

Press Release re:

World Heritage Committee Decision on Selous Game Reserve Boundary Change in Tanzania, East Africa.

Background & Additional Information

(1) Selous Game Reserve

Description by UNESCO

quoted from http://whc.unesco.org/en/list/199/ emphasis added

"Large numbers of elephants, black rhinoceroses, cheetahs, giraffes, hippopotamuses and crocodiles live in this immense sanctuary, which measures 50,000 km² and is relatively undisturbed by human impact. The park has a variety of vegetation zones, ranging from dense thickets to open wooded grasslands.

The Selous Game Reserve, covering 50,000 square kilometres, is amongst the largest protected areas in Africa and is relatively undisturbed by human impact. The property harbours one of the most significant concentrations of elephant, black rhinoceros, cheetah, giraffe, hippopotamus and crocodile, amongst many other species. The reserve also has an exceptionally high variety of habitats including Miombo woodlands, open grasslands, riverine forests and swamps, making it a valuable laboratory for on-going ecological and biological processes.

Criterion (ix): (...)

Because of this fire-climax vegetation, soils are subject to erosion when there are heavy rains. The result is a network of normally dry rivers of sand that become raging torrents during the rains; these sand rivers are one of the most unique features of the Selous landscape. Large parts of the wooded grasslands of the northern Selous are seasonally flooded by the rising water of the Rufiji River, creating a very dynamic ecosystem.

Criterion (x): The reserve has a higher density and diversity of species than any other Miombo woodland area: more than 2,100 plants have been recorded and more are thought to exist in the remote forests in the south. Similarly, the property protects an impressive large mammal fauna; it contains globally significant populations of African elephant (Loxodontha africana) (106,300), black rhinoceros (Diceros bicornis) (2,135) and wild hunting dog (Lycaon pictus). It also includes one of the world's largest known populations of hippopotamus (Hippopotamus amphibius) (18,200) and buffalo (Syncerus caffer) (204,015). There are also important populations of ungulates including sable antelope (Hippotragus niger) (7000), Lichtenstein's hartebeest (Alcelaphus lichtensteinii) (52,150), greater kudu (Tragelaphus strepsiceros), eland (Taurotragus oryx) and Nyassa wildebeest (Connochaetes albojubatus) (80,815). In addition, there is also a large number of Nile crocodile (Crocodilus niloticus) and 350 species of birds, including the endemic Udzungwa forest partridge



(Xenoperdix udzungwensis) and the rufous winged sunbird (Nectarinia rufipennis). Because of this high density and diversity of species, the Selous Game Reserve is a natural habitat of outstanding importance for in-situ conservation of biological diversity.

Integrity

With its vast size (5,120,000 ha), the Selous Game Reserve retains relatively undisturbed on-going ecological and biological processes which sustain a wide variety of species and habitats. The integrity of the property is further enhanced by the fact that the Reserve is embedded within a larger 90,000 km² Selous Ecosystem, which includes national parks, forest reserves and community managed wildlife areas. In addition the Selous Game Reserve is functionally linked with the 42,000 km² Niassa Game Reserve in Mozambique, and this is another important factor that ensures its integrity. With no permanent habitation inside its boundaries, human disturbance is low."

(2) Plans for uranium exploitation

In 2009, plans for exploitation of uranium were announced in public by then Energy and Minerals Minister, William Ngeleja.

Uranium extraction to start in 2011- Ngeleja

2009-03-21 12:00:42 By Patrick Kisembo

The Guardian

Tanzania accented its nuclear ambitions yesterday, saying plans were underway to start uranium extraction ready for the country to revert to one of the world's highly rated renewable energies.

Energy and Minerals minister, William Ngeleja made the revelation when answering journalists` questions at a news conference he called in Dar es Salaam yesterday to introduce the new mining consultative committee.

"We expect to start extracting uranium in three years. This is a great opportunity and we welcome investors in uranium mining," he said.

Energy and Water Utilities Regulatory Authority (Ewura) Acting director general Anastas Mbawala reacting to the minister's pronouncement, said that mining and subsequently setting up a uranium processing industry is not an easy job.

"It needs a lot of consideration; but I think the government can sell the uranium without processing it," he said.

He also said if an investor wanted to set up a processing industry in the country, the authority would ensure that he met all the conditions including expertise, safety, environment and radiation control issues before providing him with a license.

He said uranium becomes more dangerous when it was processed into a form of radiation.

In January this year, Ngeleja was quoted as saying already the government had contracted 20 companies to explore uranium deposits that could be used in producing nuclear energy.



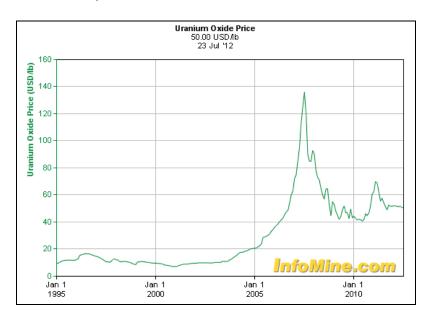
Ngeleja said in case it was found that Tanzania had sufficient uranium for electricity generation, the government would embark on it, observing international laws on atomic energy use.

Members of the mining consultative committee include the Chairman Maj. General (rtd) Godfrey Mang`enya, former justice of the military court, appointed by President Kikwete. (...)

from: The Guardian, Tanzania, 21. March 2009

(3) General Situation around Uranium

A rise in the price of uranium up to 2007 gave rise to a number of junior mining companies, and exploration activities skyrocketed.



Price of Uranium Oxide

from: http://www.infomine.com/investment/metal-prices/uranium-oxide/all/

The companies are especially targeting Africa, and the CEO of Paladin, another Australian-based junior uranium mining company gave the reason:

In 2006 the Managing Director of Paladin John Borshoff said, "Australia and Canada have become overly sophisticated ... *There's been an over-compensation in terms of thinking about environmental issues and social issues"*, *forcing companies like Paladin into Africa*".

Melbourne Sun Herald, April 3rd, 2006 (emphasis added).

Thus, weaker environmental and social standards are among the most important reasons why uranium companies target African countries; unwilling or unable to comply with stricter standards "at home", they claim to "be forced" to go to Africa.



(4) Mkuju River Uranium Deposits

Given the above situation, and the license given by Tanzania's (then) Minister for Energy and Minerals, Ngeleja, uranium mining companies started to move into Tanzania.

Basic geological survey had been done during colonial times already.

In the 1970ies, German partially state-owned state funded Uranerzbergbau GmbH (UEBG) had done some basic exploration for uranium and had discovered deposits; due to their low grade and the (comparatively) low price of uranium / yellow cake at that time, exploitation of these deposits was not considered.

When uranium mining companies moved in after the 2009 announcement and granting of licenses by Minister Ngeleja, they were able to use the data gathered earlier by UEBG.

"The area was identified as prospective for uranium during reconnaissance exploration undertaken between 1978 and 1982 by Uranerzbergbau GmbH."

from: http://www.uranium1.com/index.php/en/development/mkuju-river-tanzania

Within the next couple of years, a number of mining companies started exploration for uranium in Tanzania, among them URANEX NL and Mantra Resources, both originating from Australia.

For details, see also:

WISE Uranium Project > Mining & Milling > New Uranium Mining Projects - Africa http://www.wise-uranium.org/uptz.html

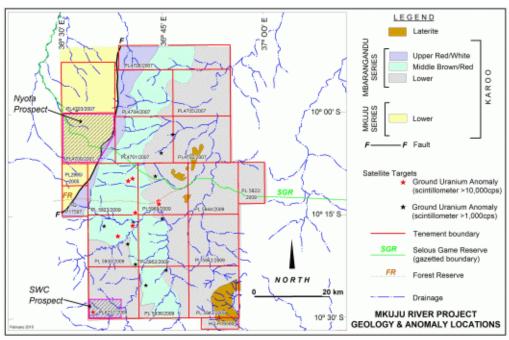
The companies involved are all junior mining companies with no previous experiences in uranium mining.

In most cases, their aim is to identify and define a deposit and then sell the deposit to a seniors mining company with profit for the shareholders; the senior company will then invest and exploit the deposit.

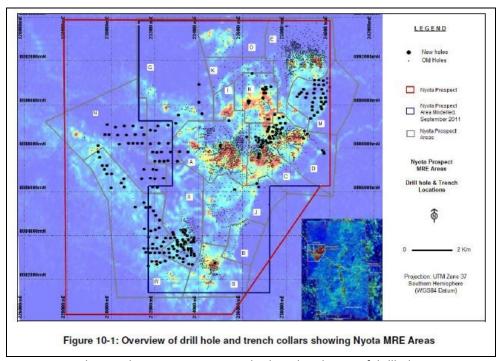


(5) Uranium Exploration at Mkuju River area / Selous Game Reserve

Mantra Resources started exploration activities for uranium also <u>inside</u> Selous Game Reserve, including drilling test boreholes and installing a camp <u>inside</u> Selous Game Reserve.



The green line indicates the border of the SGR Selous Game Reserve; a considerable part of the Mantra Resources exploration area is inside SGR



The map by Mantra Resources displays that dozens of drillholes and trenches have been dug and drilled, many of them <u>inside</u> the SGR (although not visible on this map, the SGR border line is approx. diagonally from left upper corner to right lower edge of the red-square block)



It is not clear how Mantra Resources and other companies were able to obtain licenses for exploration inside World Heritage site Selous Game Reserve.

The World Heritage Committee stated later (in 2007 and 2008) that its Operational Guidelines had been violated by the State Party (the Government of Tanzania).

(6) Scandal around Hunting Company leasing area to Exploration Companies

On July 12, the opposition party in Tanzania exposed the fact that a hunting company in Tanzania had leased their land to uranium miners.

The lease is said to be illegal.

More suspicious, considerable amounts of money were to be paid: starting at US \$ 55.000 for the lease in general, US \$ 250.000 in case of start-up of mining activities, and going up to US \$ 6.000.000 (6 million) altogether.

Although the companies involved are NOT the companies involved in Mantra Resources Mkuju River Uranium Mine Project, the obscure deal shows how exploration and mining companies probably got access to the inside of Selous Game Reserve.



Home » News

`Hunting firm illegally leased block to uranium miners`

BY PATRICK KISEMBO

12th July 2012

The Opposition camp yesterday told the National Assembly about an alleged scam involving two uranium exploring companies and a hunting firm. They are said to have entered into a fraudulent contract apparently facilitating the subletting of the blocks contrary to the law and regulations.

This surfaced when the opposition tabled its "alternative budget estimates" Game Frontiers of Tanzania Limited, was alleged to have sub-leased Mbarang'andu village in Namtumbo benefiting some of USD6m payable in two phases.

An additional 250,000 US dollars was set to be paid upon commencement of actual mining activities. Meanwhile, the local villagers are estimate to at best have had a mere s living in the surrounding villages 10,000 USD go into their meager financial capital circulation.



Shadow minister for Lands, Housing and Human Settlement Development, Halima Mdee named the exploration companies as, Uranium Resources PLC and Western Metals Limited. She also unveiled that the contract was done by a Tanzanian law firm, Rex Attorneys and signed on March, 23, 2007.

As a result of its presumed illegality, the confidential document is out for all to see and it names, Mohsin M. Abdallah and Nargis M. Abdallah as the owners of Game Frontiers of Tanzania Limited, the leasing party. "...another 55, 000 USD is to be paid annual, on every first of March to compensate the opportunity cost..." Mdee went on to unravel the scandal.

"I have gone through the Wildlife Conversation Act of 1974 and The Wildlife Conservation Act Number 5 of 2009. These acts allow a person with a hunting permit to only carry hunting activities and not otherwise..." she further explained.

She added that in accordance to the land laws of 1999 should a piece of land allocated for other purposes and then later be found to contain minerals then ownership returns to the government or the individual.

SOURCE: THE GUARDIAN

from: http://www.ippmedia.com/frontend/index.php?I=43562



(6) The World Heritage Committee (WHC)'s decision in 2007 and 2008

In 2007, at its 31st session, in Christchurch, New Zealand, from 23 June – 2 July 2007, the World Heritage Committee, stated in regard to Selous Game Reserve:

The State Party did not submit a state of conservation report as requested by the Committee at its 30th session (Vilnius, 2006). The State Party was requested to submit a report on progress made with the management plan and Environmental Impact Assessments (EIA), in addition to the following issues:

- a) Sources of income for the property;
- b) Poaching;
- c) Mining and mineral prospecting.

from: WHC Decision 31 COM 7B. 3 (2007)

At its 32nd session, July 2008, Quebec City, Canada, the World Heritage Committee stated in regard to Selous Game Reserve and the ongoings inside and around it:

The World Heritage Committee,

- 1. Having examined Document WHC-08/32.COM/7B.Add,
- 2. <u>Recalling</u> Decision **31 COM 7B.3**, adopted at its 31st session (Christchurch, 2007), (...)
- 4. <u>Regrets</u> that the State Party did not submit a report on the state of conservation of the property and on the implementation of the recommendations of the 2007 mission;
- 5. <u>Expresses its utmost concern</u> about reports received by the World Heritage Centre and IUCN of uranium prospecting within the property and in the wildlife corridor; and <u>reiterates</u> its position that mining is incompatible with the World Heritage status of the property;
- 6. <u>Urges</u> the State Party to halt any prospecting or other mining developments within the property and <u>calls upon</u> the holders of any mining or exploration permit covering the property to respect international standards with respect to mining in World Heritage properties, as outlined in the International Council on Mining and Metals Position Statement on Mining and Protected Areas (2003) and not to mine or explore within World Heritage properties;

(...)

11. <u>Further requests</u> the State Party to submit to the World Heritage Centre, by **1 February 2009**, a detailed report on the state of conservation of the property, including the status of



wildlife populations, the levels of hunting and poaching, **status of the planned and on going mining and development projects** with potential impact on the property and on progress in the implementation of the recommendations of the 2007 monitoring mission, for examination by the World Heritage Committee at its 33rd session in 2009.

<u>from</u>: Decision - 32COM 7B.3 - Selous Game Reserve (United Republic of Tanzania) (N199) http://whc.unesco.org/en/decisions/1608 (**bold emphasis added**)

In November 2008, a Joint Mission of UNESCO and IUCN to the Selous Game Reserve was conducted. It stated in its Executive Summary:

The mission expressed concern on a number of activities, currently on-going or planned within the property, which are not compatible with its World Heritage status. These include the on-going uranium exploration activities, planned oil and gas exploration, and proposed dams.

The mission noted that the State Party had not informed the World Heritage Committee of these activities and had not provided information on their expected impact on the values and integrity of the property, as required under article 172 of the Operational Guidelines.

The mission team was able to visit a uranium exploration concession on the southern boundary of SGR, of which 75 km₂ is located with the Property. The mission concluded that while the on going activities are having a clear impact on the local environment, these impacts are not irreversible and ecological restoration will be possible at the end of the exploration phase. The mission noted that mining is incompatible with the World Heritage status.

In the case of SGR, given its extremely large size, the mission team expressed the view that in this particular case the State Party could argue for redesigning the boundary and of the property to avoid conflicts between mining and World Heritage, although this would require a thorough evaluation, including an EIA, and the provision of compensatory habitat through the inclusion of additional areas to the property. In this case, the State Party would need to request a change in its boundaries, in accordance with art. 163-165 of the Operational Guidelines. However, even if the Committee would agree to such a boundary change, it would be necessary for the State Party to demonstrate through a proper EIA process that the mining activities in the immediate vicinity of the new boundaries will have no significant impact on the values and integrity of the property. The mission team recommended that, if a boundary change is requested by the State Party, the newly proposed boundary should be defined in the context of the overall Selous ecosystem. IUCN notes that the boundaries of World Heritage properties should not be modified with the primary objective of facilitating mining, as this would not be in line with the "no-go" commitment to mining in World Heritage properties.

<u>from</u>: UNESCO World Heritage Centre - IUCN, Mission Report - Reactive Monitoring Mission Selous Game Reserve (United Republic of Tanzania), 23-30 November 2008, page 4 and 5



(7) The World Heritage Committee in 2011 / 2012

In previous years, the WHC had clearly stated that (uranium) mining activities were incompatible with the status of Selous Game Reserve as a World Heritage site.

The WHC had also requested up-to-date reports which were not or not in timely fashion met by the Government of Tanzania.

In the UNESCO / IUCN Mission Report 2008, it was outlined that the State Party (Tanzania) might apply for a boundary change; strict conditions were outlined:

" ... it would be necessary for the State Party to demonstrate through a proper EIA process that the mining activities in the immediate vicinity of the new boundaries will have no significant impact on the values and integrity of the property."

Although this was already outlined in 2008, the Government of Tanzania did not provide an EIA in a timely fashion; an EIA was handed in to the WHC in 2012 (!) <u>after the deadline</u>, and the WHC's consulting NGO, IUCN, deplored that it was not able to evaluate this EIA in its full length.

The WHC's 2012 decision to accept the boundary change or World Heritage site Selous Game Reserve

- is in stark contrast to the previous decisions and statement of the WHC
- makes no reference whatsoever to the nature of the project for which the boundary change is accepted and thus lacks ALL evidence HOW the impacts of this project shall be "limited" and "mitigtated".

More details: see uranium-network.org Press Statement of 30. July 2012

(8) Economic Situation

The Government of Tanzania claims that it will profit from the 'income' from the uranium exploitation. Obviously, this argument was also put forward to convince the WHC to allow the boundary change of Selous Game Reserve and thus and make way for the Mkuju River Uranium Mine Project.

However, this argument gravely ignores the following aspects:

(a) Price of Uranium has gone down ...

The price of uranium has fallen considerably (see Graph above) since its high in 2007, and companies are unlikely to report profits from uranium exploration.

In neighbouring Malawi, Kayelekera Uranium Mine, operated and owned by Paladin has not been able to make profit since its start-up until the last quarter of 2011 when it made a modest profit.



Paladin books \$US120m first-half loss

KATE EMERY, The West

Australian

February 14, 2012, 11:26 am



Paladin books \$US120m first-half loss

Empfehlen







Paladin Energy has booked a \$US120.2 million first-half loss, bringing down the curtain on a tough 12 months for the Africa-focused uranium miner that saw it writedown the value of its Kayelekera project in Malawi.

The \$US133 million impairment cost, revealed in the September quarter last year, was largely blamed for the result unveiled today.

Paladin's half yearly also revealed its margins at Kayelekera were under pressure in the December quarter, with costs up from \$US40/lb in the September quarter to \$US46/lb. The average realised uranium price for the December quarter was \$US53/lb.

There were some bright spots in the report, including record half-year production of 3.07 million pounds of uranium oxide, up 8.5 per cent for the same period in

Production at Langer Heinrich in Namibia increased in the December quarter to 92 per cent of stage three design capacity, up 40 per cent on the previous quarter.

Production at Kayelekera was also up to 90 per cent of design for the quarter, up 60 per cent from the previous three-month period.

Paladin reported a modest \$US3.2 million profit after tax for the December quarter.

Paladin shares were off 2.5 cents, or 1.39 per cent, to \$1.775 at 12.25pm in a broadly weaker market.

from: http://au.news.yahoo.com/thewest/business/a/-/business/12903425/paladin-books-us120m-first-half-loss/

Thus, since its start-up in 2009 / 2010, no taxes on profits were paid to the Government.

(b) The costs of 'reclamation' are extremely high

The cost of reclamation of uranium mine sites are considerable and have been the subject of two studies:

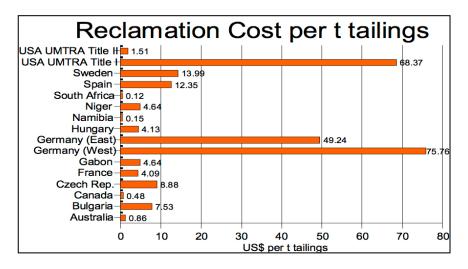
(1) Study by Bundeswirtschaftministerium - German Ministery for Ecomomic Affairs, 1995

"Kosten der Stillegung und Sanierung von Urangewinnungsprojekten im internationalen Vergleich -Einflußgrößen und Abhängigkeiten - Auszug aus dem Abschlußbericht zum Forschungsauftrag Nr. 37/93 im Auftrag des Bundesministers für Wirtschaft durchgeführt von URANERZBERGBAU-GmbH, März 1995"

(Costs of Decommissioning and Reclamation of Uranium Exploitation Projects in International Comparsion - Extract from Scientific Report for Research Nr. 37/93 by the Minister for Economic Affairs, produced by von URANERZBERGBAU-GmbH, March 1995)



The results of this study are compiled here:



from: WISE Uranium Project

(2) A joint study by OECD and IAEA Internationial Atomic Energy Agency

arrives at similar amoutns for the reclamation of uranium mines.

Costs of decommissioning and rehabilitation are country- and site-specific. They are determined by the type of mining method used, by infrastructural and organisational conditions, national environmental standards, labour costs, and costs of materials. /OCE-02/ quotes unit costs (without water treatment) for the decommissioning and remediation of uranium mines in a range from US\$0.76 to US\$16.9 per tonne of mined uranium ore or of US\$0.55 to US\$13.62 per kg of uranium produced, respectively. Costs of decommissioning and remediation of mill plants (again without water treatment) are in the range from US\$3.1 to US\$32.9 per kg of uranium. Inclusion of water treatment will push up costs between 10 and 50 %.

<u>from</u>: Environmental Remediation of Uranium Production Facilities, OECD, International Atomic Energy Agency (IAEA). Published by: OECD 2002

According to the results of the German study, adapted to 2012 (inflation rate), the costs of reclamation per t of tailings amount to:

Costs of Recla	amation per t of tailings,		adapted to 2012	
according to Study of German Ministery for Economic Affairs			by uranium-network.org	
			(3% inflation / year)	
		<u>1995</u>	<u>2012</u>	
Scenario 1	Joint Uranium and Gold or Copper Mining	2,20 USD	3,86 USD	
Scenario 2	Uranium Mining ONLY	4,00 USD	7,01 USD	
Scenario 3 a	Average of ALL cost estimations	15,76 USD	27,64 USD	
Scenario 3 b	Average of maximum and minimum cost estimation	37,97 USD	66,58 USD	



<u>from</u>: "Ist Uranbergbau ein Gewinn für Tansania? Uranbergbau, Tailings, Folgekosten und Wirtschaftlichkeit - Fakten und Überlegungen zur Wirtschaftlichkeit und wirtschaftlichen Aspekten des Uranbergbaus", uranium-network.org, April 2012

("Is Uranium Mining profitable for Tanzania? Uranium Mining, Tailings, Costs of Reclamation and Economics - Facts and Considerations in regard to the Profitability of Uranium Mining", prepared by uranium-network.org, March 2012)

The full length of this paper is at this point in time only available in German.

For Tanzania's Mkuju River Project, the costs for reclamation of the mine site will amount to:

Estimated Costs of 'Reclamation' for das Mkuju River Project, Tanzania							
			Small Version	"Extended Version			
tons of tailings:			59.500.000	139.500.000			
Costs:		<u>US\$/t</u>	costs in US \$	costs in US \$			
Szenario 1	Not applicable for Mkuju River	3,86	229.670.000	538.470.000			
(Joint Uranium and Copper or Gold mining)							
Szenario 2		7,01	417.095.000	977.895.000			
(Uranium Mining ONLY)							
Szenario 3a		27,64	1.644.580.000	3.855.780.000			
(Arithmetic middle)							
Szenario 3b		66,58	3.961.510.000	9.287.910.000			
(average minimum / maximum costs)							

It is obvious that even the lowest cost estimation for the reclamation of Mkuju River Uranium Project of US \$ 417.000.000 will be considerable and may easily 'eat up' the income created through taxes and royalties, thus rendering the idea of 'profiting' from uranium mining activities completely obsolete.

(10) Future Plans of 'URANEX' for Uranium Exploitation

As we speak, another Australian-based uranium company active in Tanzania, URANEX, is advertising at the Australian Uranium Conference, Perth, July 2012, their future plans for uranium exploration and exploitation close to the Selous Game Reserve, as they say <u>outside</u> the SGR.

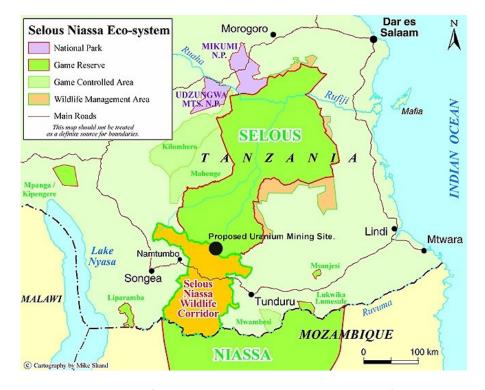
The title of the presentation states: "Developing an emerging energy district in Tanzania".



MKUJU URANIUM PROJECT URANEX Highly valuable uranium district with a number of emerging uranium companies and projects. Project area covers ~4,000km2 of classic Karoo Basin sediments which overlay the Proterozoic Basement Mineralisation occurs in coarse sandstones deposited in channel system, interpreted to be controlled by a major regional fault Sandstone hosted stacked and tabular deposits being discovered Tenements are near to Uranium One's Mkuju River Project. Outside the Selous Game reserve

from: http://www.uranex.com.au/Portals/9/asx2012%28pdf%29/URANEX Aus Uranium%20Conf July2012%20Final.pdf

This "new energy district" is exactly South of World Heritage site Selous Game Reserve - in the area of the Selous-Niassa-Wildlife Corridor.



The map shows the lay of Selous Game Reserve, Selous-Niassa-Wildlife Corridor and the location of Mantra's / UraniumOne / ARMZ's Mkuju River Uranium Project.



URANEX's uranium project is close to Mantra's project and thus will also impact the Selous-Niassa-Wildlife Corridor (marked in yellow).

The World Heritage Committee in its July 2012 decision had called upon the Government of Tanzania

- 7 c) Not to engage in any mining activity within the Selous Game Reserve World Heritage property after exclusion of the Mkuju River Mining site as per the decision of the 36th session of the World Heritage Committee,
- f) Not to undertake any development activities within Selous Game Reserve, and its buffer zone without prior approval of the World Heritage Committee in accordance with the *Operational Guidelines* for the implementation of the *World Heritage Convention*;

However, the plans of URANEX NL show that the spirit and sense of this World Heritage Committee Decision is grossly ignored: Further uranium exploration is taking place very close to the Selous Game Reserve and in the area of the Selous-Niassa-Wildlife Corridor.

Background & Additional Information compiled by Gunter Wippel, uranium-network, July 2012