



# Cannabis Industry Development Association of Southern Africa

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On behalf of the  
**Cannabis Industry Development Association of Southern Africa**  
**Friends in Disaster Risk Reduction**

30 November 2020

**To: THE PORTFOLIO COMMITTEE ON JUSTICE AND CORRECTIONAL SERVICES**

**Re: Submissions, comments and rejection of the proposed Cannabis for Private Purposes Bill [B19-2020]**

I, Dr Anita Venter, am a professional member of CIDASA. CIDASA was established in 2018. In 2018 the South African Constitutional Court decriminalised cannabis for private use and medical reasons. CIDASA supports the Constitutional Court and opposes the *Cannabis for Private Purposes Bill*, based on many unconstitutional reasons. I am also an ecological built environment practitioner in the informal sector. The bill is not well thought through in terms of the whole plant structural properties. The bill falsely claims that it reflects on 'private purposes' and show grave research errors from the side of the government. Passing the *Cannabis for Private Purposes Bill* violates the built environment rights embedded in the Constitution:

1. Environmental legislation: The Paris Climate agreement of 2015, and Section 24 (a and b) of the Bill of Rights: everyone has the right to an environment that is not harmful to their health or wellbeing; and to have the environment protected, for the benefit of present and future generations.
2. Deter persons from accessing adequate housing: Section 26, 1 and 2 of the Bill of Rights. Everyone has the right to access adequate housing. (2). The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of a person's right to access housing (or rather shelter) in times of a climate crisis.
3. Inhibit a person's freedom of expression (Section 1, c and d of the Bill of Rights). This freedom includes freedom of artistic creativity, and academic freedom and freedom of scientific research.

Therefore, on behalf of many ecological and indigenous built environment practitioners, I am rejecting the proposed *Cannabis for Private Purposes Bill*. The proposed bill does not take any consideration of the use of the by-products of the cannabis plant, its rich indigenous historical context. The bill cannot be considered as a bill for all private purposes. The compilation of the bill show great systematic neglect, steer neo-colonial agendas, encourage a policing state against centuries of indigenous freedoms, and ignore the origin and purpose of the whole property of the cannabis plant. At the end of the document, I will provide a scientific reading list that supports every statement made in my rejection of the Cannabis for Private Purposes Bill. In principle, not all private purposes of cannabis have been considered, and the bill must be challenged from the ecological built environment and indigenous perspectives.

Dr Anita Venter

*Post-Natural practitioner*

# Rejection of the Cannabis for Private Purposes Bill

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## Critical reflection on the Cannabis for Private Purposes Bill:

### A built environment perspective

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On behalf of the

Cannabis Industry Development Association of Southern Africa

and

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30 November 2020

My rejection against the Cannabis for Private Purposes Bill goes beyond the conventional medical and substance abuse rhetoric encapsulated in the draft bill. The origin and use of cannabis in industrial practices, especially in the built environment, have not been considered in the Cannabis for Private Purposes Bill. The omission of cannabis with its by-products properties is a fundamental flaw in a statement that claims ‘*Cannabis for **Private Purposes** Bill*. Focusing only on consumption aspects and counting quantities while prescribing prosecuting actions are nothing more than sustaining a Westernised ideology and is an extension of neo-colonial practices. The bill has little consideration for the rich historical indigenous context that helped to build the modern world as we know it today. I will firstly focus on the historical context of an ancient plant whose origin cannot be traced. After that, I will focus on measures of control introduced in the 20<sup>th</sup> century by medicinal councils that do not know the industrial purposes of cannabis. Then I will briefly explain the context of unjust cannabis prohibition in South Africa. Subsequently, follows a section on the climate crisis and centuries of industrial use of cannabis in the built environment. Both climate aspects and the built environment uses were conveniently ignored when government drafted the bill. Lastly, I give personal opinions, based on my expertise on why I am not only opposing the bill but outright rejecting the content of the document. The bill is based on flawed research conducted by the government. The bill failed to adhere to the mandate of the Constitutional Court to provide a context of Cannabis for Private Purposes that benefit all.

#### 1. The historical context of the ancient cannabis plant

The cannabis plant has a ecology history long before humans inhabited earth. Tracing the origin of the cannabis plant is impossible. The progress of the first human evolution towards that of the modern human species, *Homo Sapiens*, occurred after the Pleistocene epoch. The Pleistocene age ended between 11 000 to 12 000 years ago. The Holocene era that followed the Pleistocene period is the birth of modern civilisation. During the Holocene period, the climate changed to be stable, and *Homo Sapiens* (humans) adopted a more sedentary lifestyle that allowed for settling at one place and engage in agricultural practices. Humans discovered the benefits of the cannabis plant and started the cultivation of cannabis for industrial and medicinal purposes. Nomadic and pre-agriculture archaeology sites are filled with cannabis artefacts that were used for industrial purposes. Consequently, archaeologists describe cannabis as a “camp” or “settler” plant. The plant flourished near ancient campsites in open areas and nearby streams. Open spaces and streams provided the ideal habitat for the plant to grow, and settlers used cannabis plants to manufacture goods for everyday purposes. Hence, cannabis is an ancient domesticated crop that has many industrial uses. Cannabis was cultivated and modified for

millennia. Arguably the processing of cannabis for various benefits led to industrial and human advances of many civilisations.

Evidence of the use of cannabis stem fibres can be found at prehistorical sites in China and Asia that date between 8500 and 6000 years ago. Cannabis, as a cultivated plant, had many uses in ancient times. Thus, cannabis is one of the oldest crops known to humankind. Cannabis was a vital fibre plant, and the plant allowed for much industrial processing of everyday goods. Cannabis (mostly the hemp strain) was used extensively in making ropes, fishing nets, fabrics and textiles of all kinds, manufacturing paper, building materials and many other convenient goods. Cannabis played a vital role in ancient industrial evolutions of society throughout many millennia. Evidence of the use of cannabis for industrial use can be found in many archaeological sites in Asia, Western and Eastern Europe, the Americas and Africa. A few examples:

- Archaeological sites show that the Cannabis plant was used in: China as textiles, ropes and canvas as far back as 8500 years ago; Assyrian clay tablets; Egyptian Papyrus dated about 3000 years ago; construction material in the pyramids of Egypt 500 BC. Cannabis as industrial material was marketed throughout the ages in Europe up to the 1900s. The cannabis plant products encouraged trade within continents and across ocean borders.
- Cannabis was not known in the Americas until the arrival and settlement of the first European colonists in the late 1400s. Colonisers used cannabis products for its industrial strength, resistance to pests in fibres like rope, and, canvas for shipping sails. Columbus sailed to America in 1492 using hemp (a cannabis strain) in its sails and ropes. Spanish and English colonisers in the Americas imported many botanical varieties ideal for textile manufacturing to its colonies. By the 1600s cannabis was widely grown in North America and Canada mainly for its fibre properties. The declaration of independence for the USA was signed on cannabis hemp paper in 1776. Cannabis farming was widespread in the USA up to the mid- 1920s.

However, with the industrial revolution in the 1700s and 1800s, the use of fossil fuels became a quick solution to replace labour-intensive processing of cannabis fibres. The onset of the industrial revolution led to a lesser need for durable material like hemp (cannabis strain). Synthetic materials, made from fossil fuel, replaced much of hemp production functions. Also, cotton became a more profitable product than hemp to use in the textile industry. With the promotion of cotton, no consideration was given to the destructive environmental impact of cotton versus the ecological benefits of hemp.

The cannabis plant has a rich history of indigenous practices, beyond medicinal and psychoactive use. Cannabis innovation potential was violently disrupted and prohibited by modern-day Western laws. In the 1970s, the United States of America signed the Controls Substances Act into law. Industrial cannabis strains, like hemp, was classified as Marijuana and hemp farming became illegal. This law had many repercussions. Fossil fuel products replaced products manufactured by cannabis. The large-scale replacement of cannabis with fossil fuel products arguably escalated the impending climate crisis in the 21<sup>st</sup> century. We must ask critical questions on why medical legislation that control illegal use of substances brought industrial practices of the cannabis hemp strains to a standstill. The prohibition of hemp farming coincided with the increased use of petroleum and plastics as alternatives to many hemp products.

## **2. The 20<sup>th</sup> and 21<sup>st</sup> centuries- Unjust Westernised intervention in the built environment**

With the rise of synthetic fibres in the 1920s and 1930s, fibres made from fossil fuels became more lucrative to use than cannabis fibres. The world wanted fast industrial solutions. Industrial solutions where quantity outweighed quality, made environment impacts only a secondary concern. The manufacturing processes of synthetic materials required vast amounts of unsustainable fossil fuels to manufacture products. Up to the mid-1800s, hemp in particular, was widely used as an ecological and

carbon-negative building material. Hempcrete is a mixture between hemp shives (a cannabis by-product) and lime. However, with the banning of Marijuana, the family strain of hemp was unlawfully removed from industrial practices in favour of quick carbon loaded fossil fuel materials such as cement. Soon after, the carbon loaded material of cement was mainstreamed into industrial activities, the cultivation of cannabis became illegal, on the rationalisation that some of the strains have mind-altering properties. In 1938, the Canadian Opium and Narcotics Act made cultivation of all cannabis illegal. The United States Marijuana Tax Act of 1938 did not technically make Cannabis cultivation illegal in the USA but placed Marijuana under control of the Treasury Department. All industries required permission from the United States Drug Enforcement Agency (USDEA) to grow cannabis. A brief revival of hemp production in both Canada and the USA occurred during World War II. Still, hemp production came to a standstill when fossil fuel oil industrial products became widely available.

Medicinal legislation in the late 1930s effectively eliminated cannabis, especially hemp production in North America after the post-World War II era. Thus, cannabis, a plant that proofed for millennia to have favourable ecological properties, became prohibited less than a century ago. The medical prohibition was supported by politicians who lobbied for fossil fuel and neo-liberal agendas. Humanity cannot ignore the linkages between outlawing of cannabis/hemp products and the replacement of carbon loaded options like cotton and cement, and its relation to an escalating climate crisis. More concerning is the social control of medicinal councils over industrial production practices that goes beyond the scope of its mandate. In 1970, the US Congress repealed the 1937 Marijuana Tax Act and replaced it with the Comprehensive Drug Abuse Prevention and Control Act. Although the 1970 Act created a distinction between Marijuana and the cannabis hemp strain, law enforcement made little difference when they enacted its rights to destroy plants and jail innocent people for socially perceived unjust practices.

### **3. Cannabis prohibition in South Africa**

Similar restrictions of the use and over-regulation of cannabis can be seen on the African continent. The origin of cannabis farming in Africa can be traced back at least 1000 years ago. Cannabis farming was introduced to Africa either by early Arab or Indian traders. Thus, the use of cannabis in South Africa by indigenous groups precede the annexation of land by the Dutch colonisers in the Cape in 1652. Early attempts by Dutch settlers to prohibit the use of cannabis failed. During the mid-1800s, the British lured Indian workers to its colony in Natal. Indian workers brought a wide variety of different cannabis strains and hashish with them. A rich culture of personal and industrial use of cannabis became the norm across South Africa. Local attempts and prohibitions on growing, consuming and selling cannabis were ineffective in the 1800s and early 1900s. Cannabis production was common in South Africa and initially legal under colonial governments. Unfortunately, through disinformation campaigns based on racial discrimination, South Africa followed unjust international colonial regulations and outlawed cannabis in 1925. Cannabis regulation became subject to global control under the Geneva Opium Convention. By 1928, legal cultivation of non-psychotic cannabis strains ceased entirely in South Africa. In South Africa, the legislation does not distinguish between the growing of cannabis and the growing of industrial hemp, a non-psychotic cannabis strain. Thus, one industry, the medical sector hampered the development of an ecological built environment industrial product.

The government banned all cannabis product lines unrelated to the medical industry with a one-dimensional decision. We can only wonder how the built environment would have flourished had the prohibition of widescale hemp farming not been banned. Because the hemp plant looks the same as the Marijuana cousin, hemp products got prohibited through medical rationalisations. The medical sector violated environmental and human rights to access climate-resilient housing potentials for almost a century. No builder should be constricted by law to plant no cost climate-resilient building materials that can be harvested while replenishing the soil in a four-month cycle. Nine decades of technological advances that could have been made with hemp, in terms of climate-resilient products lag because of

illogical decisions in the medical and political sectors. How did it happen that one industry focusing on 'health' accelerate the extinction of the very species they supposed to heal, by removing hemp from many other industry product lines?

Although the constitutional Court decriminalised cannabis in 2018, the Cannabis Bill for Private Purposes focuses mainly on recreational and medicinal use while ignoring the industrial purposes of just ecological products. Cannabis liberalisation in Africa is by nature, agricultural and farming related. Cannabis has much more benefits as being classified as a 'drug'. How can a Cannabis Bill for Private Purposes only focus on consumption? What does it say of our government's ability to conduct quality scientific research? Current cannabis policies, in Africa and beyond, are rife with social inequity, indigenous disrespect and political-economic agendas that escalate environmental degradation. The cannabis draft bill sustains the status quo of Western ideologies, by providing neo-liberal opportunities to the rich, while ignoring the social struggles of the ordinary people that got cannabis decriminalised in the first place. This bill is nothing but a re-colonising and overregulation of the rights of indigenous people for Western capitalist purposes.

The perception of the cannabis plant as a source of a mind-altering drug in the Western world gave non-psychotic cannabis strains a bad image. None of the structural properties of cannabis or climate benefits for the built environment has been considered in the draft bill. Cannabis is much more than a recreational drug with some medicinal purposes. Why ignore industrial purposes? Why is the built environment benefits, especially in indigenous shelter possibilities not considered in a bill for 'private purposes'? Currently, African governments and Westernised companies are accumulating wealth by depriving our citizens to access the cannabis economy on its terms, namely in the informal sector. The overregulation of cannabis is illogical when we consider the historical context and the benefits of the plant beyond consumption. Most of the people that fought for centuries for the liberation of the plant cannot afford stringent rules and regulations to establish a market for themselves. Indigenous peoples right to create an informal sector market, which is familiar to them, and makes use of their unique skills are taken away by giving rights to the privilege who only have profit in mind. Pre-colonial agriculture made cannabis into a valuable crop. Basing laws and regulations on Western countries models, that prohibited the use of the crop in the first place, are unjustly and an insult to our indigenous people.

#### **4. Reviving ancient knowledge of cannabis / hemp for the benefit of the planet- What have we missed?**

Modern botanical varieties of Cannabis Sativa L (also known as hemp) is an industrial crop with thousands of uses. Hemp has a negligible amount of psychoactive content. Since some cannabis plants have high amounts of psychoactive content, all plants related to cannabis, whether it has psychoactive properties or not, is unjustly regulated by the medicinal council. Also, you have to pay a fortune for licences for research and building purposes for a plant which is indigenous by nature. Indigenous rights on the use of the plant for millennia get sidestepped, and only the privileged with money can access licences. The use of cannabis for private purposes is a fundamental human right and can do much to lessen to the impact of the climate crisis. We have to challenge the over-regulated control of the medicinal council on industrial activities that have nothing to do with their mandate. The ignorance of indigenous rights in the bill is unconstitutional. Although the above sections showed the unconstitutionality of regulating the cannabis plant from a human perspective, humanity has more significant concerns with dealing with the world on the verge of a climate collapse. Given the state of the climate crisis, we must ask critical questions about whether any plant with carbon sequestering properties should be regulated at all. What comes first, the planet or people? Without a livable planet, there will be no people.

#### **4.1 Climate relevance**

President Ramaphosa repeatedly confirmed South Africa commitment to the 2015 Paris Climate Agreement. This climate commitment places the government under obligation to start mainstreaming zero carbon technologies into all industries. Responding to the call of the Paris Agreement, the government gazette published several acts such as the Carbon Tax Act of 2019, and newly adopted Waste Acts of 2020. The Carbon Tax and Waste Acts put all responsibility on the producer to account for carbon emissions during the manufacturing and life cycle of most materials used in everyday life. The cost implication of this accountability of carbon emissions in the built environment is enormous. Without mainstreaming existing carbon-negative materials, like cannabis (mostly the hemp strain) into manufacturing processes, South Africa will struggle to reach many goals set out in international climate treaties.

Carbon emissions are a much greater concern than the human species consuming a cannabis plant for recreational and medicinal purposes. Humanity should consider the structural properties of the plant beyond the social aspects that currently dictate the use of cannabis. The cannabis plant advantage is that many strains actively lessens the impact of the climate crisis by sequestering carbon from the atmosphere. The current overregulated legislation proposed in the cannabis Bill prohibits the number of plants you can grow. Though, the widespread uptake of planting cannabis to achieve a negative carbon footprint makes much more sense from an ecological perspective. Humanity created and self-induced six-mass extinction. Surely, delaying the extinction of human and other species for future generations is more important than regulating the use of a plant. The government should let go of its double standards. Cannabis plants cause less harm than other socially accepted mind-altering substances, like alcohol, that are freely available to use in any quantities. The overregulation of cannabis hampers the carbon sequestering potential of the plant to effectively adhere to international truces like the Paris Agreement (2015). None of the environmental contexts of the cannabis plant has been taken into consideration when the Cannabis for Private Purposes Bill was drafted. Through overregulation of the Cannabis plant, the plant will not reach its full potential to sequester carbon from the atmosphere. Cannabis plays a vital role in industrial low-to-zero and even negative-carbon industrial processes.

The demand for carbon-neutral ecological buildings will increase substantially in the coming years. The World Green Building Council (2019) defines 'green' building as buildings that, in its design, construction and operation, reduces and/or eliminates carbon-negative impacts. Green buildings should create positive impacts on our climate and natural environment. Currently, the majority of conventional building materials is detrimental to the environment and one of the main sectors contributing to greenhouse gases. Ironically ancient technologies that have zero-to-negative carbon properties have been outlawed in favour of fast industrial production building materials. Hemp as a building material has proven its worth for millennia. But based on unfounded assumptions and medicinal council illogical decisions, hemp never had a chance to develop its full potential in the contemporary world. Scientific evidence on the use of hemp is in abundance but gets ignored in many building councils' codes of conduct. In South Africa, neither natural building, nor the widespread uptake of hemp as a building material is promoted by legislation.

Furthermore, my right as a built environment practitioner to conduct cannabis experiments in my back yard for private purposes is restricted by the Cannabis for Private Purposes Bill. I cannot do much critical research on the prescribed quantities mentioned in the bill. Neither am I comfortable to apply for a licence at a ridiculous cost to express my artistic and academic freedom or freedom of scientific research on cannabis. Furthermore, by not researching cannabis as build material my right to access adequate housing, or rather shelter, is compromised. The climate crisis, partly due to two centuries of malpractice in the built environment, have little regard for just ecological materials. The alarming global increase in carbon emissions through built environment practices warrants the need for applying carbon-neutral or carbon-negative technologies. The climate crisis is not waiting, and research on earth

materials is of utmost importance and urgency. The carbon dioxide footprint of most conventional construction practices is extensive and amounts to unsustainable levels of carbon dioxide emissions that increase global warming.

How do you weigh the merit of providing practical examples of how to build climate-resilient shelters versus an overregulated Bill that is crafted on unjust neo-colonial capitalist control? The Cannabis Bill for Private Purposes has little regard for indigenous people's rights to housing themselves in ecological just shelters. Hence, I am drawing on my citizens right to conduct scientific research on shelter creation to negate some consequences of anthropogenic climate change. My citizen right includes research on all varieties of cannabis plants to get to constructive solutions for shelters suitable for future climate scenarios rather than the dismal options we have now. Climate realities led to some research on low-carbon dioxide construction materials. Ironically these materials have been used for millennia, but prohibited by either modern building codes or, as in the case with cannabis, outlawed by a medicinal council that are unrelated to the building industry. Claiming that these biomaterials are novel is a misnomer. Zero-carbon building materials have been with humanity since the dawn of time but were outlawed by regulations with little regard for the environment or future generations.

It goes beyond the scope of this rejection of the Cannabis for Private Purposes Bill to explain in detail the structural properties of the cannabis hemp plant for all purposes. The next section will briefly describe some technical properties of the hemp plant and how it relates to providing adequate solutions to enhance indigenous building technologies in the informal sector. Human settlements minister Lindiwe Sisulu adopted a far-reaching new housing policy in November 2020. Her department will provide land to people so that citizens can build their own houses. Zero-carbon technologies exist, and the government have to deliver legislation to mainstream building codes that do not destroy the planet. Indigenous building technologies, with the inclusion of cannabis by-products, falls well into the scope of environmental regulations. A rejection of the Cannabis for Private Purposes Bill is an excellent start to open conversations of long-forgotten indigenous building practices as a suitable option for shelter solutions of the future.

#### ***4.2 Cannabis (especially hemp) climate-resilient properties***

Research on hemp and its structural properties are in abundance. Repeating well-known science goes beyond the scope of this rejection of Cannabis for Private Purposes Bill. In short, research show every kilogram of hemp shives sequesters about 1.6 to 1.8 kg of carbon dioxide through photosynthesis during the plants' growth. The governments should stop regulating climate sequestering plants. Hemp shives mixed with lime (called hempcrete) have even more excellent carbon properties than using hemp on its own. Hempcrete continuously stores carbon from the air as its age. Hempcrete becomes stronger with time. Furthermore, hempcrete is non-toxic, waterproof, and resistant to mould when it is above ground. Hemp (and most cannabis strains) throughout its entire growth from seedling to mature plant, manufacturing and building processes are much more sustainable than most traditional fossil fuel building materials. Most cannabis strains, especially hemp, requires little or no pesticides or fertilisers to grow quickly and vigorously. Hemp can be produced on a large scale at a low cost. When hemp is turned into a building material, it becomes carbon-negative. Hemp, though its fast growth and soil regeneration properties leave less carbon gas in the atmosphere than it produces during construction. Hemp can be harvested three to four times a year and can replace the function of some timber products. Timber that takes a long time to grow. Not all hemp building technologies are high tech. There are different ways of how many cannabis strains and not only hemp can immediately enhance the strength of traditional indigenous buildings technologies through low-skills applications in the informal sector.

As long as people consume cannabis, there will be cannabis by-products. Any cannabis stalk can be chipped into small one to five-centimetre pieces. These chipped stalks can replace straw or grass in traditional adobe/cob mixtures (adobe/cob mixtures usually consist of soil with some clay content, cow or horse manure and straw). Using the chipped stalks means that straw and grass can be used for other

essential needs such as animal feeding and bedding. The chipped stalks, especially in different lengths, have much higher structural strength than using straw on its own. The more chipped stalks you add, the greater the insulation value your material will have. As an alternative, the inside bass fibres/ wool can be extracted to become hemp straw. Shives and hemp wool can be used to make: concrete; fibre for plaster, replace straw in cob mixes; act as wool replacement in insulation; be made into insulation panels; or used as insulation for walls or roofing; shives and wool can be manufactured as matting for flooring. Woven together hemp wool can make textiles, cords and ropes to be used in the building process. Fully grown cannabis (whether hemp or other strains) produces excellent strong stalks that can be used in the place of wood for wattle and daub frames. The fast turnover of stalks means you can incrementally build your shelter as you grow cannabis for other purposes.

You don't have to cut down trees that take much longer to grow to achieve similar strength. Unfortunately, the government have little respect for South African vernacular architecture and have alienated our people from a rich cultural building heritage. The South African vernacular building never had an opportunity to evolve to be relevant for our contemporary times. The indigenous building, with the inclusion of cannabis by-products, yet have to find its way into the building codes 26 years after apartheid. By controlling the number of plants, a person is allowed to grow will neither help the planet or the housing crisis that is fast going to escalate with Minister Sisulu current policy of no more low-income houses. If legal, hemp will be the cheapest building material available. The question then is why is hemp is not permitted, and why are hemp and cannabis over-controlled and out of reach for the masses to use?

#### ***4.3 Structural properties cannabis hemp strain in the informal sector built environment***

Hemp and other cannabis strains have immense potential to transform the built environment. The inner core of the plant stem can be chopped into fine pieces and used in the place of straw in traditional earth building mixes. Straw is a scarce resource in informal settlements, and hemp stems is a suitable replacement that can be grown in your time. You can harvest plants three times a year on your property or in communal gardens to use as a building material. Replacing straw with hemp shreds also have the added advantage that it makes the cob stronger while having insect deterrent attributes. Furthermore, adding ample of hemp shreds in traditional cob mixes makes buildings insulative with many thermal qualities, much more so than most legally approved carbon loaded industrial materials. Hempcrete, a mixture of hemp and lime, have an added advantage that buildings become fire resistant.

Using hempcrete compensate for the carbon emissions made from all other processes related to constructing the structures. The success of hempcrete is its carbon negative properties due to its agricultural origin and the use of lime and other industrial wastes as the mineral binders. Buildings thousands of years old used the same methods. Hempcrete is easier to make than non-loadbearing concrete, is more durable and three times more resistant to earthquakes compared to regular concrete. Loadbearing structural walls can be achieved by using products like rammed tyres and timber frames. Also, when using cannabis and local soil, transport of materials are minimal. The research has been done, science has spoken, why are these technologies not mainstreamed already into the built environment? Micro-managing people on the number of plants they are allowed to grow, while the government itself is guilty of not conducting proper research, or applying existing research is a matter of moral concern.

Using cannabis as build material is arguably one of the most researched materials in current times. If the government adhered to the constitutional court ruling of 2018, they would have considered the built environment perspective and not have drafted a bill solely based on consumption. Much more research needs to be done on the potential of cannabis building material. However, how can you do research if the building material has been outlawed by illogical decisions rather than pure reason? There is absolutely no reason that cannabis, as evolving indigenous building method, cannot be mainstreamed



into smaller shelter structures in the informal sector with immediate effect. Any experienced natural builder will, through trial and error find a recipe for using cannabis to enhance the structural properties of small-scale buildings. Hempcrete also shows good acoustic properties. But very few researchers had investigated these properties because we were barred by law. These technologies do not need big research labs and are best conducted in real-world applications by experienced natural and indigenous builders.

Yet, in our supposedly modern world, we are looking for ecological material that is based on technology and high-tech innovation. The active pursuit of ecologically friendly material came to a halt by decisions of medicinal councils almost a century ago. Sustaining the unsustainable is not an option, and the role the medicinal council played in hampering research in cannabis is a human rights violation in itself that has to be challenged. With enough emphasis laid on the negative carbon nature and the various mechanical properties of cannabis as a building material, ecological researchers conclude that while hemp concrete has been in use for several centuries, the traditional material has freshly acquired a futuristic status. The Cannabis for Private Purposes Bill has not been well thought through, neither is it adhering to the brief given by the Constitutional Court. Considering rising carbon emissions, removing restrictions on the growth of a plant (even if it only the hemp cannabis strain) can help to lessen catastrophic consequences of climate change in a global warming world.

Western nations, and its influence on Africa policies, persist in prohibiting hemp cultivation. Prohibitions are not based on the structural properties of the plant but rather to aesthetic appearances to the Marijuana strain of the cannabis plant. Ridiculous requirements make the cultivation of hemp out of reach to those that need the material most. Stringent requirements involve the use of approved cultivars obtained from authorised sources, secure fencing and storage facilities, the careful maintenance of records, governmental inspections and sampling to ensure the material has insignificant levels of psychoactive properties. The legislative burden that accompanies hemp puts the crop at an unfair disadvantage not to be used by indigenous people that invented the uses of the plant. Regulations for cultivating hemp in most Western countries, including South Africa, are stringent and represent a high cost, which is out of reach of most marginalised communities that can benefit most from hemp production. Who owns the intellectual property of the cannabis plant? For sure, not the government. Governments have done nothing than hamper progress in of this indigenous plant for industrial purposes.

Carbon emissions are a much greater concern than the human species consuming a cannabis plant for recreational and medicinal purposes. The structural properties of the plant should be considered beyond the social aspects that currently dictate the use of cannabis. The cannabis plant advantage is that many strains actively lessens the impact of the climate crisis by sequestering carbon from the atmosphere. The government have to ask themselves what is more critical regulating the plant or promoting the climate sequestering properties of a plant that can lessen the effects of climate change. We are in the onset of the six-mass extinction. Surely, delaying the extinction of the human species for future generations is more important than regulating the use of a plant. The cannabis plant causes less harm than other mind-altering substances like alcohol that are freely available to use in any quantities. President Ramaphosa repeatedly confirmed South Africa commitment to the 2015 Paris Climate agreement. This climate commitment places the government under much stress to mainstream zero carbon technologies into all industries. Responding to the call of the Paris climate agreement, the government gazette published several acts such as the Carbon Tax Act of 2019, and the newly adopted Waste Acts of 2020. The Carbon Tax and Waste Acts put all responsibility on the producer side to account for carbon emissions during the manufacturing and life cycle of most materials used in everyday life. The cost implication of this accountability of carbon emissions in the built environment is enormous. Without mainstreaming existing carbon-negative materials, like cannabis into manufacturing processes, South Africa will not reach many goals set out on international climate agreements.

## **5. Conclusion**

The government failed to rectify the Constitutional Court ruling to provide a comprehensive Cannabis for Private Purposes Bill. The regulation of the number of plants per household based on medicinal use only, sustain discriminatory practices against the built environment and many indigenous groups in this country. The requirement of a few plants per household will not enable the marginalised to explore the potential of cannabis in stimulating a revival of own cultural indigenous building practices. Neither provides the Bill scope for users to cultivate cannabis/hemp for creating their shelter that is more adequate than the makeshift structures many households currently reside in. Citizens should be able to use materials (like cannabis/ hemp) that are kind to the planet, healthy, sustainable, and that hold solutions to social and economic problems. The omission of consideration of the built environment in the bill shows that the Cannabis for Private Purposes Bill did not fulfil its mandate to provide the holistic context of the use of cannabis for all purposes. The 24 months provided enough opportunity for the government to do proper research on the various use of cannabis beyond consumption. Besides, the Bill cannot be viewed in isolation from broader societal discourses like climate change and the countries committed to the Paris Agreement. As ecological built environment practitioner in the informal sector, I am rejecting the Cannabis for Private Purposes Bill and recommend that the government goes back to the drawing board. The alternatives existed for decades to stop much ecological destruction. But the medical council decided to outlaw hemp. Precisely what gave one industry the right to make critical decisions to stop another critical important value chain? How much health issues and environmental destruction have resulted from a boardroom full of uninformed people who pursued their agendas for profit. How much attention is given to science and indigenous rights when those decisions are made? How thoughtless are we to still sustain those laws without really digging deep to question the truth behind lies perpetuated decades on end?

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