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The cannabis economy: a mirage or entrepreneurial opportunity for Africa?

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The emerging cannabis economy in Africa

I have had what I might call a lifetime interest in the versatility of the *cannabis* plant. My first encounter with cannabis (mbanje) came when I was a child growing up in rural north-western Zimbabwe's Hurungwe District. Ever since, I have gone from my earliest memories of this versatile plant as a potent traditional medicine to later in life where I encountered the same plant as a classified illegal drug. When I first left Zimbabwe as university student travelling across the world, I once again encountered cannabis as both an illegal and legal substance largely used as a recreational psychoactive and hallucinogenic drug. Later on, as a professional, I encountered cannabis in my work as an archaeologist researching and studying traces found in artefacts such as ceramic pot sherds and ethnographic collections of smoking paraphernalia across southern Africa. In the past decade, I have seen the same plant once again re-emerging in the public debate with another identity. This time global societies that have largely campaigned against cannabis are now on the forefront of the cannabis research completely reversing their historical attachments to psychoactive and hallucinogenic applications.

During all this time, I evolved from being an admirer of the plant from my knowledge of its traditional medicinal uses, to encountering the plant highly restricted and criminalised in contexts where it was largely presented as a mind-altering substance and, to the recent revisionism. Today, the plant is receiving significant attention from pharmaceutical researchers and the auxiliary economic valuations (Hartsel, et al. 2016). I guess my extended interest in cannabis ever since my childhood encounters awakened a long-term interest in the plant because I could not understand how one plant could be both hailed as a life saver to be an illegal substance prohibited in one part of the world yet legal in another and at times occupying both legal and illegal statuses in the same jurisdiction. While cannabis does not feature as an economic commodity in most of Africa, it has for long been associated

with some traditional values and certainly formed part of precolonial trade (Huffman, 2019).

Today my interest in cannabis has developed into seeking to understand how the local African knowledge and history of the plant can be exploited in relation to the emerging economic value chain in the pharmaceutical and industrial value of cannabis. I am not referring to the botanical question but rather the cannabis *sativa* and related species group's economic value from medicinal to industrial values such as fibre.

The expanding research on the uses of cannabis is raising more questions than answers on the full potential or confirmable uses of the plant. For instance, I grew up in rural Zimbabwe knowing that cannabis leaves, flowers, seeds, bark fibres and roots were strong medicines or ingredients of effective traditional medicinal remedies for a variety of ailments. I witnessed first-hand the miracles of traditional medicines and I believe the emerging cannabis value chain has similar potential as an economic force fraught with entrepreneurial opportunities.

I write this article from my multiple perspectives about cannabis ranging from the history of plant in the southern parts of Africa, its historic traditional use to the entrepreneurial opportunities that are emerging as the plant takes a new position in the growing global pharmacopeia. I do not make any effort to address the plant's biology and classification. That task is taken up by other papers published in this journal. For the purposes of this article, I address cannabis as a genus that include the *indica*, *sativa* and *ruderalis* to which both hemp and marijuana cannabis belong. I also do not make scientific attempt to address the hundreds of cannabinoids components but make general references to the THC and CBD components.

There are few plants and drugs that have wide presence and universal appeal as cannabis. It is still largely controlled and illegalised in most parts of the worlds on one hand while on the other hand it is emerging as a wonder economic boom in other parts of the world. Multi-billion entrepreneurial firms are booming and being listed on international securities and

stock exchanges (Global XETFs, 2020).

Historical background

Research on the use and diffusion of cannabis in Africa has been a subject of research as far back as half a century ago (Du Toit, 1976). Historical writings have always associated the introduction of cannabis on the African continent through trade contacts between India, the Arabian Peninsula and the horn of Africa and eastern coast. Historians such as Ahmad Khalifa, Neville Chittick, Schultes and Rosenthal places cannabis spread from east Africa to Egypt round about the 10th to 12th Centuries AD (Khalifa, 1975). More historians have linked the spread of cannabis to southern Africa with the Bantu migration where the plant spread through trade routes. Archaeological evidence from Ethiopia to southern Africa yielded pottery evidence of smoking pipes which derived cannabis compounds (Van der Merwe, 1975). Historical traveller documents and ethnographic evidence similarly refer to the presence, cultural use and distribution of the “herb” in east, central and southern Africa as far back as the seventeenth century (Du Toit, 1976). Ethno-linguistics has also linked the Hindi term *bhang* and early Arabic references to *banj* to be the origin of the Swahili *banghi* commonly adopted in east Africa giving birth to the variations of *banj*, *mbange*, *mbanje*, and *mbanzhe* names used to refer to cannabis across most South African Bantu speakers (Junod Junod, 1962). Ethnolinguistic evidence also explains how the term *dagga* came to be associated with *cannabis sativa*. This term originates from Jan Van Riebeeck’s 1658 reference to “*daccha*” was mistakenly applied to cannabis and the writings were referring to an indigenous *leonotis leonurus* shrub with long history of use by the San and Khoi hunters and herders (Watt Breyer-Brandwijk, 1932). However, the white settlers encountered cannabis by way of the Khoi herders, and ever since the term *dagga* became the common referent in formal Afrikaans and English references to the legal ethno-medicinal and social uses in southern Africa.

The history and evidence of presence of cannabis in east central and southern Africa may point to the plant not being indigenous, however, the plant has been used, grown distributed and traded across the region for centuries going as far back as the Late Iron Age. The long distance ivory and gold trade was associated with evolution of complex African state systems in the east coast and southern African regions (Huffman, 2019). This has generated significant amount of indigenous knowledge about growth, breeding, industrial, medicinal uses and naturally the plant forms part of the traditional pharmacopeia.

For generations since the establishment of the colonial legal systems, cannabis has largely been a prohibited and banned substance. This did not eliminate growing, breeding, distribution and medicinal or recreational uses as a psychoactive hallucinogen. The greater part, the plant has been restricted to be part of the illegal economy largely traded on the illicit informal markets.

All this time cannabis has never been quantified as of economic value throughout Africa until now. There is a significant shift, a revolution taking place in reassessing the botanical, pharmaceutical, industrial and even recreational uses. Several western European and North American governments have increased their research support and legalisation of cannabis in various forms and stages. More than 50 countries globally have legalised the plant and many more are in the process of legalising it for specific uses under controlled conditions (Amlug MacKillop, 2019).

While Africa has had a long history with cannabis, no

country on the continent has developed any significant scientific or economic capacity to exploit the values now being recognised from the plant such as is the case in the developed economies of Europe and north America. For instance, The Netherlands has one of the longest histories of regulated legal cannabis economic sector. In the past decade, countries like Canada and some States in the USA have developed cannabis economic value chain already exploiting estimated market returns in excess of \$100 billion through entrepreneurial ventures and publicly traded and listed new ventures (Global XETFs, 2020). African countries have not completely been blind to this revolution. For example, in the past few years, countries such as Lesotho, Zimbabwe and Malawi are among the early adopters to legalise cannabis for medicinal purposes. Lesotho has had long history of breeding and growing a variety of organic cannabis *sativa* due to its special high-altitude conditions. Although the country legalised the commercial production of the plant, the terms and conditions of the licencing are strict and costly beyond the local growers’ reach. As such, almost all licences issued have gone to foreign entrepreneurs backed by international investors largely from Canada. The same trend can be observed in African efforts to legalise the plant for industrial, medicinal, traditional and modern pharmacopeia as well as recreational use.

It is here where I see entrepreneurial opportunities either emerging or evaporating as the cannabis sector get regulated in Africa

The new global cannabis economy

I have always known cannabis as a medicinal herb used in various forms to treat serious diseases and traumas as well as minor problems where various components of the plant from roots, stalk, leaves, flowers, seeds and charcoal from burnt stalks were used as ingredients in various herbal and traditional herbal remedies. Traditional herbalists in my community clearly understood and effectively exploited medicinal values of cannabis, its extracts and derivatives including cannabidiol. Throughout my life, I have seen both the miracle of cannabis as well as its destructive nature when abused in contexts where it is used as a recreational psychoactive and hallucinogen drug. But because of the legal prohibitions, all this indigenous knowledge is all but gone with pockets that remain still stigmatised.

There is no doubt that cannabis has a long history on the African continent which dates back to prehistoric era. Under colonialism, the plant was criminalised, and some instances religiously regulated with prohibitions enforced with varying levels of punishment ranging from jail sentences to steep fines in different jurisdictions. Because of this legal history, the plant was also stigmatised particularly through the spread of the Christian doctrine specifically across east and southern Africa.

All these restrictions contributed to the development of the predominantly illegal cannabis economy we are now seeking to redress. Just like in most parts of the world, cannabis across African was forced to go underground making the plant one of the most illegally traded commodity (Mahamad Hammond, 2019; Valdivia, 2019). This history has created a knowledge vacuum in African societies where cannabis is largely conflated with drug abuse and recreational use. This has made it difficult for African countries to effectively change their regulatory environment, invest in research on both the scientific and economic benefits of the cannabis species as well as track both the consumer demands in medicinal, industrial, health and wellness applications. Even those countries that have made strides to regulate and reclassify cannabis

are still battling to build effective formal cannabis value chain environment. There is significant misunderstanding of the value and applications of cannabis with knowledge largely limited to popular culture which categorises cannabis into hemp and marijuana. These variations are largely differentiated on basis of their cannabinoid (CBD) and the delta-9-tetrahydrocannabinol (THC) content. This is because the hemp-based CBD is widely considered legal while that derived from marijuana is still classified as illegal.

It is from here that the blanket misunderstanding originates. THC is just one of the hundreds of components of cannabis known to date (there is not enough research yet that has successfully quantified the full spectrum of cannabis chemical components). Since THC is the component largely associated with potency, it is unfortunately singularly linked to psychoactive and intoxication components of cannabis sativa plant. On this extreme end of THC, current debates and regulations in most world jurisdictions continue to look to criminalise THC without adequate scientific evidence of the full spectrum of this component. On other extreme is the over simplified and often exaggerated value of CBD (cannabidiol) which is associated with positive medicinal effects such as anti-psychotic, anti-inflammatory as well as anxiolytic and anti-epileptic properties (Elsaid, Kloiber, Le Foll, 2019). This view downplays the fact that CBD is also psychoactive, but in a unique way from THC. Both THC and CBD are cannabinoids from the cannabis plant and their respective or joint effects are far more complicated than what is presented in popular media. Unfortunately, even our science is far from supplying a full answer to this wonder plant's compounds

Jumping on the bandwagon or an emerging cannabis economy in Africa?

I make an argument that African countries that have made strides towards legalising cannabis are largely making these decisions on basis of limited information and knowledge. The majority of law-makers in countries such as Zimbabwe, Lesotho, Malawi (McCool, 2020), and South Africa seem to largely favour limited regulation popularly referred to as "for medicinal use". Even this so-called medicinal use is not well documented in any of the countries that are legalising cannabis which means they are either making misinformed regulatory frameworks or they are simply copying and pasting regulations from the American and European regulations. From an entrepreneurial perspective, this approach is flawed and does not take into consideration the unique local value propositions of the cannabis industry.

What is of concern with the current approach is the extreme prejudice against centuries of the indigenous knowledge of the plant, its distribution and uses. For example, all the traditional applications of cannabis in traditional medicines and herbs I witnessed growing up including cannabis infusions, decoctions, herbal honeys, salves, seed oils, tinctures, filtration charcoals, glycerites as well as other pharmacopoeia I never had the opportunity to observe then or learn about are all not accounted for or well understood in the current debate about legalising cannabis. And yet those that are seeking to regulate the plant seem convinced that they know what is best for the production, use and regulation of the plant. The full commercial role of cannabis in African economies can only be realised from a significant departure from the existing legislations of copy and paste from Western legal documents. This limits the scope of this emerging industry in Africa. Furthermore, the wholesale importation of cannabis legislative framework also plays into the hands of the same western and developed economies cabal who are bent on limiting

supply to reap super normal profits from the plant's growing value chain. It is my evolved view that the misinformed regulatory environment in early adopters in southern Africa will be responsible for long term expropriation of indigenous knowledge about cannabis by the global entities that are currently securing the legal licenses on offer across different African jurisdictions.

I propose that significant amount of research effort be dedicated to the socio-economic value chain of cannabis as the basis for future regulatory frameworks across most African countries seeking to participate in the global cannabis economy. African growers can only benefit from the plant's value chain if the entire entrepreneurial potential from the full spectrum of the plant is allowed to flourish, and when African laws lead the way rather than be reactive to external whims on how to regulate the cannabis economy.

The growing global uses of Cannabis

Cannabis is still a mystery plant as far as the full spectrum of its components and potential uses and effects are concerned. The potential uses are currently unquantified although they range from the commercial industrial, medical, pharmaceutical, primary health and wellness to leisure recreational uses. A significant number of global pharmaceutical firms have been making significant scientific and financial inroads in the development and application uses of cannabis products (Rong et al. 2017). To date, there is no Africa pharmaceutical company that has made significant breakthroughs in the application of cannabis products across the continent. Meanwhile the USA's Food and Drug Administration (FDA) has approved several CBD-derive treatments for anxiety, spasticity and long term pain as well as the first cannabis derived drug for treatment of seizures (FDA, 2018). The European Union Parliament has made formal references to medicinal marijuana benefits such as potential to reduce obesity, alleviating symptoms of asthma, cancer, psychosis and Alzheimer. (Valdivia, 2019) Medicinal use of cannabis-based drug development (Rong, et al. 2017) is a frontline where unlimited opportunities exist including revisiting the indigenous knowledge of the plant.

One of the most accepted use associated with cannabis is the industrial hemp fibre and hurd widely used in building materials, textile, plastics, paper as well as fuel industries. Canada already has some of the world's well-funded emerging cannabis value chain governors which include publicly traded ventures such as Apharia, Canopy Growth and Aurora Cannabis. It is in this space that international giants such as Canada's Canopy Growth are dominant and actively seeking to acquire the licensing and market shares in the emerging African cannabis economy. This is a plus-4Billion-dollar listed and publicly traded venture reportedly holding more than 90 cannabis patents with hundreds more applications pending (Global XETFs, 2020).

International entrepreneurs and global ventures have not missed on the evolving legalisation efforts taking place in Africa. Take the British Invegrow's activities in Malawi. This was the first licensed firm to conduct research in the hemp sector which subsequently led to the limited legalisation of industrial hemp in Malawi (McCool, 2020). The local stakeholders in the cannabis industry in Malawi are largely excluded by the nature, form and licensing costs established by the legalisation framework. No African entrepreneurial venture or country is in anyway near this level of building and governing an African cannabis value chain.

Cannabis continue to be largely known as an illegal recreational drug across Africa occupying the largest share of the illicit markets across the continent. There is a significant

global market for illicit cannabis estimated to be in the excess of a hundred billions dollars (Mahamad, Hammond, 2019). One of the applications of cannabis is the ever globally popular recreational use. It is this application that has been the biggest challenge for legalisation early adopters in Africa. Countries such as The Netherlands have a long history of recreational use of cannabis. The North Americas has increasingly driven towards full legalisation for adult recreational use. Once again, we see Canadian entrepreneurs, such as the Cronos Group (Cronos Group, 2018) publicly traded firm, driving this application in vaping, topicals and creational edibles. No African country among the early adopters have come up with a clear approach to the recreational market for cannabis. This begs a response given the global trends that indicates that, for example the legal recreational global sales of cannabis reached US\$15 billion in 2019 (Global XETFs, 2020). The USA state of Colorado, an early adopter in the USA reported exponential growth in cannabis sales during the covid-19 related lockdowns and restrictions as sales went online (Colorado Department of Revenue, 2020).

The entrepreneurial opportunities that are emerging from global trends towards legalisation of cannabis seem to be largely escaping the majority of the local communities and the local entrepreneurs in Africa. Unfortunately, it seems African governments are once again too slow or are still looking to the West for guidance. In 2018 the World Anti-Doping Agency (WADA) made a distinction between THC and CBD subsequently removing CBD from the prohibited substances lists. Other government bodies with international reputations such as the USA's FDA are following the Canadian lead by removing cannabis from the illicit substance list to regulated product opening ever more opportunities for entrepreneurs in this space. Unfortunately, the indigenous African communities with their centuries of traditional knowledge about cannabis remain on the periphery of this future and booming cannabis economy largely because the legalisation currently being adopted in African countries is largely restrictive through licensing that is too expensive or too complex for local players to afford or qualify. This is largely because most African regulators' legalisation efforts are blinkered and still largely prejudiced by the historical context of cannabis as an illegal drug.

Conclusion

There is need, urgently, for African governments or bodies to up their efforts towards addressing the high growth potential for the cannabis value chain. This would begin with considerable effort to understand and educate stakeholders and constituencies about the true potential of cannabis. This means assessing cannabis opportunities not as an illicit drug but rather an economic sector offering industrial, public health and personal health care solutions. The African cannabis economy has yet to be quantified from entrepreneurial opportunities perspectives for both the producers and the consumers alike. Unfortunately, the picture emerging points to the colonial and historic role of Africa as tenants than value chain governors of the agro-products they produce. We have seen similar challenges in African agricultural commodities such as coffee and cocoa.

The cannabis revolution works within the trifecta environmental forces of a significant legislative and regulatory overhaul, change of local societal opinion and the now proven addressable market. Sadly, it seems most African governments are making decisions not related to these factors. The long-term potential of the cannabis economy for African economies will only be significant if the governments begin to

make informed and evidence based decisions that can create regulations that favours the local development of the value chains that harnesses the local and indigenous knowledge of the plant as opposed to the current trends that seem to be seeking to prohibit the local participations. The cannabis economy requires true innovation driven by the confluence of societal factors, government regulatory efficiency and market forces.

References

1. Amlung, M., MacKillop, J. (2019). Availability of legalized cannabis reduces demand for illegal cannabis among Canadian cannabis users: evidence from a behavioural economic substitution paradigm. *Canadian Journal of Public Health*, 110(2), 216–221.
2. Colorado Department of Revenue. (2020). Marijuana Sales Reports. Retrieved on 13th June 2020 from colorado.gov
3. Cronos Group. (2018, December 7). Strategic Partnership with Altria Conference Call. Cronos Group Inc. Retrieved on 19 June 2020 from thecronosgroup.com
4. Du Toit, B. M. (1976). Man and cannabis in Africa: a study of diffusion. *African economic history* (1): 17–35.
5. Elsaid, S., Kloiber, S., Le Foll, B. (2019). Effects of cannabidiol (CBD) in neuropsychiatric disorders: A review of pre-clinical and clinical findings. In *Progress in molecular biology and translational science*, 167: 25–75). Academic Press.
6. FDA, (2018). FDA approves first drug comprised of an active ingredient derived from marijuana to treat rare and severe forms of epilepsy. Retrieved on June 19th 2020 from [FDA](https://www.fda.gov)
7. Global XETFs. (2020). Introducing the Global X Cannabis ETF (POTX) – Global X ETFs. Retrieved on June 17th 2020 from www.globalxetfs.com
8. Hartsel, J. A., Eades, J., Hickory, B., Makriyannis, A. (2016). Cannabis sativa and Hemp. In *Nutraceuticals* (pp. 735–754). Academic Press. Huffman, T. N. (2019). Ethnoarchaeological fieldwork in Zimbabwe: people, pots, structures and scientific mementoes. *Southern African Humanities*, 32(1), 217–274.
9. Junod, H. A., Junod, H. A. (1962). *The Life of a South African Tribe: Social Life*: University Books.
10. Khalifa, A. M. (1975). Traditional patterns of Hashish use in Egypt. *Cannabis and Culture*, 195–205.
11. Mahamad, S. and Hammond, D., (2019). Retail price and availability of illicit cannabis in Canada. *Addictive Behaviors*, 90: 402–408.
12. McCool, A. (2020). “Malawi legalises cannabis amid hopes of fresh economic growth”. *Global development*. The Guardian. Retrieved on 23 June 2020, from <https://www.theguardian.com/global-development>
13. Rong, C., Lee, Y., Carmona, N.E., Cha, D.S., Ragguett, R.M., Rosenblat, J.D., Mansur, R.B., Ho, R.C. and McIntyre, R.S., (2017). Cannabidiol in medical marijuana: research vistas and potential opportunities. *Pharmacological research*, 121, pp.213–218.
14. Science Direct. (2017). Cannabidiol in medical marijuana: Research vistas and potential opportunities.
15. Valdivia, A. G. (2019). The economic implications behind the cannabis legalization debate. Retrieved on June 28 2020 from <https://www.forbes.com/sites>
16. Van der Merwe, N. J. (1975). Cannabis smoking in 13th–14th century Ethiopia: Chemical evidence. *World anthropology: Cannabis and culture*, 77–80.
17. Watt, J. M., Breyer-Brandwijk, M. G. (1932). The medicinal and poisonous plants of southern Africa: Being an account of their medical uses, chemical composition,

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