



Lights & Gems



Ministry of Mines and Energy Official Newsletter

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**Husab uranium project
commissioned**

10

**Shell Enters Namibia
for oil exploration**

13

**Construction of Marine
offloading facility at
Walvisbay on progress**

14

TABLE OF CONTENT

• Editor's Note	3
• From the PS's desk	4
• Ohlthaver & List group of companies goes green	5 - 6
• HopSol builds Africa's biggest off-grid solar power plant in Gam	7
• Mines and Energy embraces green energy	8 - 9
• Husab uranium project commissioned	10
• Tschudi copper project	11
• The Namibian Diamond Trading Company hands over N\$80 million in dividends to Government	12
• Shell Enters Namibia for oil exploration	13
• MoU on construction of an Oil Storage Facility and Marine Petroleum Offloading Facility signed	14
• NamPower Board signs performance agreements	15
• Namibian woman elected as a president of the Organisation of African Geological Surveys	16
• African and European Geological Surveys committed together for Africa's wealth	17
• Land crack at Odibo	18
• Ministry of Mines and Energy at the 19th Polytechnic Career Fair	19
• How Small-scale Mining can contribute to economic development and environmental sustainability in Namibia	20 - 21
• How can the public take part in Small Scale Mining (SSM)?	22
• YES Network Namibia	23
• Namibian YES Network Chapter Committee	24
• MME PANAROMA	25

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FROM THE EDITOR

Will it be wrong if I say 'Welcome' to our first edition? After a long break, the Ministry of Mines and Energy newsletter is back, and with a bang. We introduce a new name and feel for our Newsletter.

The Husab uranium project of Swakop Uranium has just been commissioned to start its production. This indeed is good news to Namibia as it makes her the second largest uranium producer in the world with a production of 6 800 tons annually by Husab alone.

One can say that Namibia is all about being the biggest these days in almost everything. Africa's biggest solar rooftop plant was unveiled in February, mounted on the Namibia Breweries Limited's rooftop. During the same month, HopSol was also awarded a tender to build Africa's biggest off-grid solar power plant at the Gam settlement in the Otjozondjupa region.

The Ministry of Mines and Energy has also embarked on a project of building the first ever green building in Namibia. The building will be used as MME's offices in Swakopmund.

We will also talk about the N\$80 million dollars in dividends handed over to government by Namibian Diamond Trading Company and the groundbreaking ceremony of the Tschudi Copper Mine.

Namibia continues with the search for oil offshore, we saw Shell coming on board for oil exploration. For those who are interested in small scale mining, please consult the newsletter for the procedures to follow when applying for Non-Exclusive Prospecting Licenses.

During December last year, we received reports of a possible earth quake in Odibo village in the Ohangwena region. Our geologists however confirmed that this was just a crack, caused by subsidence of top soil, which was caused by the dissolution of limestone.

This newsletter will hopefully fulfil its objective, which is to inform and educate our stakeholders!

Ten

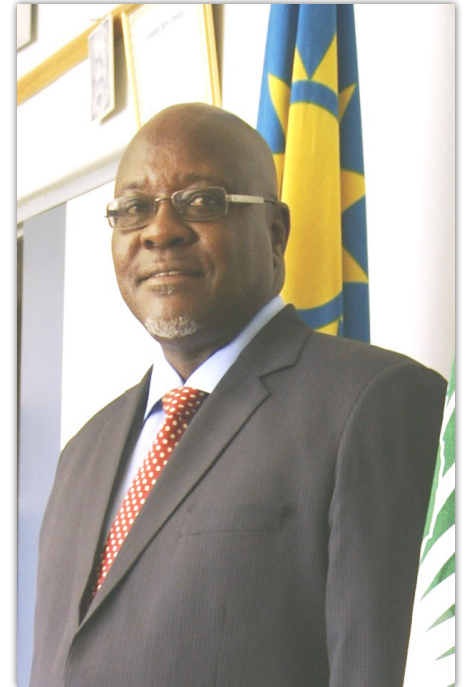
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FROM THE PERMANENT SECRETARY'S DESK



Let me wish you all a belatedly prosperous new year 2014, as this is our first edition for the year. I would like to take this opportunity to welcome you to our exciting revamped newsletter. The year 2014 has started busy and productive, and we foresee that this will continue.

I want to take this opportunity to welcome two new officials in the office of the Permanent Secretary, who will deal with Public Relations. I wish them success in taking our Ministry to the public. This will be done by communicating our mission, vision, and strategic goals, as well as achievements to our stakeholders.

This year the ministry has already seen strategic projects come to light such as the commissioning of the Husab Mine, the unveiling of Africa's biggest solar rooftop, and the awarding of the tender to Hopsol to build Africa's largest off-grid solar power plant in Gam, in the Otjozondjupa region.

The highlight of the Ministry is however the construction of the ministries offices in Swakopmund. This is one of the ministries big projects as the building will operate almost on 100% green energy and is the first of such kind Namibia has ever seen

With these few words I can assure you that the newsletter has a lot of informative articles and I am encouraging you to read it and be informed.

I hope you find the newsletter worth your while.

A handwritten signature in black ink, appearing to read 'Kahuure'.

Kahijoro S-M Kahuure
Permanent Secretary

Ohlthaver & List Group of Companies goes green



Chairperson of O&L, second from right with Noddy Hipangelwa of MME, second from left and her worship, Mayor of Windhoek Agnes Kafula at the immigration

As one of the countries in Africa with the largest number of sunshine days, Namibia should invest more in solar energy. Solar energy is light and heat from the sun. This source of energy is environmentally - friendly, costs less, does not run out, creates jobs, enhances the national economy, and provides energy security for the country. It is estimated that Namibia has more than 80% of sunshine days throughout the year, even during the rainy season.

With this in mind, the Ohlthaver & List (O&L) Group of Companies and its subsidiaries Ohlthaver & List (O&L) Energy and Namibia Breweries Limited (NBL) became a success story when they invested in solar energy, which is considered green energy. Their new solar plant is so far the biggest solar rooftop in Africa. The plant was inaugurated by Noddy Hipangelwa, Deputy Director of Renewable Energy in the Ministry of Mines and Energy on behalf of the Minister of Mines and Energy, Hon. Isak Katali, on Thursday, 20 February 2014, at NBL.

In his speech, read on the Minister's behalf by Mr.



O&L Roof top panels



Hipangelwa, Hon. Katali applauded O&L for their innovation. “What better way to do this (generate electricity) than to start harnessing free energy We are a country in which the sun shines an average 300 days per year – and even on rainy days we usually have sun in the morning – this energy is not only free but also environmentally friendly and it is time to start using it on a big scale.” Katali said.

The plant has an annual output of 1.9 GWh and has a high output in the mornings and afternoons. The plant was designed by DHbrid, a German-based solar company. It is specially configured to reduce wind loads and also caters for sufficient ventilation.

Sven Thieme, the Chairman of O&L said that the project is an exciting development for Namibia and will be the forerunner for a range of renewable energy projects currently being developed in southern Africa. He further said that the development serves as a ‘catalyst’ displaying highly efficient modern solar technology as well as streamlining the regulatory process towards how renewable energy projects can be fast-tracked in Namibia and in Africa. “Namibia, Africa and the World have realised that we have to respond urgently

“ What better way to do this than to start harnessing - free energy? ”

and adequately to climate change.” He added.

Namibia imports most of its electricity from South Africa and Zimbabwe, and 36% of its electricity is fossil fuel based. A recent study by Government indicated that Namibia faces a deficit in electricity generation from 2015 onwards due to growth in demands.

Namibia cannot rely on its neighbours forever and with South Africa experiencing electricity problems on a regular basis, South Africans are worrying about power outages. Namibia should therefore become self-sufficient and supply from any of its neighbours should not be taken for granted.

O&L invested an amount of N\$22.8 million on the project, which can provide 1.1 MWp from 4 200 solar panels, with 66 SMA inverters, on a 6,400 m2 roof area.

Interesting facts about solar energy!

- 💡 Solar energy is the main source of energy for all life forms.
- 💡 Solar power is one of very few sources of energy that are completely free.
- 💡 The largest solar power plant in the world is located in the Mojave Desert in California, covering 1000 acres.



An African Superlative in Namibia:

HopSol builds Africa's biggest off-grid solar power plant in Gam

• HopSol staff

On Tuesday, 18 February 2014, the Ministry of Mines and Energy awarded the installation of Africa's biggest off-grid solar power plant to the Namibian solar company HopSol Africa (Pty) Ltd.

Near the village of Gam in the Otjozondjupa region, a photovoltaic power plant shall provide the whole settlement of Gam with its 1630 people with electricity made by the sun.

The whole installation will consist of ca. 2000 solar panels. Due to the extreme climatic conditions in Namibia, CIS Solar Panels from TSMC have been chosen for the project. These solar panels can handle high temperatures significantly better than polycrystalline panels who suffer high losses under high temperatures. The solar array is combined with a battery bank which has a capacity of about 2.5 MWh (576 2 Volt cells). The batteries and inverters together fill a room of 6 by 40 m and the whole installation will cover an area of about two soccer fields. The solar plant is combined with a generator that supports during peak times – early morning hours and late afternoon. The overall solar-diesel-

hybrid system operates fully automatically and is controlled by SMA Sunny Island Inverters. It can satisfy a demand of 200 kW for 24 hours.

“The local population in Gam will receive their own green energy at the latest by August this year. This is a further step towards securing power supply in Namibia and to provide everyone in the country with enough electricity.” said Bjoern Wilschke, the CEO of HopSol Africa.

HopSol Africa, who will carry out the works for this superlative of a solar power plant, has proven experience in building on- and off-grid photovoltaic power plants in the southern African region. All of the outstanding big grid-connected solar power plants in Namibia, like Maerua Lifestyle Shopping Center or Woermann Brock supermarkets, have been installed by HopSol. The company already confirmed that they will use local workforce only, and that they will work closely with the local community in order to make this installation a success for the community and for the country.



One of HopSol's projects at Maerua Lifestyle Shopping Center

Ministry of Mines and Energy Embracing Renewable Energy

• Andreas Simon



As a Ministry, we are aiming on going green and at the same time setting an example by building the first ever green building in Namibia.

The objective of building the green building by Ministry of Mines and Energy (MME) is to construct a structure that is cost effective and it is just as the architect Jorit Moisel of Karin Miller said "as green as possible".

Renewable energy technologies are clean sources of energy that have a much lower environmental impact than conventional energy technologies. We know that renewable energy is important but MME understand that aspect very well. Not only does the ministry 'understand it well' it has decided to make use of the benefits of renewable energy by building the first ever 'green building' in Namibia.

The project started on 07 February 2014 and the practical completion date is set for 07 October 2015. Moreover, the building is designed in a way that most of the offices and frequently occupied spaces are north facing. The environmental benefits of renewable energy technologies are widely recognised in Namibia, but the contribution that they can make to energy security is less known. Renewable technologies can enhance energy security in electricity generation, heat supply, and transportation. Access to cheap energy has become essential to the functioning of modern day Namibians.

The MME's green building will be using solar tubes for lighting. The solar tubes will be used to introduce natural lighting into most parts of the building, including offices.

The use of such a renewable technology will minimise the usage of conventional electric lighting and LED plus low voltage lighting will also be utilised to keep the electricity consumption as low as possible. Furthermore, the structure will be constructed with high quality clay bricks that are manufactured locally by NAMCLAY in Uis. The best advantage of using clay brick(s) is that, the building will be cooler on hot days and warmer on cold days.

Solar modules of Thin Film Technology will also be implemented as one of the renewable technologies. The Calyxo CX series is a series of cost efficient high performance modules. Based on innovative and patented CdTe thin film solar technology, the solar modules are designed to provide a significant reduction in the overall cost of electricity generated.

Just as one would think that; it is done, there is nothing more and that the building will exist of a minimal number of renewable technologies. Well, think again because you must be wrong. The architect also thought of adding a water collection system. This system will be made from a piece of the boundary wall that will be used to harvest fog.

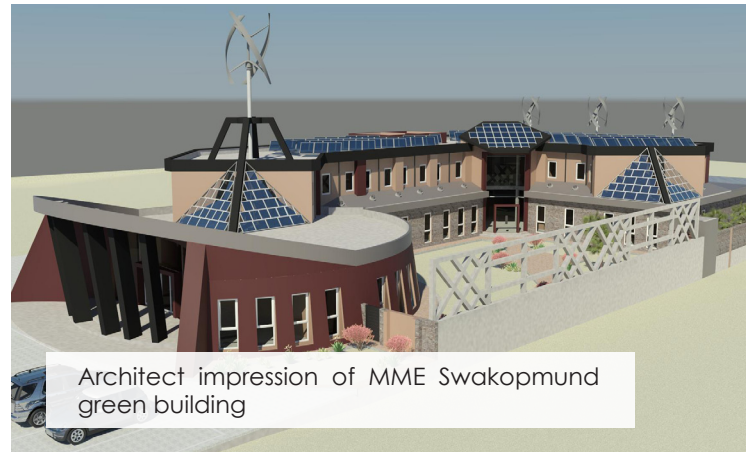
In addition, the recycling of waste water in a patented biological/mechanical process without chemical additives is a perfect method of recycling water for plants and outside taps as the water collected from the fog nets will be used coincidentally with Hansgrohe Grey water recycling and Pontos AquaCycle.

Furthermore, the building will have under floor heating. The Viega under floor heating closed water system will work efficiently on providing comfortable temperatures in the building by keeping the temperature warm in winter and cool in summer.

The ceiling of this modern environmental friendly building will consist of lamdaboard. Lamdaboard carries an eco friendly stamp and offers the highest levels of insulation properties. The board has a high temperature resistance and is recyclable. Lamdaboard complies with the Montreal Protocol regarding OZONE DEPLETION and the Kyoto Protocol regarding GLOBAL WARMING in the manufacturing process.

The building will also be made up of ventilated cavity & ceiling. This will supply heated air to heat pumps which in turn will need less energy to heat up water for the under floor heating system and air conditioning system.

The total preject is estimated to cost N\$36 986 502 and it is just right to mention that a project of this nature will consider a very large amount of brain power, manpower and capital. Experts from all fields such as; architecture, engineering (electrical, mechanical civil) quantity surveyor(s), and also the government itself will play key in adding their contributions to the success of the excellent venture. The project has employed thus far a great number of local people (57 Namibians of which; 39 are brick layers, 6 carpenters, and 2 contractors) and a the number/s are expected to rise as more hands and thinking heads will be needed.



Architect impression of MME Swakopmund green building

GREEN FEATURES

“Active and passive uses of energy and human comfort will be established in the building by means of using the natural resources of nature. Human comfort entails that a person feels comfortable in an area with optimum temperature as well as means of receiving fresh air. By acquiring these comfortable areas people often make use of air conditioning which uses allot of energy/electricity. The aim of achieving a more efficient building is derived from the thought of making use of alternative uses of energy thus creating a comfortable human space as well as saving electricity “ **Jorit Moisel**



Architect Jorit Moisel briefing the MME staff

Husab uranium project commissioned

HUSAB



His Excellency President Pohamba talking to Hon Katali, Minister of Mines & Energy at the Commissioning the of Husab Mine.

The Husab Uranium Mine, a project of Swakop Uranium, was commissioned by His Excellency, President Hifikepunye Pohamba, on the 8 of May, 2014. This was preceded by the opening of the road to the Husab Mine on 7 May 2014 by the Founding Father, Dr. Sam Nujoma.

Husab is owned by Taurus Minerals Limited, which holds 90 % of the shares, and Epangelo Mining Company, with the remaining 10 %. More than N\$7 billion were spent in the development of the mine.

In his speech, President Pohamba said that the Government supports and welcomes such investments because they contribute to the achievement of the national development objectives, which also include the transfer of

skills to local workers. "I have no doubt that the thousands of workers who will be employed during the construction of the mine will acquire valuable experience and skills that they will continue to use in future." the President said.

Swakop Uranium's CEO, Mr. Zheng Keping, applauded the Government by saying that the project might not have been possible if it was not for the support of the Namibian Government.

The mine is expected to produce 6 800 tons of uranium oxide annually, which will make Namibia the second largest uranium producer in the world, surpassing Niger, Australia, and Canada. The mine has a potential life of more than 20 years.

The Tschudi Copper Project

• Elmarie Kurz

Weatherly International plc, the London-based parent entity of Weatherly Mining Namibia, held the groundbreaking ceremony of the Tschudi Copper Mine on Friday, 8 November 2013, officiated by Honourable Isak Katali, Minister of Mines and Energy.

Tschudi will be an open pit mine operated by a contract miner. Mining and processing will operate 24 hours a day, 365 days a year. This N\$900 million project will be one of a kind in Namibia. Heap Leaching and Solvent Extraction

technology will be used to process the copper ore before being passed onto an Electro Winning Refinery which will produce copper cathode. Once the mine is operating at full capacity, 17,000 tonnes of copper cathode will be produced per annum. The production of copper cathode will

be a first for Namibia, because it is the highest possible level of value addition that can be achieved for copper by any mining company, paving the way for down-stream manufacturing activities such as production of copper tubes and copper wires.

The Tschudi Project will generate important benefits for Namibia and the Namibian Community. The Tschudi project has more than 10% equity participation for Namibian partners, including Government itself, GIPF and Labour Investment Holdings.

The Honourable Minister Katali, in his address stated that "Government has been hard at work to achieve the speedy implementation of our policies and programmes, such as NDP4, in order to realise our people's aspirations and national development agenda. Government embraces the concept of Public-Private Partnership in the Mining Sector that will ensure that Namibia fully benefits from its rich mineral endowment rather than merely through rent-seeking."

Honourable Minister Katali expressed his satisfaction that the Tschudi Project will generate 800 direct jobs during the construction phase and 500 jobs during subsequent operations in Namibia for more than a decade.

"I am delighted to note that the creation of jobs would further be supplemented by additional

investment in training and development for Namibians."

The Tschudi Project has full environmental clearance. Dundee Precious Metals - Tsumeb is constructing an acid plant which is due for commissioning during the same period as Tschudi. The sulphuric acid from the Tsumeb plant will be used to leach the copper oxide ore at Tschudi, further amplifying the economic benefits of upstream industries.



Hon. Isak Katali at the ground breaking ceremony



The Namibian Diamond Trading Company hands over N\$ 80 million in dividends to Government

Hon Deputy Minister Willem Isaacks with NDC CEO Mr Shihaleni Ndjamba at the handover

On 17 December 2013, a cheque of 80 million dollars was handed over to Government in dividends by the Namibian Diamond Trading Company (NDTC).

NDTC is a joint venture of the De Beers Diamond Trading Company (DTC) and the Namibian Government, and sells diamonds for international and local markets. The Government has a 50 percent shareholding.

In his acceptance speech, the Deputy Minister, Hon. Willem Isaaks, said that the agreement between Government and De Beers has opened doors for rough diamonds mined in Namibia be cut and polished locally, and then sold to local jewellers. "A percentage of rough diamonds can be retained and sold to contracted local sight holders in Namibia, who in turn cut and polish them for sale to local jewellers and for export." Isaaks said.

The diamond mining industry has seen some downfalls in recent times, however, Hon. Isaaks maintained that despite these global economic constrains, the Namibian diamond manufacturing sector continues

to grow from strength to strength. Diamonds remain the largest contributor to the country's Gross Domestic Product (GDP).

" A percentage of rough diamonds can be retained and sold to contracted local sight holders in Namibia... "

Mr Shihaleni Ndjaba, the Chief Executive Officer of NDTC, stated that 2013 was a good year for the company, with revenue collected amounting to N\$ 11 billion, compared to N\$8.7 billion in 2012. During 2013, the NDTC paid an amount of N\$240 billion in dividends to shareholders, bringing the amount of dividends paid to N\$ 1.08 billion since its inception seven years ago.

Since their first discovery in 1908 by Zacharias Lewala, diamonds have proven to be the most desired and adored stones ever mined in Namibia, as they symbolise wealth, durability, quality and status.



Shell Enters Namibia for oil exploration



The Ministry of Mines and Energy and Namcor have announced the re-entering of Shell Exploration and Production into Namibia's oil and gas exploration arena, by farming into blocks 2913A and 2914B, with license No. 0039 in the Orange Basin. Shell Exploration and its partners Production (LXVIII) and Signet Petroleum will have 90% participating interest in the licence, with the remaining 10% being retained by Namcor. Shell will become the new operator in the block and will continue with the remaining exploration work programme as stipulated in the petroleum agreement relating to blocks 2913A and 2914B.

The Ministry of Mines and Energy is very excited about the interest in Namibia shown by a major corporate such as Shell Exploration and Production, and hopes that this is only the start, and that other recognised International Oil Companies (IOC's) will also come and participate in the search for oil and gas in Namibia. The Minister of Mines and Energy, Hon. Isak Katali had approved the transfer of the license on 21 January 2014.

The Wingat-1 drilling campaign by HRT last year obtained the first oil sample, thus unequivocally

establishing offshore Namibia as an oil province and breaking the decade long paradigm that only gas and condensate will ever be discovered here.

The oil sample, together with the source rock samples and other data obtained in HRT's well, provides positive proof of the oil potential for both the Orange and Walvis Basins, thus de-risking the oil exploration effort for all current and future explorers.

The 2012 and 2013 offshore exploration drilling campaign by Chariot Oil and Gas and HRT, though commercially unsuccessful, was a geological success and is leading the way for the evaluation of several new play types within both, the Walvis and Orange Basins.

The HRT campaign brought the prevailing positive investment climate in the country and the open and transparent licensing and governance of the industry by the Ministry of Mines and Energy to the forefront. Such factors are attracting additional interest from super majors to mid-size exploration companies, which have the potential to bring both, additional exploration expenditure and capital resources to the nation.

The public should understand that several of today's leading offshore oil provinces like Nigeria, Angola or Norway had a large number of dry wells drilled prior to the first commercial oil discovery. Frontier exploration provinces such as Namibia require patience, dedication as well as exploration "know-how," and with the results of recent exploration campaigns Namibia's oil future looks bright.



MoU on construction of an Oil Storage Facility and Marine Petroleum Offloading Facility signed

The Government of the Republic of Namibia through the Ministry of Mines and Energy signed a Service Agreement with Om'kumoh Consulting Engineers cc & AIJ Cost Consultants JV on 11 April 2014.

This is in respect of the provision of construction supervisory, project supervision and management services for the Namibian Oil Storage Facility and Marine Petroleum Offloading Facility in the port of Walvis Bay.

The project was declared as being "strategic" by His Excellency, President Hifikepunye Pohamba in December 2011, and Cabinet approved the construction in Walvis Bay in March 2012. The construction of the storage facility is estimated to cost N\$3, 699,297, 000.00, which will be financed from the National Energy Fund through a dedicated levy.

The Ministry of Mines and Energy appointed a Civil Engineering Consultant to provide advisory services, prepare EPC tender documents and assist in the evaluation of the tenders. The services will be required until completion of the project.

The project is expected to take about 24 months to complete. Upon completion, the facilities will be transferred to Namcor for management and operation.

Mr. Wendell Uuyuni signed the agreement on behalf of Om'kumoh Consulting Engineers cc & AIJ Cost Consultants JV, while the Government was represented by the Permanent Secretary in the Ministry of Mines and Energy Mr. Kahijoro Kahuure.



MME PS Mr Kahuure with appointed Civil Eng Consultant Mr Uuyuni after signing MoU

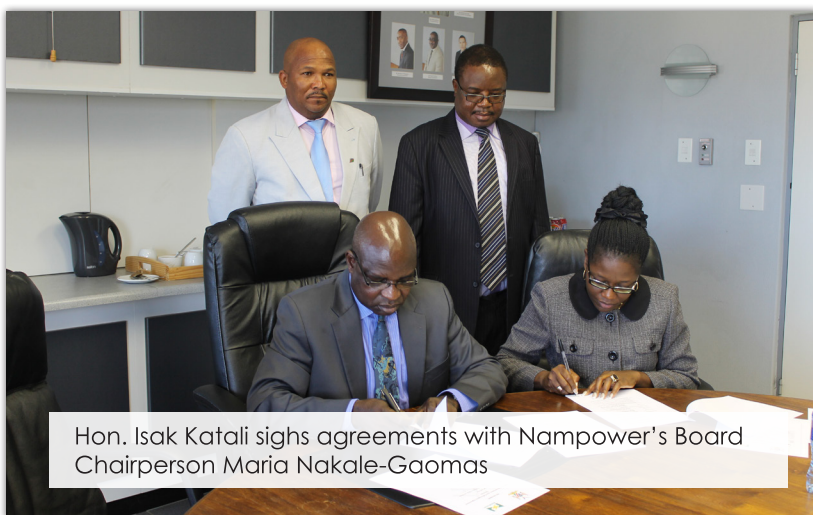
“ The cost of building this storage facility will be financed from the National Energy Fund through a dedicated levy. ”

NamPower Board signs performance agreements

• Edgar Brandt

The Ministry of Mines and Energy and the national power utility, NamPower, reached a milestone in their relationship on Friday when the utility's Board of Directors signed performance and governance agreements in the presence of both the Minister, Isak Katali, and the Deputy Minister Willem Isaaks.

During the signing ceremony at the Ministry of Mines and Energy, Katali said he was very happy that the date has come for the agreements to be signed with the Board. "NamPower is a very important institution in this country and it is befitting that these two agreements have been finalised," said Katali, adding that the agreements were a requirement of the State-Owned Enterprises Governance Act.



Hon. Isak Katali signs agreements with NamPower's Board Chairperson Maria Nakale-Gaomas

"The responsibility of NamPower is on your shoulders. You need to ensure that NamPower's strategies are implemented timeously." The Minister further said that the national power utility NamPower needs to ensure that the country has adequate energy for sustained economic and social growth. "Affordability and access to electricity on a sustainable level are crucial," said Katali.

"The responsibility of NamPower is on your shoulders. You need to ensure that NamPower's strategies are implemented timeously."

Speaking on behalf of the Board, NamPower Chairperson, Maria Nakale-Gaomas, said performance agreements are generally an important part in the corporate world and NamPower cannot be an exception. "We recognize that NamPower has huge challenges in ensuring a reliable power supply and in order to do this we need to have well thought-out strategies in place," remarked Nakale-Gaomas. She noted that the performance and governance agreements would be strictly monitored and added that the board "is here to serve the nation".

NamPower Managing Director, Paulinus Shilamba, has on numerous occasions sounded a warning that the power supply situation in Namibia would remain critical until the commissioning of a base load power station in 2018. The MD attributed the current situation to an over-reliance on imports, as Namibia's imports an average 60 percent of total power consumed per year and up to 80 percent during a dry season.

Namibian woman elected as a president of the Organisation of African Geological Surveys

'A woman's place is in the kitchen' so goes the saying. In the past, the role of women was often associated with being pregnant, barefooted and behind the stove. However, in today's world, many women are rather career minded, and are even good at what they do on top of it.

This is a story of a woman who took up a challenging career, in a field that is to this very day often dominated by men. Dr. Gabi Schneider has 2 children, she loves taking off her shoes, and she enjoys cooking – but that is how far it goes with the old saying. She is the Director of the Geological Survey of Namibia in the Ministry of Mines and Energy, and has recently been recognised at an international level by being appointed as the president of the Organisation of African Geological Surveys (OAGS) at the organisation's Annual General Meeting in Accra, Ghana, in September 2013.

OAGS strives to provide comprehensive information, support and capacity-building to Geological Surveys across Africa. The organisation assists member countries in their development through the establishment of information sources and means of technology transfer for their own use

and for the attraction of investment. OAGS also aims to establish greater public and government understanding of the strategic importance and offerings and products of Geological Surveys throughout Africa.

The mandate of OAGS is to foster and sustain geosciences programmes and excellence on the African continent, in the quest for socio-economic development and poverty alleviation, with special reference to mineral resource assessment, sustainable land use and development, hazard mitigation and environmental protection.

Schneider had already served a term as Vice-President of OAGS, during which time she had been instrumental in retrieving and making available geo-science information on Africa held by European geo-science institutions, such as European Geological Surveys and Universities. She was also involved in bringing the 35th International Geological Congress to the African continent. This largest gathering of geologists and other geo-scientists will be held in Cape Town, South Africa, in August 2016. Schneider serves on the Local Organising Committee. She will be at the helm of OAGS for the next three years.



From L - R, Dr G Schneider (centre) with incoming Vice Presidents Dr A Senvano (Mocambique) and Dr H Amadou (Niger), outgoing President Mr L Bitam (Algeria), outgoing Vice President Dr J Doudu (Ghana), and the CEO of the Council for Geosciences (OAGS secretariat) Mr M Kota (South Africa)

African and European Geological Surveys committed together for Africa's wealth

• Dr. Gabi Schneider



Africa and Europe have strengthened their cooperation in the field of Geology at the 5th EU-Africa Business Forum on “Engaging the private sector in sustainable and inclusive growth”. The event has been a great success for the Geological Surveys of Africa and Europe. They engaged at the roundtable on Raw Materials and governance, which resulted from a previous debate with Geological Surveys worldwide at the EuroGeoSurveys General Meeting on 25 - 27 March 2014.

The Organization of African Geological Surveys (OAGS), EuroGeoSurveys (EGS), Euromines, Business Europe and other industrial players and institutions discussed how to enhance a sustainable exploitation of the minerals wealth of the continent leading to a sustainable economic growth, along four axes: governance, infrastructure, knowledge base and waste management. It has emerged that geological knowledge and information should be increased by strengthening the Geological Surveys' capacity and geological cooperation. The roundtable stressed the importance of developing a good policy framework to attract investments, promote skills development and business education in the sector. This process should ensure environmental protection and the participation of local population in all parts of the processes, also in the form of consultation.

Mrs Fatima Haram Acyl, African Commissioner for Trade and Industry, and Mr Karel De Gucht,

European Commissioner for Trade, were present at the debate. Mrs Acyl expressed full support of the geological cooperation, considered one of the most important and urgent needs to understand the mineral resources potential in Africa and its sustainable development.

Geological Surveys' data production and access to such data has a remarkable impact, especially for business and development opportunities and to enable African countries to take informed decisions. In line with EU Raw Material Diplomacy, at the Business Forum opening ceremony, the European Commission Vice President Antonio Tajani, expressed his commitment to foster geological collaboration. This should benefit local populations and European companies that adopt a business model ethic compatible with the EU legislation. The President of the European Commission, José Manuel Barroso, and the chairperson of the African Union Commission, Nkosazana Dlamini Zuma, reaffirmed the strategy to strengthen African sustainable development (infrastructure, agriculture, tourism, raw materials, young education) while enhancing EU business and trade with Africa.

The Forum followed the broad debate held at the EuroGeoSurveys General Meeting on the 25th-27th of March, in which for the first time the Geological Surveys of North America, South America, Asia, Europe and Africa plus international organizations representatives from the World Bank, UNESCO, and UNECA discussed cooperatively about sharing geoscientific information for a sustainable world economy.



Land crack at Odibo

In December 2013, the presence of a deep crack in the surface of the soil was reported by the villagers of Odibo. The elongated crack, located south west of this village in northern Namibia, approximately 5km east of Oshikango, is believed to have formed between 23 and 24 December 2013. The village is within the Cuvelai drainage system, which runs from southern Angola to the Etosha Pan in northern Namibia. A team of geoscientists from the Geological Survey of Namibia was assembled to investigate the site.



Land crack at Odibo Village

The preliminary investigation revealed that the crack formed through geochemical processes involving the dissolution of a calcareous layer (these are rocks that dissolve by slightly acidic water) and structures. Calcrete (calcium carbonate) is formed by precipitation when the dissolved calcium and carbonate concentration in a solution becomes sufficiently high. The solution may be in open water, in a lake, a spring, within ground water or water within the soil.

The surface crack is located in the vicinity of an ephemeral river (Rivers that do not always flow and are mostly dry). In general, clusters of thick vegetation occur along the north-south trending rivers/streams in the investigated area. It is therefore suspected that the surface crack has

occurred due to the subsidence of the topsoil resulting from dissolution of a calcareous soil horizon in the subsurface by ground water.

A shake test was done on the soil samples collected from the site. The shake test was used to determine the soil type based on the amount of different materials present. Based on the initial shake test analysis, it was observed that the soil in the vicinity of the crack is primarily composed of 40% to 60% clay. The soil with the highest clay content was observed within the main stream.

A possible hazard associated with the crack is mainly weakening of the soil horizon due to the subsidence of the topsoil. This might result in the development of cracks in buildings and infrastructure within the area.

Villages are cautioned to avoid building infrastructure within and near to rivers or clay pans since these are zones with high surface and underground water flow and the clay soil surrounding them has a high shrink and swell capacity.

Further detailed investigations need to be conducted on a local and regional scale by the Geological Survey of Namibia.



Geologist assessing the crack



Ministry of Mines and Energy at the 19th Polytechnic Career Fair

Helke Mocke of MME explaining the use of minerals to pupils.

• Helke Mocke

The 19th Career Fair hosted by the Polytechnic of Namibia took place on 12 and 13 March 2014. The event was opened by the Polytechnic's Prof Errol Tyobeka, Advisor to the Rector's office, who spoke on behalf of the Rector Dr. Tjama Tjivikua. Prof Tyobeka gave an inspiring speech about the role of youth in the development of Namibia and the vision of the Polytechnic as it is busy changing into the University of Science and Technology.

More than 35 institutions came to share information on possible career paths, bursaries and internships. Schools from various regions and districts attended with more than 400 pupils coming to the Ministry of Mines and Energy's booth. Our ministry was represented by the Geological Survey of Namibia and the

Renewable Energy subdivision at the REEI, which demonstrated solar energy technology and shared information on the importance of identifying alternative energy sources for an ever growing Namibian economy.

There was a huge demand for internships and youngsters wanted to know why the Ministry of Mines and Energy does not offer any bursaries. They showed a huge interest in fields such as Geochemistry, Engineering, Mining, Environmental Geology and Energy. Students and pupils were quizzed about various topics relating to Namibia's geological resources, the use of certain minerals and rocks, mines, renewable energy and chemistry. As a reward for giving a good answer they won items sponsored by the Solar Revolving Fund.

How Small-scale Mining can contribute to economic development and environmental sustainability in Namibia

• Itaveleni Mupewa

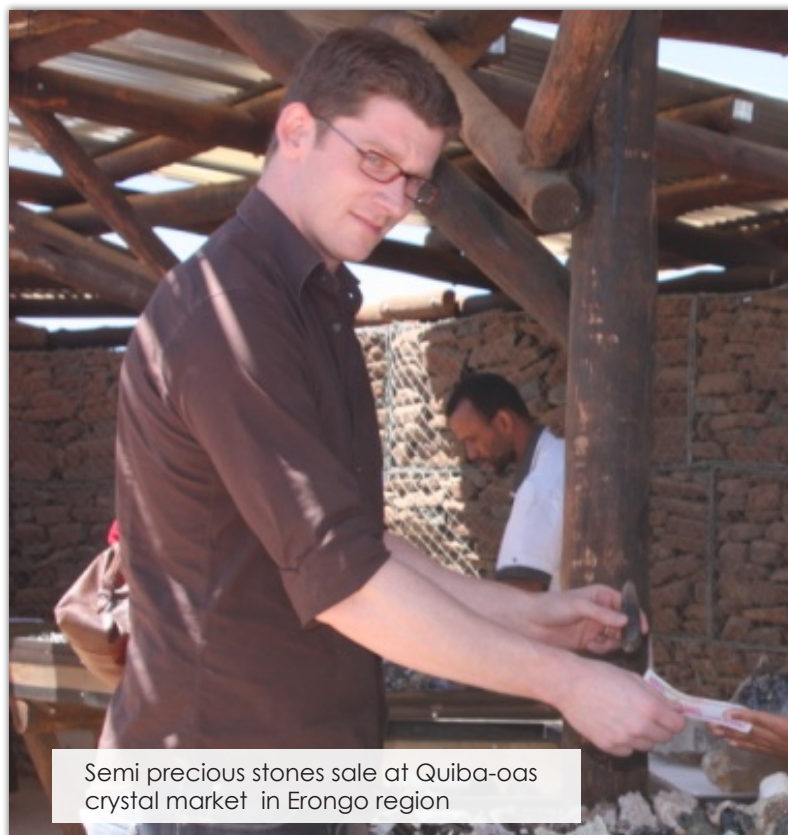
Small-scale mining (SSM), which is almost always informal, refers to mining practised by communities, groups and sometimes individuals on a small scale. The reasons why people practice small scale mining vary depending on certain “push” and ‘pull’ factors. Participation in Namibia’s small scale mining sector has been linked to push factors such as poverty and economic crisis. Pull factors that encourage people to take on SSM are the potential for high profits or gold-rush type situations, for example when a pocket with tourmaline is found in a pegmatite.

Small-scale mining has the ability to improve economic development in Namibia by increasing local purchasing power, creating employment, reducing poverty as well as slowing down urban migration. SSM also has the potential to improve environmental issues for example by tailings recycling. However, there are also social and negative environmental impacts associated with SSM, which are linked to lack of knowledge amongst the small scale miners resulting in environmental degradation and unsafe working conditions. Often, these arise due to unclear laws or lack thereof and inefficient technologies, which create risks to communities, workers and the natural environment.

How can these socio-economic and environmental issues faced by SSM be solved?

The formation of associations, which can then be supported by Government, such as the Erongo Small Miners Association (ERSMA), the Karas Small Miners Association (KARSMA) and the Kunene Small Miners Association is a valuable initiative. These associations are a stepping stone towards fostering the promotion of technological development in SSM, which in turn increase the social and environmental benefits of SSM activities, and consequently reduce its stigma as an economic activity degrading the environment.

Moreover, small miners should be encouraged from a regulatory perspective to adopt managerial and technological innovations that will protect the environment, the miners and the community as a



Semi precious stones sale at Quiba-oas crystal market in Erongo region

Small-scale mining in Erongo

Environmental Code of Practice
A helping hand to environmentally responsible mining

This code of practice is a commitment to mine in an environmentally and socially responsible manner, respecting other land users, whether current or future.

whole. We should provide incentives to small scale miners to adopt and develop more sustainable practices which do not only focus on economic gain, but also on improving environmental and social performance, as well as post-extractive economic activities. An example is the Environmental Code of Practice, which was developed by the Geological Survey of Namibia for ERSMA.



Finally, strategies need to be designed to combat the high level of informality, restricted access to technical expertise and financial resources that small scale miners are facing. This can be done by developing 'Clusters'. Clusters are defined as a geographic concentration of interconnected economic agents in the same sector.

The development of clusters in Namibia can be a useful tool in improving the current situations faced by small scale miners. The advantage of clusters, once promoted in Namibia, they will naturally develop around ore deposits, and the geographical position is therefore determined by the location of the ore deposits. Economic agents have to move towards the mineral resources, resulting in boosting similar and related economic activities in the area. This can result in miners, mining companies, training organizations, unions, maintenance firms, jewellers and traders, amongst others, clustering around an area.

Nevertheless, it is of utmost importance to understand how to take care and manage small scale mining projects which do not only focus on short-term economic gain, but also adopt strategies that consider long-term economic, social and environmental benefits.

Any interested Namibian Citizen who is 18 years old and above, and who has identified a potential mining area, can take part in small scale mining by obtaining the relevant mineral rights. A Non-Exclusive Prospecting Licence (NEPL) allows a prospector to prospect and identify mineable areas. If a prospector then decides to start mining, he/she must register a Mining Claim, which gives the holder the right to extract minerals and rocks for the purpose of selling or further processing. A person is allowed to have up to 10 mining claims.



Calcrete mining in Epukiro

How can the public take part in Small Scale Mining?

How to Apply for, Peg and Register a Mining Claim

STEP 1:

Application for a Non-Exclusive Prospecting License (NEPL)

- Requirements for NEPL Application:
- Applicant must be a Namibian citizen being atleast 18 years old
- Complete relevant Application form(obtainable from 2nd floor MME)
- N\$50.00 to accompany the application form
- Certified copies of proof of date of birth and nationality
- Certified copies of passport and /or identity document

NB: The NEPL is valid for 1year. The holder of NEPL **has no authority to mine** until such time as he/she is in the possession of Claim Registration Certificate.

STEP 2:

Pegging of claims

- Claims may be pegged by the holder of NEPL by the erection of beacons
- Claims shall have a maximum area of **18 hectares**
- Claims must be in the form of a rectangle where the sides are parallel, the long side being 600 meters and short side 300 meters in length.
- Beacons must be visible from the next beacon

STEP 3:

Application for the registration for of a Mining Claim

- Application for a claim to be registered must be made within 21 days of pegging claims
- Complete" Application for the Registration of Mining Claim" obtainable from MME head office, 2nd floor
- Provide a sketch plan showing beacons erected (4 copies required)
- Application form and a payment of N\$50.00 to be submitted in person at the MME head office, 2nd floor
- Complete an "Environmental Questionnaire for Mining Claim in Namibia" obtainable from 2nd floor, MME office
- Complete a" Pro – forma Environmental Contract" obtainable from 2nd floor, MME office
- Submit form "e" and "f", together with a copy of form "b" to the Ministry of Environment and Tourism (MET) in person
- MET will issue you and MME with a copy of Environmental Certificate
- After MME received your Environmental Certificate from MET, the Mining Commissioner's office will than issue you with a CLAIM REGISTRAION CERTIFICATE which is valid for two years
- Start mining, the annual fee payable for each mining claim is N\$50, payable in advance

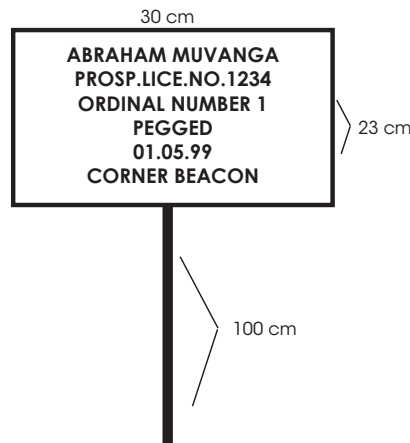
Restrictions on the pegging of claims:

- Claims may not be pegged over any land, which is privately owned without the permission of the owner.
- Claims may not be pegged on any land, which is the subject of: i) Mining Claim ,ii)Reconnaissance License , iii) Exclusive Prospecting License, iv) Mineral Deposit Retention License or v) Mining License. (Details of those license(like their status and the position) are available from the Ministry of Mines and Energy

NB. What is a beacon?

Beacons are metal or wooden plates, at least 30cm by 23cm which is firmly attached to the beacon pole and shall contain the following information in permanent marking block letters.

- The name of the license holder
- The nature and number of the prospecting license
- The ordinal number of the claim (e.g. 1, 2, 3, 4...)
- The date on which the claim was pegged

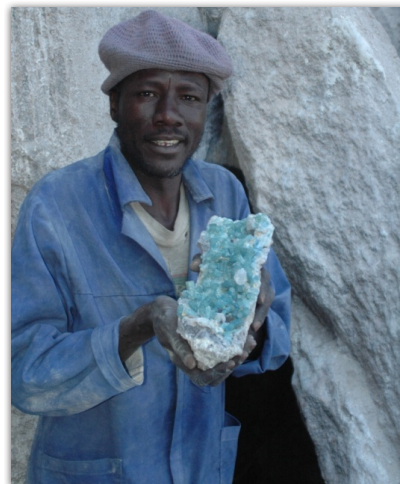


Example of making a beacon plate

Fig: 2 Shows the process of applying and registering for a mining claim.

Procedures for obtaining mining rights relevant to small scale mining

Small scale miners are encouraged to form associations and cooperatives, or join the existing ones, as this makes it easier for Government to channel geotechnical and other support to them.





Young scientists team at UNAM

YES Network Namibia

Kombada Mhopjeni

The Young Earth Scientist (YES) Network was formed by young scientists all over the World in 2007 to support the goals and the implementation of the various themes of the International Year of Planet Earth (IYPE). The network is an international association that provides a platform for young professionals and scientists from different fields of earth sciences to engage in the dialogue on the scientific challenges facing our planet today. Early-career scientists are provided with means to network with other geoscientists from diverse backgrounds, both young and seasoned. Following the steps taken by global youth, young geoscientists in Namibia formed the YES Network Namibia in 2009, initially with only 1 committee member. Today, YES Network Namibia has more than 10 committee members from companies and other research institutions.

Why should young earth scientists join the YES Network?

YES Network offers early career researchers/young geoscientists with many opportunities by:

- Fostering international collaborations between early-career geoscientists.
- Improving professional resources and increasing opportunities for early-career geoscientists.
- Creating bridges between early-career geoscientists and environmental policy makers.
- Raising awareness of the importance of geosciences for society.
- Promoting scientific, professional, and academic collaboration between early-career and senior geoscientists.

- Providing information on how you can get involved in the Network and International Union of Geological Sciences (IUGS) activities.

The YES Network Namibia Chapter consists of young geoscientists from diverse backgrounds and is a voluntary association. It is composed of young earth scientists, both academicians and practitioners, working on the basis of the ten themes of IYPE. YES Namibia aims to provide a platform for young, vibrant, innovative Namibian earth scientists with a passion for information sharing to share and learn about earth sciences. The YES Network Namibia Chapter plans and executes activities of the network locally and promotes global collaboration, by linking young Namibian earth scientists with other young scientists worldwide.

“ Early-career scientists are provided with means to network with other geoscientists from diverse backgrounds, both young and seasoned. ”

Namibian YES Network Chapter Committee

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Media representatives:

Media representative – Rosina Leonard

Social Media – Michelle Hijamutiti

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You can access YES Namibia through email
(yesnetwork.namibia@gmail.com) or social
media on:

- www.linkedin.com/groups/YES-Network-Namibia/
- <https://www.facebook.com/pages/YES-Network-Namibia/>
- <https://twitter.com/YESnetworkNam/>
- <http://yesnetworknamibia.blogspot.com/>

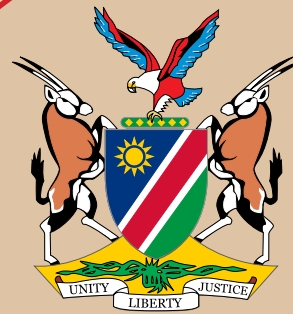
Are you looking for these opportunities?

Get your free membership now. YES Network
membership is free.

<http://www.networkyes.org>



Ministry of
Trade and Industry



Ministry of
Mines and Energy

PUBLIC STAKEHOLDERS MEETING

The Ministry of Mines and Energy in conjunction with the Ministry of Trade and Industry cordially invites you to the Worksop on “Value Addition to Minerals”. The purpose of the workshop is to discuss the proposals contained in the report

“Beneficiation Possibilities for Namibia’s Minerals”.

Date: 07 August 2014

Time: 07h30 - 13h00

Venue: Ministry of Mines and Energy’s
Auditorium – Ground Floor
6 Aviation Road

Your valuable inputs and insights made will direct
Namibia’s National Value Addition Strategy.

For more information, please contact

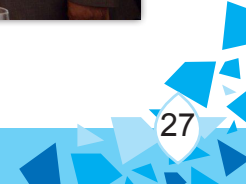
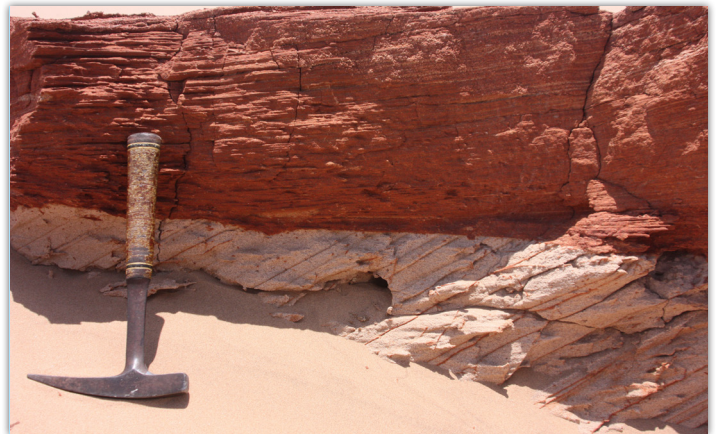
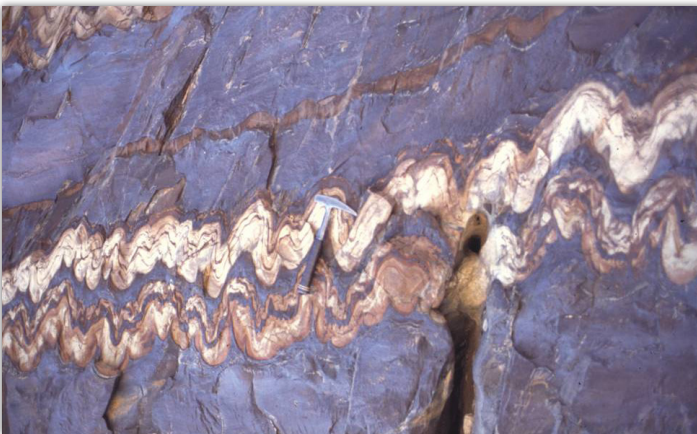
Helena Itamba at hitamba@mme.gov.na or at telephone number 2848162.



MME

PANAROMA





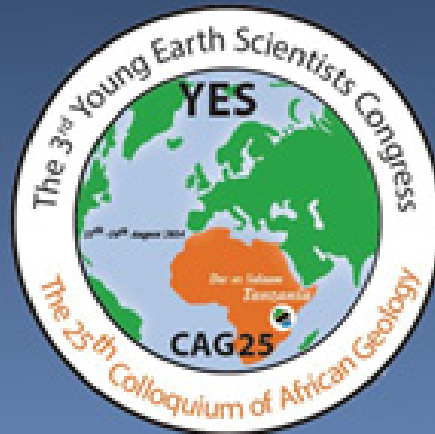


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