

Cannabis and Hemp

Special Issue

AAMPS Newsletter

Highlights

- A WORD FROM THE EDITOR...1
- MEET THE CANNASCIENTIST...2
- FOLLOW THE CANNABIS EXPEDITION...4
- THE CANNABIS CORNER...8
- THE DENTAL SURGEON WITH A PASSION FOR CANNABIS...10
- CATCH UP WITH THE CONVERSATION...12
- FOCUS ON BUSINESS- MEDICAL CANNABIS EXTRACTION...13
- UPCOMING EVENTS...15



AAMPS newsletter editor Prof. David Katerere with the Lesotho Minister of Health and AFCANN team

From the Editor

I have been traversing Southern Africa in the past 2 months trying to understand the nascent industry of an ancient medicine, cannabis. Starting in South Africa at the Cannabis Expo, I drove through with good travelling companions to Maseru in Lesotho.

There we met with local Basotho entrepreneurs hoping to jump onto the cannabis business train. We met with the Minister of Health, who expressed concern that of the nearly 40 licences issued, only about 10 have broken ground and most Basotho are not benefiting apart from leasing their land. We were able to witness the official opening of a R100 million farm in the Berea district and the Lesotho Prime Minister, Hon Majoro echoed the same sentiments.

In Zimbabwe we met young and energetic movers and shakers. The landscape seems highly responsive to locals after an initial militarized approach which failed to attract local and international investors. Recently South Africa has also moved to give licences for hemp though the THC limit of 0,02% appears to remain contentious and the agronomy doesn't support it.

We know that cannabis exposed to prolonged sunlight will always produce high THC (that's why the best growers in Canada and Europe invest in good lights and here in Africa we are naturally blessed with high levels of insolation). So cannabis loves Africa.

So wherever you are reading from I hope that you will enjoy the insights shared in this newsletter. Please feel free to get in touch and we will be happy to publish your letters and feedback.

Be happy!

David

[Read more](#)

Meet the Canna-Scientist

Jeff Verlinden



Tell us about yourself and your professional background?

My background is as a trained Biochemist with a fascination on drug development and commercialization.

Why are you working with cannabis? What sparked your interest in Cannabis?

I have always had a passion for the unrealized potential of botanical medicine, the 2018 FDA approval and recognition of a cannabinoid therapeutic was a turning point driving a more formal discussion around the plant.

What kind of research /work / support are you doing with cannabis?

My primary focus has been on extraction, testing and quality assurance workflows related to cannabis. Due to slow progress in adoption I have found myself spending more time hosting industry interviews that are being shared on YouTube to help spotlight the developments in the South African and African cannabis industry.

Tell us about the interesting people you have met on your journey?

I have been amazed by the overwhelming interest that people in general have in the potential medical benefits of cannabis. It is always fascinating engaging with licensed cultivators, testing labs, lawyers and private society lobbying for better access and policy reforms.

Some people say cannabis is a fad, what are your thoughts?

I would say big capital rushing into cannabis will certainly be a fad, regarding the understanding of health benefits and the education around cannabis this will continue to grow year on year.

In 5 years-time, where would you like to see the cannabis industry?

If we trend along the lines of North America we will likely see 2 main markets develop. A responsible adult-use market enabling the public to better modulate their own moods and general health, with a hopeful move away from a reliance on opioids. Secondly a more formal medicinal market should find its feet and migrate from special access via Section 21 to more recognised registered medicines.

Tell us about your work on the policy / advocacy front.

I hope that the content and interviews hosted on YouTube (South African Cannabis Extraction) is helping to breakdown the stigmas associated to cannabis and highlights that there is a strong list of professionals currently supporting the industry.

What are we doing right as South Africa?

The country has enabled reasonable access to CBD products (under Schedule 0) compared to other global markets. Formal licensed cultivation under Section 22C (1)(b) has been progressing well, but improvements are always needed.

Can you comment on the current cannabis legislation and how it affects the development of the cannabis industry?

We need to urgently make amendments to the Drugs and Drug Trafficking bill 140 of 1992. We also need a final version of the Cannabis for Private Purposes bill to be ratified. We also need a bill to address the need for successful commercialization of cannabis outside of the regulated medical market.

Where can we improve and how?

The points mentioned above are urgent, but we also need to focus on better inclusion in the formalization of a cannabis industry locally. Currently those with reasonable access to capital will be leading the charge.

What other partners are you working with?

Currently we work closely with companies like Apeks Supercritical CO2, Delta Separations, Heidolph HBX, Sciex amongst others.

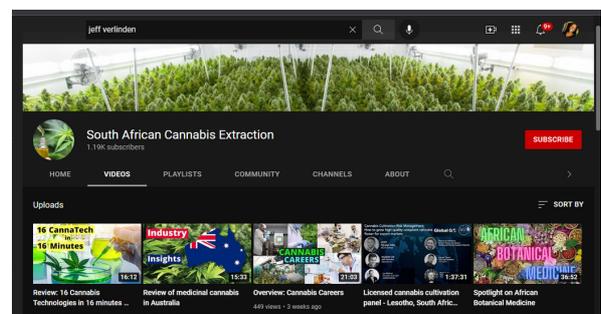
What trends are you seeing elsewhere in Africa and also globally?

Hemp cultivation is starting to develop and will be feasible in regions focused on a minimum 1% THC definition for hemp. The focus I would like to see is on local patient access to cannabinoid therapeutics and not just a focus on export.

Would you like to learn more about medical cannabis?

Jeff Runs a channel that aims to disseminate any information related to the extraction of medical cannabis while to improve the knowledge of cultivators to aid to the success of the cannabis business.

To visit his channel, click the link below:



[Visit Channel](#)

The Great Cannabis Expedition

By the AFCANN team

The Great Cannabis Expedition started in Cape Town on a balmy March afternoon. It was the Cannabis Expo, the first since COVID-19 started to very slowly exeunt stage left. I had never been to these expo so I didn't quite know what to expect.

I was also meeting the Buffalo Extraction Systems (BES) team, f2f, for the first time, thought we were well acquainted over the long lock-down Zoomby period going back to June of 2020. We had even done a deal Yogesh Jhamtani and I, with my university having purchased a 5L / h CO2 extractor (which at that time I was anxiously and impatiently awaiting).

So, it was that the Cannabis Expo was an eye-opener of sorts. I met interesting and interested people from the sub-continent as far as Lesotho, Malawi, Lusikisiki (a larger than life man mountain who always set in the front row in loud batiks and nodded or shook his head at the speakers) and then, of course, the Cape Town crowd.

I was on one panel where we discussed the latest developments in the industry in South Africa and what needs to be done (reduce regulatory barriers, create access and mainstreaming for indigenous growers, build technical capacity of farmers and regulators, understand cannabis chemistry better so that science informs regulations..list is endless).

One sad observation is that all the products (hemprete and hemp clothes, seeds, finished products, including the controversial edibles) were imported into the country.

This despite the African continent being the biggest supplier of cannabis crop in the world (Prohibition partners data). This seems to be the new mining...raw product out, finished product exported back to us at exorbitant prices. We have to be smarter than that, Africans...



The
Cannabis
Convention
Cape Town
2022

After the quick visit to Cape Town, it was back to Pretoria and then a road trip to Lesotho via the Vaal, the Gauteng's government choice of the provincial cannabis hub (did anyone say heavy metals!?). The Vaal University of Technology in Vanderbijlpark has a good laboratory facility and a highly motivated group of scientists who have much to offer to the industry with some off the wall ideas.

It was good to meet with people in the flesh after a 2-year hiatus in face to face meetings. We also managed to take a short detour and meet the Women Farmers who are bring sexy back (into farming).

African Women in Agriculture is a non-profit which has a farm in Eikenhof and incubate young women from the townships into tomorrow's farmers.



Yogesh and David with the AWIA ladies at their farm in Eikenhof (South Africa)

With their fashionable weaves and well-manicured nails, they give the lie to the fact that farming is a man's job. We had a quick class with them discussing what products they are thinking of getting into and how they could be thinking about market-focussed products (the design thinking bug from good ol' Mr Geddes, Australia's award-winning designer just won't leave me alone). Yogesh was in his element with dishing out real-world business advice to the ladies. I hope they invite us again...(Veronica if you are reading this).

The drive to Lesotho was uneventful, through the rolling field of drying maize and sunflowers. Along with the purple haze of the iconic cosmos flowers one could not escape, I remember thinking, the tagetes (kakiebos / African marigold / kambanje) weed waving in the gentle breeze. It followed us all the way to Lesotho, and later in Zimbabwe, it was almost everywhere.

I made a mental note to that one day soon when my machine is installed, I would be making that African marigold oil. This is weed which is considered close to cannabis, incidentally, and I remember it from my grandmother (Mbuya Mhlanga)'s granary as it is considered a good pesticidal plant.

In Lesotho we had an able coterie of guides with local knowledge. We convened a meeting of over 20 stakeholders for the first roundtable (we were told) of local stakeholders. It was heartening to see how we were able to connect them and get them to start talking about collaboration.

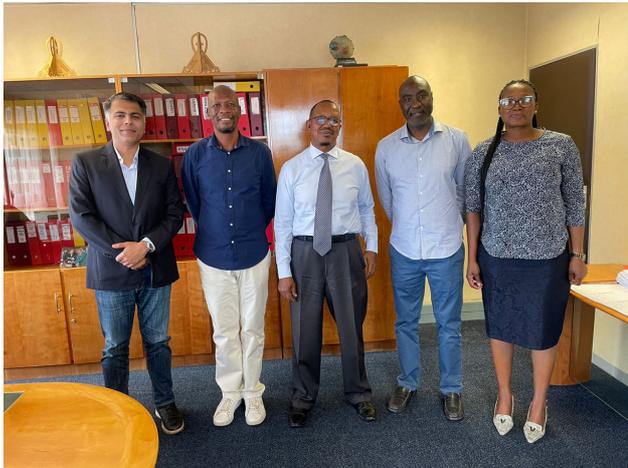


Stakeholder's Meeting in Lesotho

A value chain approach to cannabis is what we should champion so that everyone feels included and valued as they bring their...

...different skills to the table. We had a room full of highly talented people and there is no reason they cannot succeed.

We paid a courtesy call to the Minister of Health Hon. Sekatle. We briefed him that we had just met with stakeholders and that there is a need to increase local access to cannabis medicines in Lesotho. His major worry, he said, was that Basotho locals are holding on to licences which they are not using, and therefore the benefit to citizens is diminished. (This is a point the Prime Minister Hon Majoro also rehashed the next day at the opening of a grow facility in Berea district.)



The AFCANN team with the Minister of Health, Hon. Sekatle.

How can locals who secured licences at great cost (over half a million rand/maloti) be assisted to utilize the licences? How can Basotho patients have access to safe and good quality cannabis based medicines (CBM)? These seem to be issues which keep Hon. Sekatle and in our discussions we proffered some plausible solutions. We have a follow up meeting with the honorable minister being arranged.

Meantime, we had earned an invitation to the official launch of a 5000 sqm grow facility in the Berea district (the biggest in Africa we were informed and costing R100 million to put up, creating 500 jobs in the rural valleys of Lesotho: a good thing, surely). The Prime Minister was in attendance along with several ministers and a swanky crowd dressed to the nines.

This is how seriously they take the cannabis industry in Lesotho. The PM Hon Majoro talked at length about how the villagers will benefit from the rentals of their land, jobs created within the community and also about the worry that not enough locals are getting investors for their licences.

He reminded us about the foresight of his government which started investigating the legalization of "Lesotho gold" back in 2007. He also, interestingly, talked about how they are now looking at relaxing regulations around psychedelic mushrooms.

Berea district is now firmly the home of the cannabis industry. Within a 5 kilometre radius of where we stood there were at least 5 other grow operations licenced and at various stages of breaking ground. One of them Berea is interesting as it is led by a woman founder who is also a highly regarded scientist. But again her issue is not being able to raise the necessary funding. However, she is developing a seedbank of local varieties and it was interesting to see the work going on there. More power to her.

The last leg of the Great Cannabis Expedition was Zimbabwe. But the first stop was CSIR in Pretoria where we had a hybrid workshop (link to webinar). David Roque (Labat) and Jeff Verlinden (Separations) were the stars of the show with very well researched talks which again challenged South African policymakers to be more industry-friendly and enact policies that will take advantage of South Africa's potential.

Dr Blessed Okole from the CSIR talked about the CSIR / TUT Cannabis Research and Innovation Hub which is beginning to take shape and has ambition to have GMP accreditation. We watch this with great interest.



Attendees of the workshop at CSIR in Pretoria

Then to Zimbabwe. A country that has been in a tailspin for a long time. And yet, there are green shoots (figuratively and literary). The economy is fragile. But these are people of the soil and the climate is just right.

The dynamo behind unlocking the hemp and cannabis industry in Zimbabwe is a Chinese-trained dentist-

Dr Zorodzai Maroveke, indefatigable with an infectious passion for what she does.

She regaled us with her story and how she realized just how valuable hemp was as she was finishing her training in China, and how she hurried back home to start campaigning for its legalization.

Writing concepts notes to former President Robert Mugabe and not accepting a no from the current President, "that little girl" has been at the forefront of the Zimbabwe Industrial Hemp Trust (ZIHT).



Stakeholder's workshop in Zimbabwe

With the support of the Zimbabwe Investment and Development Agency (ZIDA) and the regulatory agency, the Zimbabwe hemp and cannabis landscape is vibrant with over 60 licences approved (again local licencees have problems getting off the ground). Our hosts, Harare Institute of Technology (HIT) are keen to have first mover advantage as the university of choice for research and training in cannabis and hemp.

We had a workshop of nearly 100 attendees and it was heartening to have the regulators there sharing their concerns and being open to suggestions from stakeholders (and no, we don't need clinical trials for products; pharmaceutical equivalence perhaps).

We visit at least 2 sites which are just being set up and both are of very experienced black farmers...a piggery where biogas is also being generated (quite tech savvy) and a large tobacco farm which is now adding on medical cannabis.

We heard of hemp farmers from many rural communities (the licence for hemp is \$400 and no special security) and exports to Switzerland starting to open up. And with various meetings done and dusted, the Great Cannabis Expedition came to an end. Or was it just beginning...

AfCANN partners are Tshwane University of Technology (TUT), BereaCan, PharmaConnect Africa, Buffalo Extraction Systems (BES) & CSIR

AFCANN

Partners



The Cannabis Corner

Did you know?

Cannabis and International Law

The United Nations regulates the global cultivation, trade and use of so-called illicit (psychoactive) drugs through There are three United Nations treaties that together form the international law framework of the global drug control regime: the Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol; the Convention on Psychotropic Substances, 1971, and the Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, 1988.

These conventions aim to provide access to these drugs for medical and scientific use / research while deterring their diversion, trafficking and use in the illicit market. They also provide for the penal codes which countries should enforce to combat all aspects of the illicit production, possession and trafficking of psychoactive substances.

The 1961 Single Convention on Narcotic Drugs was the first effort to consolidate all international instruments dealing with so-called narcotic drugs. It was the first time that cultivation of drugs (opium, cannabis and coca) was outlawed including by indigenous farmers for traditional use. It also established the International Narcotics Control Board (INCB) in 1968.

Cannabis, cannabis resin, as well as extracts and tinctures of cannabis were uniquely classified as both Schedule I (substances considered the most addictive and harmful) and Schedule IV (substances with "particularly dangerous properties" and with little or no therapeutic usefulness).

This was the state of play for 60 years until 21 April 2021 when "cannabis" and "cannabis resin" were definitively removed from Schedule IV of the 1961 Single Convention on narcotic drugs (C61). This move was based on a scientific review by the World Health Organization (WHO) on 2 December 2016 to reschedule Cannabis-related controlled drugs. This review led to the historic vote in December 2020 at the United Nations Commission on narcotic drugs (CND) to adopt the WHO recommendation and recognize the medicinal role that cannabis products can play.

References:

The UN Drug Control Conventions | Transnational Institute (tni.org)
(PDF) History, science, and politics of international cannabis scheduling, 2015–2021
(researchgate.net)

The Dental Surgeon who is passionate about Cannabis

Tell us about yourself and your professional background?

I am a dental surgeon by profession who learnt about cannabis in China by accident and developed a very strong passion to unearth its potential through lobbying for its legal inclusion in Zimbabwe.



Dr Zorodzai JT Maroveke

Tell us about your cannabis journey, how did you get into it? What sparked your interest in Cannabis?

It all began with a dress I had bought and I didn't understand the fabric. I looked more into it and that's how I found out about Industrial Hemp.

What kind of work are you doing in the country and the region?

Through an organization I founded in 2017 in Zimbabwe Industrial Hemp Trust (ZIHT), we lobby Government for better policies and legislation reforms, R&D, Investment promotion, Education and Awareness and now consultancy.

Tell us about the interesting people you have met on your journey.

I have met pioneers of the Cannabis industry legalization in China, Australia, Malawi, Botswana, South Africa, Zambia, India, the Rastafarian community in Zimbabwe and Politicians that have come and gone. I have also met very pessimistic people who said I could never succeed at this.

In 5 years-time, where would you like to see the cannabis industry?

I would like to see a socially, economically and environmentally inclusive Cannabis Industry in 5 years in Africa.

What work have you done on the policy/advocacy front?

Today my team and I have successfully influenced three pieces of Legislation since 2017-2020. I am currently working on an amendment on the definition of Industrial Hemp in Zimbabwe in regards to the maximum THC limit.

What are we doing right in the region?

The SADC region has moved with speed and learning as it goes which is a positive attitude from the Governments, as well as the continuous development of policies.



Dr Maroveke and the Cannabis Round Table in Zimbabwe

Can you comment on the current cannabis legislation and how it affects the development of the cannabis industry?

In Zimbabwe there are a number of issues affecting both Medicinal Cannabis and Industrial Hemp.

There are serious overlaps between Recreational Cannabis and Medicinal Cannabis which need to be addressed.

Industrial Hemp application, process and policy is still excluding the ordinary small scale farmer. Legislation has to be driven by social inclusion, small scale farmers have built the Tobacco industry as have small scale miners increased the gold output in this country.

Where can we improve and how?

Having the right conversations at the right time. Sharing lessons between countries. Government to government engagement. Let's stop copying and pasting the first world instead let's domesticate and learn from their mistakes too.

What other partners are you working with?

Partners in the Tobacco space, Equipment manufacturers, Tertiary institutions, International Investors and buyers, Farmers, Compliance officers, Agronomists, Policy makers.



Dr Maroveke attending a Minority Cannabis Business Association conference

What trends are you seeing elsewhere in Africa and also globally?

East Africa is coming on board with Rwanda issuing 5 licenses recently. Expecting more activity in the West with Ghana leading and Nigeria slowly following suit.

Connect conversations

Highlights

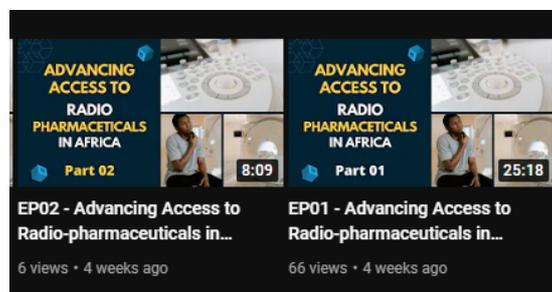
1. TUT/CSIR Cannabis Research Dialogue



The TUT/CSIR Cannabis Research Dialogue series is brought to you by Pharma Connect Africa under the Connect Conversations Banner where a host of individuals in the Cannabis and Tertiary Industry discuss on the Cannabis industry, their experiences and different ventures they have embarked on.

[Follow the conversation...](#)

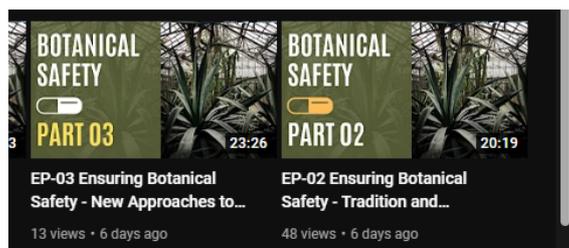
2. Advancing access to radiopharmaceuticals in Africa



The Advancing Access to Radio-Pharmaceuticals in Africa Webinar Series brought to you by Pharma Connect Africa on the Connect Conversations Africa platform. Radio-pharmaceuticals are radioisotopes bound to biological molecules able to target specific organs, tissues or cells within the human body and this series seeks into delve into the various radio-pharmaceutical procedures available in Africa and the processes that are being done to make the practice of using these isotopes widespread in Africa. This video contains the Introduction and the presentation is by Prof Jan Rijn.

[Follow the conversation...](#)

3. Botanical Safety



Ensuring the safety of botanically derived products is an important public health priority. This webinar provides an overview of approaches to ensuring the safety of botanicals following scientifically valid methods and from a regulatory perspective.

[Follow the conversation...](#)

The Focus On Business

Buffalo Extraction Systems



Founded in 2019 and based in Bentonville, AR, Buffalo Extraction Systems is a turnkey solutions provider in the Cannabis Extraction space.

Led by a young, dynamic group of technocrats offering state-of-the-art extraction solutions for the Cannabis industry, Buffalo Extraction Systems serves the United States, Canada, Africa, Middle East and Asia-Pacific regions.

Made with the greatest emphasis on safety, our Cryogenic Ethanol Extraction & Carbon dioxide Supercritical Fluid Extraction (CO₂ SCFE) solutions are easy to use and maintain, and come loaded with an on-board computer for continuous monitoring and control.

We are committed to navigating our clients through the nitty-gritty of the extraction process from concept to commissioning.

Buffalo Extraction Systems is a subsidiary of Cybernetik Technologies, a global industrial automation company with over 30 years of experience in manufacturing high end material handling and process automation solutions for multinationals such as Hershey's, GSK, Novartis, Mondelez, and Mars International.

Yogesh Jhamtani is the CEO of Buffalo Extraction Systems. With extensive experience across sectors like banking, operations, change management, business analysis, and general management, Yogesh is a keen business leader with a proven track record.

..of leading successful cross-functional projects across North America and Asia Pacific. He recently toured South Africa, Lesotho, Zimbabwe & Malawi to immerse himself in the booming African Cannabis industry.

Yogesh believes that many African countries possess an ideal climate for growing Cannabis, with global trends hinting at the vibrant opportunity in store. The continent looks towards South Africa for leading technological innovation and expertise. It is imperative for entrepreneurs & farmers to take on this responsibility and lead the effort, in order to create jobs and build a sustainable industry.

The need of the hour for the Cannabis industry is innovation centered around product development, technology, patient access, experience, data and tracking. South Africa, with a very strong tradition in this sector, and an established Pharmaceutical and Healthcare industry, has the opportunity to take a lead in this industry.

At Buffalo Extraction Systems, we are committed towards helping build the African Cannabis ecosystem, and have established a Cannabis Innovation Hub in Pretoria, South Africa, in collaboration with the Council for Scientific and Industrial Research (CSIR) and Tshwane University of Technology.

The Innovation and Research Hub will be responsible for developing new Pharmaceutical APIs, empowering farmers with testing services and helping businesses grow in the region through research, training & job creation.

Buffalo Extraction Systems is actively working with institutional investors and entrepreneurs in the region to establish relationships that will help realize projects on-ground, as we look towards fostering enterprise development in Africa.

To learn more about Buffalo Extraction Systems and their services, visit their website by clicking the link below:



[Visit website](#)

Alternatively you can follow their social media pages below



Upcoming Events

- **7 July** University – Industry Collaborations: are they working? (in conjunction with SANBio & UEF)
- **22 July** – CSIR / TUT Cannabis Research Hub Virtual Expo
- **11 & 25 August** WOMENpreneurs of Africa (in conjunction with SEDA)

[JOIN IN ZOOM](#)

Dear Valued Reader, thank you for your continued support of our newsletter. Kindly take a few minutes to complete the survey in the link below. This form will help us at AAMPS to create a database of members and also understand our member needs so that we can best serve you. Your information will not be shared with third parties nor used for commercial purposes.

[Click Here to Complete Survey](#)

[Subscribe to our newsletter here](#)