



MINERAL POTENTIAL OF UGANDA STATUS OF EXPLORATION AND DEVELOPMENT 2024



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Mineral Reserves and Potential of Uganda and Status of exploration and development

#	Mineral	Location	Status of Reserves	Nature and Progress of Action	Uses
1	Copper	(a) Kilembe in Kasese District (b) Boboong in Kotido District; (c) Kitaka in Bushenyi District; (d) Kampono in Mbarara District	(i) Reserve at closure was about 6.5 million tonne at 1.77% Cu; (ii) Grade of 1.7% at Boboong; and Reserves at Kitaka and Kampono are under evaluation	<ul style="list-style-type: none"> Government looking for investor to develop the copper resources at Kilembe mines; Opportunities to discover more deposits around Kilembe. Reserves at Kitaka and Kampono are under exploration. 	Electrical conductors (wires), roofing and plumbing, bullet shells
2	Cobalt	Kilembe in Kasese District	5.5 Million Tones with grade of 0.17% of cobalt	Kasese Cobalt Company Limited has been processing cobalt stockpile, which is nearly exhausted.	In special alloys for the aerospace industry, electronics and high-tech industry. Cobalt salts are used in the chemical industry and in tinting glass to give a blue colour.
3	Beryl	(i) Kazumu in Ntungamo District (ii) Mutaka in Bushenyi, (iii) Bulema in Kanungu District (iv) Ishasha in Rukungiri District (v) Mbale Estate in Mubende (vi) Lunya in Mukono District	Require exploration and evaluation	Under Exploration	Gemstones (Ornaments), ore for beryllium used in making gears and cogs in aviation industry
4	Gold	Districts of: Buhweju, Bushenyi, Mbarara, Kabale Kisoro, Rukungiri Kanungu, Busia, Mubende, Moroto, Hoima, & many streams of West Nile	(i) Five (5) million ounces (141,748kg) of gold at Kamalenge in Kasanda District (Anglo Uganda Corporation (AUC)); (ii) 412,500 tonnes at 13.33g/t of gold in rock (5,500 kg of gold)	(a). M/s Anglo Uganda Corporation (AUC Mining, Mubende District) (b). M/s Kisita Co. Mining and	Bullion, dentistry and medicine, electronics and computers, medal and statues, jewelry.



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			<p>and 1,200,000 tonnes at 6.6 g/t in alluvium (7,920kg of gold) at Ngugo and Kisita in Kasanda (Kisita Mining Company);</p> <p>(iii) One (1) million ounces (28,350kg) of gold at Mashonga (Sino Minerals);</p> <p>(iv) 500,000 ounces (14,175kg) of gold at Tiira, Busia (Greenstone Resources);</p> <p>(v) Measured & Indicated resource 30Mt at 1.2 g/t at Alupe in Busia (Wagagai);</p> <p>High potential gold fields</p> <p>(vi) Bukuya, Kayonza, Kayonza, Bukuya, Lugigi, Masaka, Kapyia, Walukwago, Kabaada and Kayimbirimbi (all outside AUC Mining Lease) estimated Over 10 million Ounces (283,495kg of gold);</p> <p>(vii) Buhweju Gold fields (Katenga, Bihanga, Kahengyere, Kasaans, Ankombe) estimated over 1</p>	<p>(c). Sino Minerals Ltd</p> <p>(d). M/s Greenstone resources at (Tiira, Busia District)</p> <p>(e). Wagagai Mining (U) Limited in Busia District; Mine development in progress.</p>	



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			million ounces (28,349kg) of gold; (viii) Karita (Amudat), Moruita, Acerer (Nakapiripirit), Rupa (Moroto), Morulem (Abim), Lopedo (Kaabong) estimated at over 5 Million Ounces (141,748kg) of gold		
5	Iron Ore	(i) Districts of: Muko, Kabale, Kisoro, Mbarara, & Hoima Tororo (Magnetite in Bukusu and; Sukulu), Moroto (Napak) & Kotido (Toror)	(i) 152.37 Mt at 60-65% Fe in Muko (Butare, Kyanamuzinda, Kamena and Kashenyi), Kabale District; (ii) 48 Mt at 40-65% Fe in Buhara, Kabale District; (iii) 50 Mt at 60-65% Fe in Butogota, Kanungu District; (iv) Buchimbiri 48Mt at around 60% Fe (v) 8 million tonnes in Bufumbira, Kisoro; (vi) 2 Mt at 42.7-62% Fe in Mugabuzi, Mbarara District; (vii) 23 Mt at Bukusu; (viii) 88 Mt at Sukulu; Tororo District; (ix) 5.3 Mt Recently discovered iron ores in Kabale (Kihumuro, Karukara, Nyakyonga, Mwiguriro, Bukaranga); (x) 13.1 Mt Recently discovered iron ores in Rubanda/ Kisoro Districts- (Rubuguli, Higabiro, Kijuguta, Rushekye, Kazogo)	Three (3) Mining Leases, granted for development of iron ore resources 1. Uganda International Mining Company Limited; 2. Sino Minerals Investment Company Limited; 3. Guangzhou Dong Song Energy Group Co. Ltd.	In the blast furnaces, crude iron metal is produced when iron ore is reduced by coke to cast iron . Stockpile of iron ore pellets will be used in steel production. Apparently, over 99% of iron ore commercially used is for steel making. Steel is used in construction (housing/housing appliances), aircrafts.



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6	Lead	Kamwenge District (Kampono, Kanyambogo and Kitaka in Kitomi Forest), Isingiro district (Kikagati)	Require exploration and evaluation	Under Exploration	Lead is used in making motor vehicle batteries and heavy metal shield for nuclear radiation protection.
7	Lithium	Ruhuma in Kabale District; Mwerasandu, Rwamwire and Nyabushenyi in Ntungamo District; Lunya in Mukono District; Nampeyo and Mbale Estate in Mubende District.	Require exploration and evaluation	Pegmatite deposits	Amblygonite, Lepidolite and spodumen are the ore of lithium mainly used in chemicals and production of long lasting batteries.
8	Columbite Tantalite ¹	(i) Ntungamo District; Bushenyi District; Kanungu District; Kisoro district and Lunya in Mukono District. (ii) Sukulu in Tororo District, Bukusu Complex in Mbale District; Napak in Moroto District and Toror in Kotido District.	(i) 130 Mt of Niobium at 0.20% Nb ₂ O ₅ at Usukulu, Tororo District; 56Mt indicated and 16 Mt inferred. (ii) 1.1 Metric tons grading 0.014% of columbite per ton at Mbale Estate in Mubende (iii) 3.5 million tons of columbite-tantalite estimated at Kagango in Ntungamo District.	The Sukulu phosphate deposit is potentially the most important source of Niobium.	Niobium is used in making carbon steels, super alloys, high strength low-alloy steels, stainless and heat-resistant steels. The major end-use of tantalum is in production of electronic components and batteries for cellular phones, and in alloys.
9	Tin	Mwerasandu, Kaina, Nyinamaherere and Kafunzo in Ntungamo District; Kikagati in Isingiro District, Ndaniyankoko, Kitezo in Mbarara District, Burama Ridge on the Kabale/	Mwerasandu: A probable grade of 0.35% tin (Wilson, 1969); 156,993.91 (Measured); 320,678.64 (Indicated); 421,703.55 (Inferred) at 0.02% Sn	The tin prospects have not been evaluated by drilling, there is need to carry out drilling to ascertain the resources at depth;	Tin is used mainly for coating iron/steel to minimize rusting and also making cans for the food industry.

¹ Niobium-Tantalum



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		Ntungamo border, Rwaminyinya in Kisoro District.	<p>(20th Percentile) (Zannack Holdings, 2011)</p> <p>Kikagati: Grades of 0.38% are reported (Wilson, 1969). During the UNDP Exploration programme in 1994, grades ranging from 0.5-1.4 kg/m³ of cassiterite were reported; 400,000Mt at 1.65% Sn (African Panther Resources (U) Ltd., 2014).</p> <p>Bulunga: A grade of 0.2% tin is reported (Wilson 1969);</p> <p>Kaina: Average grade 0.2 kg/tonne cassiterite (UNDP, 1994). Katto 1997 estimated 12 tonnes of cassiterite in 60,000m³ of gravel at the grade mentioned above;</p> <p>Kafunzo: Small scale cassiterite mining is ongoing at Kafunzo and recently a number of bore holes have been drilled to study the long and relatively strong magnetic anomaly. The results indicate that it is caused by magnetite bearing schist.</p> <p>Others are, Nyamaherere, Burama ridge, Ruhuma and Naniankoko</p>		



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			are related in terms of geology and mineralization. They are all the Mwirasandu type and the estimated grades of the deposits are: 0.48% for Ruhuma and 0.4% for Naniankoko. Other areas include the Kyamagasha, Twemengo, Kibumba and Nyalubale cassiterite mines, alluvial deposits of river Kafu		
10	Titanium	Bukusu Complex in Manafwa District (22% TiO ₂) and Sukulu in Tororo District (13% TiO ₂).	Grade of titanium is 22% TiO ₂ and (13% TiO ₂ in Bukusu and Sukulu respectively.	Undeveloped	Titanium oxide pigment in paint, paper, rubber, etc. rather than as a metal. The metal is used in the manufacture of corrosive resistant steel.
11	Tungsten	Nyamuliro (Bjordan Mine) and Ruhija in Kabale District; Kirwa, Mutolere, Rwamanyinya and Bahati in Kisoro district; Kyasampawo in Mubende District and Buyaga in Rakai District	<p>(a) At Nyamuliro mine in Kabale District; A measured resource of 0.7 million tonnes with a grade of 0.15% Wolfram determined.</p> <p>(b) At Ruhizha mine, reserve estimation gave 10 million tonnes of inferred resources that still exist with a grade of 1% to 4% Wolfram.</p> <p>(c) -At Kirwa, 0.8 million tonnes of indicated resource and 1.9 million tonnes of inferred</p>	<p>Three (3) Mining leases granted:</p> <ol style="list-style-type: none"> 1. Krone Uganda Limited; 2. Berkeley Reef Limited; and 3. Sino Minerals investments. 	Tungsten is mainly used in making armour plate in military equipment, manufacture of filaments for electric bulbs and in making tungsten-carbide for drilling bits.



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			<p>resource with an overall grade of 0.13 wolfram is still expected to be at the mine. a coarse stock pile of about 15,000 tonnes with a reported 0.18% wolfram grade exists at the lower Southern end of the ridge.</p> <p>(d) -At Mpororo no detailed figures but the general grade was taken at about 1% wolfram.</p>		
12	Manganese	Isandara, Gulika, Kirongo and Gweitengya, all close to Isandara hill; and Kisinga in map sheets 57/3 and 57/1, Kyenjojo District.	Require exploration and evaluation	Detailed exploration required; pitting and trenching, sample analysis, geophysical surveys and drilling.	Glass manufacture, catalyst, rubber additive, black-brown pigment in paint, as a filler in dry cell batteries, alloy with aluminium
13	Silver	Silver occurs in association with galena at Kitaka in Kamwenge District and Mubende granite in Mubende District	Require exploration and evaluation	Occurs in association with copper, lead and zinc	<i>Jewelry, solar technology, electronics, soldering and brazing, cars, water purification, table ware.</i>
14	Zinc	Zinc occurs with galena at Kitaka in Kamwenge District	Require exploration and evaluation	Occurs in association with copper, lead and silver	<i>Galvanizing other metals to prevent rusting, medicine.</i>
15	Rare Earth Elements (REE)	(i) Isolated pegmatites in SW Uganda,	(a) 73.6 million tonnes of Rare Earth Elements estimated at Sukulu, Tororo District with grade of 0.32% La ₂ O ₅	Largely Under explored	<i>REE is crucial in making high-tech electronics products such as highly specialized miniature nuclear batteries,</i>



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		(ii) Carbonatite centres in Eastern Uganda (Sukulu, Butiriku, Bukusu, Napak) (iii) Makuutu- Buwaaya area, Eastern Uganda.	(b) Carbonatite Centers of eastern Uganda at Bukusu in Manafwa District. (c) Rare Earth Elements: World class deposits discovered in aluminous clays at Makuutu, Bugweri District (532 Mt/ 23% REE-Sc, Y, Ga); with inferred resource of billion tonnes	Mining Lease granted to M/S Guangzhou Dong Song Energy Group Co. Ltd. M/S Rwenzori Rare Metals and Ionic Rare Earths acquired mining lease at Makuutu	lasers repeaters, superconductors and miniature magnets. The mineral is also used to produce automotive catalysts and petroleum cracking catalysts, flints for lighters, pigments for glass and ceramics and compounds of polishing glass.
16	Limestone/ Marble	(i) Limestone is found at Muhokya in Kasese District and Dura in Kamwenge District, and Hima in Kasese District, western Uganda; (ii) Carbonatites are found at Sukulu and Tororo in Tororo District; Napak Hill in Napak District; Toror in Kotido District in Eastern and northeastern Uganda; (iii) Marble is found at Moroto District in north eastern Uganda; and;	(a) 14.5 million tonnes at Hima, Kasese and (b) 11.6 million tonnes at Dura, Kamwenge (c) 560 million tonnes of marble at Rupa in Moroto (Sunbelt) (d) 5.5Mt at Tororo (e) 14 million tonnes at Katikekile in Moroto (Tororo Cement Ltd.) (f) 27 million tonnes at Rupa in Moroto (DAO Marble) (g) 11.34 + 25.92 million tonnes at Lokatero in Moroto (Mechanized Agro) (h) Loyoro in Kaabong - (i) Over 1 billion tonnes of marble in other localities (Nauyet in	Production on large scale in Kasese, Tororo and Moroto Districts	Cement and lime manufacture, tiles, pigment or filler in toothpastes and paints, aggregates for base of roads, soil conditioner



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		(iv) Dolomitic marble is found at Gweri in Moyo Districts.	Kotido, Ngolapulom and Napelmoru Nakadaplait, Forest Reserve, Tank Hill, Rupa around Moroto Town, Matehinko, Pule, Karikacham in Moroto District,		
17	Phosphates	Sukulu in Tororo District and Bukusu in Manafwa District, Lolekek in Napak	(a) 230 million tonnes at Sukulu with grade of 13.1% p ₂ O ₅ ; (b) 50 million tonnes at Bukusu with grade of 12.8% p ₂ O ₅	<ul style="list-style-type: none"> • Investment in fertilizer manufacturing plant viable; • Apatite with magnetite, vermiculite, pyrochlore, barite, zircon, uranium, titanium, Niobium and rare earth elements.) 	<i>Fertilizers, phosphoric acid</i>
18	Vermiculite	Sukulu in Tororo District and Bukusu Carbonatite Complex (Namekhara, Nakhupa, Surumbusa, Kabatola and Sikusi) in Mbale District	54.9 million tonnes at Namekhara	<ul style="list-style-type: none"> • Mine developed at Namekhara • Investment in fertilizer manufacturing plant viable 	<i>Soil conditioners. Construction, agriculture, horticulture, industrial (brake pads, paints).</i>
19	Graphite	Orom in Kitgum District	24.5 Mt measured in 1% of the license at 6-8% C; 3.3 Bn tonnes inferred); occur at Orom, Kitgum. <i>M/S Consolidated African Resources has acquired Mining Lease and is developing the mine.</i>	Mining Lease granted to Consolidated Africa; Graphite can be used in the manufacture of battery, refractory, steel, brake linings, foundry facings, lubricants, blast furnace linings	<i>Battery electrodes, pencils. Brake pads and cleaning of nuclear reactors</i>
20	Kaolin	Namasera, Migadde and Buwambo in Wakiso District; Mutaka in Mitooma District, Kisai in Rakai District	(a) 2.8 million tonnes at Mutaka, Bushenyi. (b) One (1) million tonnes at Kisai (Koki), Rakai	On demand by local industrial sector; Supplied to Goodwill Ltd. in Kapeeka for ceramics.	<i>Paints, paper coating and filling, ceramics, plastics, rubber, ink, fibre glass</i>
21	Bentonite	Bentonite is discovered at Kaiso-Tonya, Hoima District and (Burama and Ntungwa) in Rukungiri in western Uganda.	(a) Over 1 Billion tonnes estimated at Kaiso; (b) Reserves of 3 million tonnes at Burama (Rukungiri); and	Mined on small scale	<i>Used as drilling mud, animal feeds</i>



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		Other bentonite occurrences are reported at Butiaba in Buliisa District; Kibuku in Bundibugyo District; and Buseruka, Alalam River (Bukwo).	(c) 2 million tonnes at Ntungwa (Rukungiri) have been evaluated.		
22	Gypsum	Kibuku in Ntoroko Distict; Lake Mburo in Kiruhura District; Muhokya in Kasese District; and Kanyatete in Lake George basin Kasese District.	2 million tons estimated at Kibuku; One (1) million tons of gypsiferous clay worth 290,000 tons of gypsum concentrate at 60- 18 70% gypsum at Lake Mburo in Kiruhura District; 3.2 million tons of gypsiferous clay capable of producing 40,000 tons of gypsum concentrate at 86-90% gypsum indicated at Muhokya;	Available market	Cement, soil conditioning, wall boards, plasters
23	Salt	Kibiro in Hoima District; Katwe and Kasenyi in Kasese District	22 Million tonnes of trona at Katwe and Kasenyi, Kasese District 2.07 Mt of NaCl, 0.65Mt of KCl and 12.6 Mt of salt in crust at Katwe (UDC, 1997)	Mined for animal and human consumption locally. Industrial production opportunities available	<i>Human consumption, preservative, tanning, dying, bleaching, soap and chlorine (Chemical industry), pottery</i>
24	Feldspar	Bulema in Kanungu District; Bugangari in Rukungiri District; Mutaka in Bushenyi District; Nyabakweri in Ntungamo District and Lunya in Mukono District.	Require exploration and evaluation	Development and investment in downstream industries viable; Supplied to Goodwill Ltd. in Kapeeka for ceramics.	<i>Ceramics</i>



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25	Glass sand (Silica sand)	Diimu, Malembo and Bukakata in Masaka District; Lwera in Masaka District, Nalumuli Bay, Nyimu Bay and Kome Island in Mukono District	The highest quality 99.95% SiO ₂ at discovered at Kome islands, 2 Mt at Dimu and Bukakata at 99.93% SiO ₂ Recent evaluation and Malembo indicated 9.9 Mt at 98% SiO ₂ .	Viable investment	<i>Silica sand is the main ingredient in making glass for cars.</i>
26	Kyanite	Kyanite occurs at Ihunga and Kamirambuzi hills in Rukungiri district; new prospect of Azi, Erusi and Ayugi in Nebbi and around Murchison Falls	Require exploration and evaluation	Open	Bricks, mortars, kiln
27	Diatomite	Panyango, Alui, Atar and Amboso River near Packwach in Nebbi District	Require exploration and evaluation	Open	Filtering impurities in beers, wine, soda, oil, greese, against, bed bugs, cockroaches, crickets, fleas, ticks, spiders, and other pests.
28	Dimension stones	(i) Marble occurs in Karamoja Region (ii) Granite in various colours and textures occur in various parts of the country; (iii) Slates	Over 800 million tonnes of marble in Karamoja (Rupa, Kosiroi, Tank Hill, Forest Reserve, Matheniko, Pule and Lolung); Abundant granites and slates	<ul style="list-style-type: none"> • Sunbelt manufactures tiles and sculptures in Moroto; • 13 mining licenses granted 	Building material, construction, floor tiling, flag stone, curbing, wall cladding, monumental and memorial stones
29	Pozzolana	Kapchorwa	Abundant	Mining taking place for cement production by Cement Manufacturing Companies (TCL, Hina, National Cement, Kampala Cement, Simba Cement.	Cement manufacture
30	Clays, aggregates and hard cores	Various parts of the country		Stable demand, viable investment	Pottery, construction



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31	Nickel	<p>(i) Nickel at Kafunzo in Ntungamo District; Rugaga in Isingiro District;</p> <p>(ii) Nickel in Kitgum and Lamwo Districts;</p> <p>(iii) Nickel in laterites at Logiri, Arua District;</p>	<p>Magnetic anomaly mapped by SMMRP at Kafunzo. A few kilometres north of this magnetic anomaly there is another smaller magnetic zone with a length of ~3 km and width ~200 m;</p> <p>Considering the analogies with the Kabanga nickel sulphide deposit in north-western Tanzania, it is speculated that an intrusion feeder channel could be the anomaly source;</p> <p>A magnetic and gravity ground survey by SMMRP supports the interpretation of a magnetic, heavier body at the site;</p> <p>A soil geochemical survey across the geophysical anomaly mapped Sn, As, Ba and Au anomalies;</p> <p>Drilling undertaken by Sipa in Lamwo District intercepted nickel ore (magmatic sulphide) at depth. At Akelkong 3 lenses with average Ni grades of 0.37% Ni & 0.12% Cu were encountered;</p> <p>Pre-feasibility studies and EIA by Samta in Arua District- Processing</p>	<p>Core drilling is recommended to study the source of the magnetic-gravity anomaly which might not be coming up to rock surface, explaining the weak results by soil geochemistry.</p> <p>More detailed exploration is required;</p> <p>Further review of the exploration results required;</p>	Alloys such as stainless steel, nichrome and chromium (resists corrosion)



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		(iv) Kasongoire in Masindi District (402000mE/222,000mN)- Sheet 31/3	<p>of nickel from laterites proved difficult at the time;</p> <p>Geophysical anomaly at Kasongoire confirmed by stream sediment surveys by Rizk, 1977. Nickel content in the ores- 700-860ppm;</p> <p>Ground gravity survey confirmed heavier rock (density 3.395 kg/cubic dm) which coincides with the magnetic anomaly (SMMRP, 2010)</p> <p>Stream sediment and soil surveys mapped anomalous values of Ni and Cu (SMMRP, 2010);</p> <p>Mafic intrusions (narrow sills) have also been observed in the area, which could explain the Ni grades in the soil above the magnetic anomaly and in the streams to the north of the magnetic anomaly</p>		
32	PGM	Platinum Group of Metals-Chromite occur_at Nakiloro in Moroto District 688587mE, 292638mN (WGS84) - Sheet 27/3;	<p>At Nakiloro, chromite samples give 45.3% Cr2O3 (M. J. Fleuty, 1958);</p> <p>13 ore samples gave an average grade of 46.9% Cr2O3 (S. A. Mboijana, 1992);</p>	Require detailed exploration	In special alloy steels and for chrome coating. Chromite as an industrial mineral is used in metallurgical processing and in furnaces as a refractory.



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			3 ore samples gave 33.8 - 43.6% Cr ₂ O ₃ (De Villiers Exploration Ltd., 2006); Geophysical surveys outlined anomaly (DGSM, 2015);		
33	Gemstones	Karamoja, Central Uganda, SW Uganda and Moyo: (Types: Apatite, Beryl - emerald, aquamarine, heliodor, morganite, Corundum (Ruby, blue sapphire), Fluorite, Garnet, Opal, Quartz (amethyst, rose), Topaz, Tourmaline and Zircon).	Unknown	ASM workings	Jewelry, good luck, weapons, safety, building resilience, spiritual healing
34	Others potential minerals	(i)Diamond potential in Kibaale, Butare in Buhweju District, areas around Lake Kyoga, indicator minerals occur in Katakwi and Karamoja; (ii) Kimberlites interpreted	Unknown	Require exploration	Bullion, jewelry, automatic industry, stone polishing and cutting



