wildlife Statute 1996, with its own
Board of Trustees.

▶ **Integration into regional and national planning systems**  
**Mostly Effective**

The park is managed together with other protected areas within Uganda Wildlife Authority’s regional management structure.

▶ **Management system**  
**Mostly Effective**

The park has been under planned management for more than half a century, the first two management plans (1948, 1961) being produced by the Uganda Forestry Department and focusing on water catchment protection. The development of a General Management Plan (GMP) for all national parks is a statutory requirement, and the first full plan developed by Uganda Wildlife Authority covers the 2004-14 period (General Management Plan, 2004). The GMP was reviewed in 2009 to make it more responsive and relevant to changing circumstances (SP Report 2012).

▶ **Management effectiveness**  
**Mostly Effective**

Management is significantly constrained by budgetary and staffing levels. The Uganda Wildlife Authority was receiving major support during its initial establishment phase through World Bank and GEF financing of a major Protected Areas Management and Sustainable Use (PAMSU) programme, completed in 2009 (SOC, 2009). Donor funding has been reduced since then, affecting programmes at the park. Staffing levels (currently 64) are significantly below levels anticipated in the GMP (which envisages 111 staff by 2014), and the park has inadequate vehicles and other equipment as well as unmet needs for investment in new park infrastructure. Despite this, however, the park is characteristically resilient and requires only relatively low levels of management input to retain its values and ecological integrity.

▶ **Implementation of Committee decisions and recommendations**  
**Some Concern**

Since its removal from the List of World Heritage In Danger in 2004,
Committee decisions and recommendations have focused on (1) development of a sustainable financing strategy; (2) elimination of mining licenses; (3) mitigation of climate change impacts and (4) reporting on ecological monitoring. Some progress has been reported in implementing climate change mitigation measures, but at the time of writing there had been no significant progress in developing a sustainable financing strategy (revenue retained covers about half the park’s recurrent budget) or eliminating mining licenses. The ecological monitoring plan that was developed in 2009 has not been submitted for review, nor have the results of monitoring of resource use been reported to IUCN or the UNESCO World Heritage Centre (SP Report, 2012).

**Boundaries**

**Mostly Effective**

Park boundaries are well marked with concrete beacons and lines of planted trees. The international border through the centre of the mountain range remains unmarked. There are no significant boundary incursions. Trans-boundary coordination of patrols between management on either side of the international border has recently been initiated. The buffer zone is not subject to management intervention by Uganda Wildlife Authority, but communities have been supported to plant trees adjacent to the boundaries. Most settlements are located in the valleys, typically several kilometers from the park boundary. The boundary line itself traverses steep land that is generally unsuitable for cultivation, along the 2,100 m contour.

**Sustainable finance**

**Some Concern**

Financial sustainability is based on retention of all park revenues by Uganda Wildlife Authority, enabling cross-subsidy within the Uganda parks system. Park revenue covers 50% of recurrent budgets so the park depends on cross-subsidy from other parks and donor support (SP Report, 2012). There has not been a significant improvement in the proportion of recurrent budgets covered by retained revenue since 2006/7, although visitor numbers are reported to be increasing at 20% per annum. There are useful contributions from international NGO partners, including WWF, WCS, and FFI., but the
major World Bank/GEF-financed PAMSU programme (which had provided vehicles and other equipment) was completed in 2009. There remain significant concerns over sustainable financing.

▶ **Staff training and development**

**Data Deficient**

The General Management Plan envisages a total staffing level of 111 staff by 2014, but there are currently only 64 staff deployed. The most recent SP report (2012) does not mention specific staff training initiatives.

▶ **Sustainable use**

**Data Deficient**

Fourteen Memoranda of Understanding have been developed under which communities adjacent to the park can use resources such as bamboos, honey, mushrooms and medicinal plant products from designated zones. Resource availability and off-take are monitored by park rangers to ensure sustainable use, but the details of this monitoring are not yet available. Some illegal hunting is carried out (Howard, 1996; Mission Report 2003), but its impact in the rugged mountain terrain is difficult to evaluate.

▶ **Education and interpretation programs**

**Mostly Effective**

An education strategy aimed at raising awareness of park values amongst local communities has been developed through the support of the WWF-funded Rwenzori Mountains Conservation and Environmental Management Project. A separate initiative focused on raising awareness of climate change impacts and mitigation is supported by the MacArthur Foundation. Local communities are engaged at various levels, through tourism initiatives, wildlife clubs, and negotiation over the extent and limits of resource use within designated resource use zones.

▶ **Tourism and interpretation**

**Data Deficient**

No visitor statistics are available, but hiking the 6-day ‘central circuit’ provides the park’s primary revenue and visitor numbers are increasing at
20% annually.

► Monitoring
  Data Deficient

An ecological monitoring plan was developed in 2009, but no details are available.

► Research
  Data Deficient

Thirteen priority research topics have been identified to aid management decision-making. Three of these, focused on (1) resource inventory; (2) monitoring of resource off-take by community members and (3) status of chimpanzees are being undertaken with support from WWF. Two further research activities have recently been commissioned by Uganda Wildlife Authority on (1) the impact of climate change on restricted-range species, and (2) changes in vegetation belts/altitudinal zonation resulting from climate change.

Overall assessment of protection and management
  Mostly Effective

The remote and rugged nature of the terrain ensures a high level of natural protection against unsustainable resource use, so the need for management intervention is limited. The park has a good current management plan, but implementation is falling short of expectations due to budget and staffing constraints. Visitor numbers and revenues are growing strongly but the park is still heavily dependent on international NGO partners and donor support to cover recurrent and investment costs.

► Assessment of the effectiveness of protection and management in addressing threats outside the site
  Data Deficient

Community outreach programmes have significantly improved relations with local communities and the process of engaging communities in negotiating resource access rights should provide a basis for long-term sustainable use
and reduce threats.

► Best practice examples

The park is considered a model for integration of cultural values into the Protected Area Management framework as an innovative approach to resource management, the first of its kind in Africa (SoOUV, 2011; Infield, M., Mugisha, A., 2010.).

State and trend of values

Assessing the current state and trend of values

World Heritage values

► Spectacular mountain scenery

Low Concern
Trend: Deteriorating

For many visitors a significant element in the scenic values of the site is the existence of the glaciers and snowfields very close to the equator. Their disappearance will reduce the scenic value and impact of the site. Furthermore, as visitor numbers increase there will be a need for further infrastructure, including visitor accommodation, bridges and walkways through the high altitude bogs, all of which are likely to compromise the wilderness values of the 6-day hiking experience around the central peaks (SOC report, 2009; Taylor et al., 2009).

► Rich montane flora, with many endemic species

Low Concern
Trend: Deteriorating

The full impact of climate change is difficult to predict, but it is expected to cause a gradual long-term shift of vegetation communities to higher elevations, with the rare high-altitude Afro-alpine communities reduced in extent as they are gradually replaced by species characteristic of lower elevations. It is these rare communities at the higher elevations that have the highest proportion of endemic plants (SOC report, 2009; Taylor et al.,
2009).

▶ **Rare and endemic birds**
  
  **Good**  
  **Trend:** Improving

Most of the rare birds, including the majority of the Albertine Rift endemics are forest birds, may be expected to benefit from the expansion of forest habitats to higher elevations as the climate warms.

▶ **Rare and threatened mammals**
  
  **Good**  
  **Trend:** Improving

Most of the rare and threatened mammals, including the majority of the Albertine Rift endemic rodents and shrews, as well as the primates, elephants and duikers are forest-adapted species which may be expected to benefit from the expansion of forest habitats to higher elevations as the climate warms.

▶ **Diversity of habitats**
  
  **Data Deficient**  
  **Trend:** Data Deficient

As the climate warms and there is a general shift of vegetation zones to higher elevations, a reduction in the area of the rare Afro-alpine vegetation communities can be expected. At lower elevations, species characteristic of richer lowland forest communities may be able to colonise the lower areas of the park. Nevertheless, the main vegetation communities and diversity of habitats are not likely to be altered in any major way.

### Summary of the Values

▶ **Assessment of the current state and trend of World Heritage values**
  
  **Low Concern**  
  **Trend:** Data Deficient

The scenic values of the site, epitomized by the occurrence of glaciers and snowfields on the Equator, are being compromised as the ice melts (and the
glaciers are expected to disappear altogether by 2030). There are insufficient data to assess likely changes to the site’s biodiversity resulting from climate change, but rare endemic plants in the Afro-alpine zones may be in decline, while birds and mammals endemic to the western (Albertine) Rift forests may be benefiting from an expansion of forest at lower elevations.

▶ **Assessment of the current state and trend of other important biodiversity values**

**Data Deficient**

**Trend: Data Deficient**

N.A.

### Additional information

### Key conservation issues

▶ **Management effectiveness and sustainable financing**

Local

Increase management effectiveness, paying particular attention to investment for business growth and revenue generation. Develop and implement the required sustainable financing plan.

▶ **Community relations**

Local

Further strengthen community relations especially towards mutually beneficial management arrangements.

▶ **Monitoring**

Local

Improve monitoring especially in relation to the sustainable use of resources within designated resource use zones, and in relation to ecological change resulting from climate change.
International cooperation

Regional

Strengthen trans-frontier collaboration and develop a formal protocol for cooperation.

Benefits

Understanding Benefits

- **Carbon sequestration, Soil stabilisation, Flood prevention, Water provision (importance for water quantity and quality), Pollination**

  Water catchment, water flow regulation, climate amelioration. The watershed functions as a result of the intactness of the boundary has enhanced the Park’s capacity to act as the biggest contributor of water in the region for domestic and industrial use (SoO UV, 2011)

- **History and tradition, Wilderness and iconic features, Sacred natural sites or landscapes**

  Sacred sites, strong cultural ties, rich history, source of livelihood, security

- **Outdoor recreation and tourism**

  Mountaineering, nature tourism, cultural tourism, scenery

- **Is the protected area valued for its nature conservation?, Does management of the site provide jobs (e.g. for managers or rangers)?**

  N.A.

- **Legal subsistence hunting of wild game, Collection of wild plants and mushrooms**
N.A.

- **Access to drinking water, Commercial wells**
  
  N.A.

- **Collection of medicinal resources for local use**
  
  N.A.

- **Importance for research, Contribution to education, Collection of genetic material**
  
  N.A.

- **Collection of timber, e.g. fuelwood**
  
  N.A.
  
  Data deficient

### Projects

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## REFERENCES

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