

# Tanzania: Selous Game Reserve – Still Under Threat

Günter Wippel, uranium network



Tanzania's World Heritage Site Selous Game Reserve, Africa's largest protected area, with approx. 51.000 square kilometers, has been registered as "World Heritage in Danger" in 2014, and UNESCO retained Selous Game Reserve on the "In Danger"-list since then (2017 Decision: 41 COM 7A.17, <http://whc.unesco.org/en/decisions/6963>).

In a February 2017 statement, UNESCO explicitly expressed its concern about Tanzania's plan to build Stiegler's Gorge Dam in the central part of Selous Game Reserve (<https://whc.unesco.org/en/news/1785/>). In fact, at the UNESCO WHC Session 2017 in Krakow/Poland, the Tanzanian delegation had requested a postponement of the discussion of WHS Selous Game Reserve due to "new

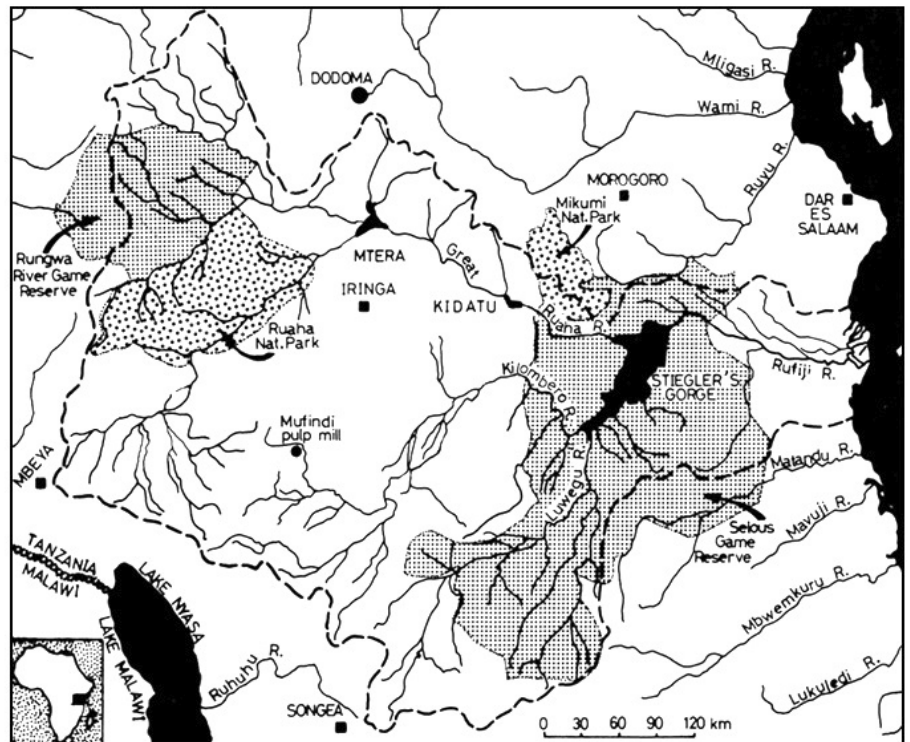


Fig. 2: Area of the planned Stiegler's Gorge Reservoir inside Selous Game Reserve. Map: UN Food and Agriculture Organization



Fig. 1: Newsclip from The Guardian of 2 July 2017 <https://www.ippmedia.com/en/news/come-rain-or-shine-well-build-stieglers-project> Source:

facts"; the request had been granted by the Chair. The "new facts" were not so new at all: Tanzania's President Magufuli had already been cited in the media as saying on 1st July 2017 that "come rain, come sunshine, the project will be implemented as per plan" [1] – in the heart of Selous Game Reserve. Or, in a similar report, "we have decided to revive the Stiegler's Gorge project ... we will not listen to any environmental impact (concerns)." [2]

The timing of these statements, just days before the status of Selous Game Reserve would be discussed at the UNESCO WHC session, may be seen as a clear act of defiance towards the WHC.

Besides Stiegler's Gorge Dam, plans to build a uranium mine at Mkuju River got less attention. In 2012, the Government of Tanzania had motioned the WHC to excise the mine area in the Southwest of the Selous Game Reserve from the WHS. Sub-

stantial requests by the WHC have not been well complied with by the Government of Tanzania (as outlined in the 2017 Reactive Mission Report and by this author in the 2017 World Heritage Watch Report).

There is a lack of clarity around a number of issues with the Mkuju River Uranium Project

1. Change of Mining Method

The operator of Mkuju River Project, Mantra, majority-owned by Russian state nuclear energy corporation ROSATOM, had applied for a mining license with an ESIA based on open pit mining. In October 2016, Uranium One vice president and chief operations officer, Andrey Shutov, announced in the presence of Mantra Tanzania managing director, Fredrick Kibodya, that the company wants to employ in-situ recovery (ISR) at Mkuju River. [3] This intention had been announced previously at different occasions, as for example during a presentation by the operator to the IAEA in 2014. [4]

The use of ISR is in strong contradiction to the 2012 ESIA which rejects ISR, due “to a lack of confinement between impermeable layers.” Ongoing drillings have obviously not shown any different geology. Meanwhile, UNESCO WHC clearly stated that a change of the mining method would necessitate a new ESIA. To date, there is no indication that a new ESIA has been commissioned.

2. Changing Timeframe

On July 7, 2017, while the WHC session was still on-going and Selous Game Reserve was still to be discussed, ROSATOM surprisingly announced to suspend the project: “Russian state cor-

poration suspends \$1.2 billion uranium project in Tanzania” [5]—for at least three years, due to the depressed uranium market. Hence, in February and March 2018, equipment was removed from the site and the number of workers reduced.

3. Changes in Tanzania Mining Legislation

The same media report of July 2017 stated that ... “Another reason for this postponement is the major overhaul of Tanzania’s mining industry commissioned by the local authorities in March of this year. Recent bills, which aimed at providing the state with a greater share of revenue from the country’s natural resources, imposed fresh challenges for mining companies operating in Tanzania, including Rosatom.” [5]

4. Transport routes for the final product (‘yellowcake’)

Additional ambiguity arises around the transport route for the final product of the mine, generally referred to as ‘yellowcake’ (more or less pure uranium): while the company seems to prefer a route through Tunduru and Masasi to a port on Tanzania’s east coast (Mtwara, approx. 650 km), the Government of Tanzania prefers a route to Dar es Salaam (roughly 1000 km) and undertakes efforts to upgrade Dar es Salaam port to security Class 7 (license to handle radioactive materials).

The European Union, however, is currently (2018) funding research and a project to “organize an exercise simulating the transport of uranium ore concentrate from Tanzania to Namibia through Malawi and Zambia, and monitoring step by step the provisions applied in the individual countries, at the border crossings and assessing the interaction at the regional level.” [6]

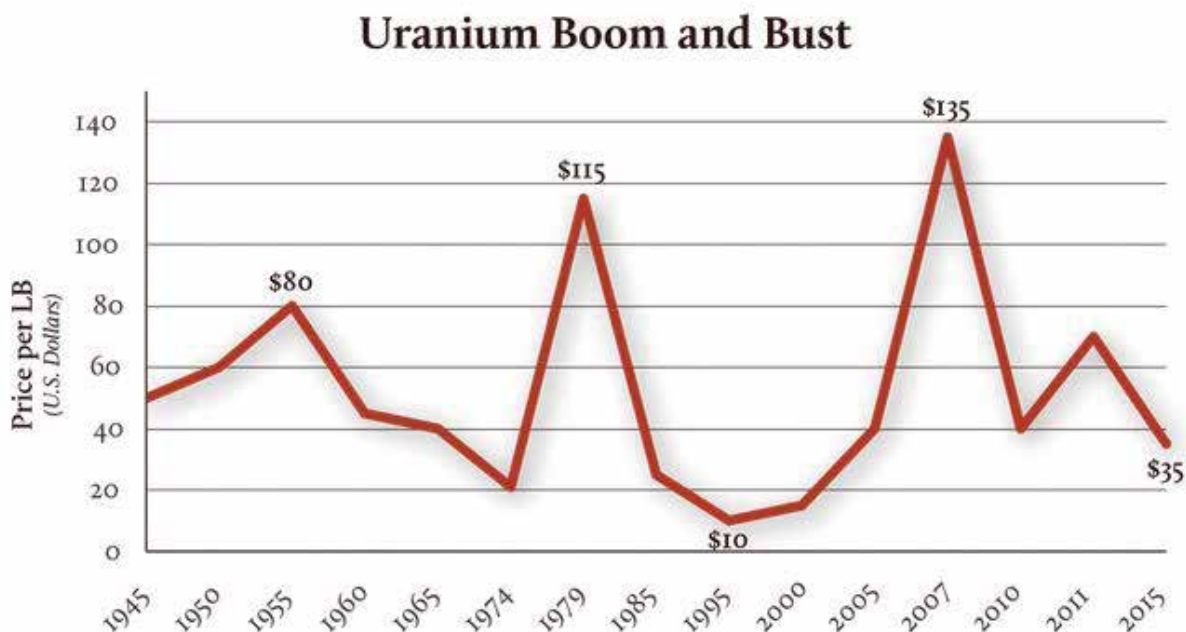


Fig. 3: Rise and Decline of the Price of Uranium 1945 – 2015.

Graphics: Grand Canyon Trust

This route measures a little less than 4000 km, six times the shortest connection (to Mtwara), passing through four countries as well as the Caprivi Game Park in Namibia – not an appropriate surrounding for uranium transports. In Namibia’s Walvis Bay, uranium from Namibian mines such as Rössing is shipped, and now mothballed Kayalekera uranium mine in Malawi had used the same port for shipping their final product.

### Impacts on the World Heritage site

Without reiterating the impacts of mining and the disposal of millions of tons of radioactive and toxic tailings (in case of an open-pit mine) that have been outlined previously, the major ambiguities around the project as well as the notorious boom-and-bust cycles of the uranium industry give rise to grave concerns:

- Will the Mkuju River Project ever start – and when?
- Will the Government of Tanzania comply with all ‘conditions and recommendations’ outlined by the UNESCO WHC in its decisions regarding the Selous Game Reserve since 2012?
- Which mining method will be used?
- Will there be a new ESIA – as requested by the UNESCO WHC - in case in-situ recovery (ISR) will be used?
- How will the company – wanting to use the ISR method – overcome the rejection of this method in the original (2012) ESIA, based on scientific analysis?
- By which route shall the final product (yellowcake) be transported?

The uranium industry has proven repeatedly to be a boom-and-bust industry; a rise of the price of uranium in the near future (as hoped for by Uranium One and other companies) may be followed by a similarly steep and sudden decline, as happened

before, leaving behind an abandoned mine, with no reclamation work done.

In Africa, as well as in other parts of the world, many uranium mine and mill sites, tailings and tailings ponds have been left behind without rehabilitation; in some cases, rehabilitation started 20-30 years later, and often at government expense.

Taking into account the climate of ambiguities around the Mkuju River Project, and the boom-and-bust character of the uranium industry, there is considerable risk that the project may be left behind with an abandoned mine and unreclaimed tailings and tailings ponds – which will pose a serious threat to the headwaters of the Rufiji River system and to the World Heritage Site for many years to come.

The mine area that was excised from the World Heritage Site Selous Game Reserve in 2012 “in an extraordinary and unique way” should instead be re-integrated in a similarly extraordinary way into the World Heritage site to ensure its continued protection.

### References

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- [3] <http://www.thecitizen.co.tz/News/Business/Uranium-One-to-use-latest-technology-at-Mkuju-River/1840414-3423476-ms8vmi/index.html>
- [4] <https://www-pub.iaea.org/iaeameetings/cn216pn/Wednesday/Session8/039-Boysov.pdf>
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- [6] European Union PROJECT MC5.01/15B - SUPPORT TO SOUTHERN AFRICAN STATES IN NUCLEAR SAFETY AND SAFEGUARDS; fact sheet accessed through [www.google.de/search?q=PROJECT+MC5.01%2F-15B+-+SUPPORT+TO+SOUTHERN+AFRICAN+STATES+IN+NUCLEAR+SAFETY+AND+SAFEGUARDS+&ie=utf-8&oe=utf-8&client=firefox-b-ab&gfe\\_rd=cr&dcr=0&ei=XZOUWpzAikPHXuajvogB](http://www.google.de/search?q=PROJECT+MC5.01%2F-15B+-+SUPPORT+TO+SOUTHERN+AFRICAN+STATES+IN+NUCLEAR+SAFETY+AND+SAFEGUARDS+&ie=utf-8&oe=utf-8&client=firefox-b-ab&gfe_rd=cr&dcr=0&ei=XZOUWpzAikPHXuajvogB)