Cryptophobia: Dystopian and Utopian Realities of Cryptocurrency Bans and Regulatory Reactions to Blockchain: A Case Study of Nepal

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Abstract

This article explores the socio-legal implications of fear in response to blockchain through a case study of Nepal. Blockchain and cryptocurrency evoke the cultural imaginary of global societies and elicit both a wonderous utopian response and a fearful dystopian reaction; both have implications for how regulators create rules and structures to limit the development and use of this emerging and disruptive technology. This article looks to Nepal as an often-overlooked case study for cryptocurrency bans, insofar as the regulatory response has been to halt and criminalise the possession and handling of cryptocurrency by Nepalese, both domestically and abroad. This is more than merely fear, and an exploration of this allows for a deeper understanding and rethinking of the promises made by the technology as a tool for good through mechanisms such as remittances, the potential for blockchain entrepreneurism and the practicality of a Central Bank Digital Currency (CBDC).

Keywords: Blockchain; Nepal; cryptocurrency; Central Bank Digital Currency (CBDC); cultural imaginary.

1. Introduction

The banning of cryptocurrency exemplifies fearful reactions to the potential of blockchain technologies and can lead to wider, inadvertent restrictions. This article explores how blockchain and cryptocurrency evoke reactions that translate into legislative actions. Blockchain is a technology that has captured the cultural imaginary; it is something that can elicit both a fearful reaction and a utopian vision of potential wonder that promotes transparency, security, autonomy and efficiency. Blindly embracing either extreme is a path likely to lead to disaster, as technology and its connection to nations and innovation will always be nuanced in each instance. This article analyses the decision made by Nepal to ban cryptocurrencies. It explores how this regulatory path was adopted, its effects and what this has meant for the relationship between cryptocurrency (which is banned) and blockchain (which is not). The lessons drawn from Nepal's approach speak to greater ways of understanding the contoured relationship between the cultural imaginary and the creation of regulation.

This article first introduces the concepts of blockchain and the cultural imaginary before establishing a clear case study of Nepal. This analysis involves a detailed critique of how Nepal's remittance system is linked to both the potential for blockchain and, contra-indicatively, the rationale for the ban. It next details the potential for this technology and concerns about an overwide and uncertain ban that inadvertently captures both cryptocurrency and blockchain. Finally, the role of specific digital assets, Central Bank Digital Currencies (CBDCs), will illustrate further fears. However, the Nepalese system may be uniquely placed to embrace the technology. Fearful reactions to technology – such as banning cryptocurrency – can have unintended consequences if regulatory responses are cast wide enough to inhibit innovation. This is not as simple as saying it was a fear of something unknown, but this lens helps to understand some of the ways a purely negative response can have unintended consequences when the connection between legislation and technology is driven by hyped negatives and fear.



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2. Blockchain Explained and Blockchain Banned

Blockchain is both a piece of code and an idea. This article will not wax lyrical over the 'power of an idea' by delving into the theoretical benefits of blockchain technology, but rather approaches the concept of blockchain from the standpoint that what is novel is driven by the hype and imaginary around the technology itself. Blockchain is a 'blend of several existing technologies, including peer-to-peer networks, public-private key cryptography, and consensus mechanisms'. It can be designed in a variety of ways that enable a more cryptographically secured storage of data. This technology has been used for cryptocurrencies, through supply chain provenance claims, to rethinking ownership rights, to 'creative' ideas such as decentralising religion. Blockchain simply allows for digital records of human interaction in different, and arguably more secure, ways. To consider cryptocurrencies as the epitome of blockchain is to seriously undervalue its potential. Unfortunately, the fear of crypto as an unstable and uncontrollable asset is often the first approach taken by governments and regulators; this fails to appreciate the wider distinctions in the technology.

Within these uses there is a separation that can typically be made between financial uses and other uses. This is the split between cryptocurrencies (crypto) and blockchain (also called distributed ledger technology or DLT), insofar as all crypto is blockchain, but not all blockchain is crypto. This split is being simplified in this introduction section to try to illustrate the inherent need to recognise the difference between the asset of a Bitcoin compared with the Bitcoin blockchain upon which these assets are recorded, and to understand that this difference is further compounded when compared with a non-speculative asset that is simply used to record information rather than to have financial value. These differences are reflected in the risks associated with each, and by extension the regulatory response that is needed.

The fear associated with blockchain is commonly driven by cryptocurrency as a field of fraud, scam, volatility and imagined value. The 'non-sophisticated investor' can be drawn in by cryptocurrencies and fall victim to the allure of a technologically novel get-rich-quick scheme. This leads to risks, and these risks have governments trying to desperately find the balance between protecting the vulnerable and not stifling innovation. One way by which this is done is through the pursuit of central bank digital currencies (CBDCs), which are digital currencies issued and supported by a central bank and fixed to the value of that central bank's national currency. These are claimed to be distinct from cryptocurrencies, and are a solution to problems of volatility and uncertainty that allows for flexible digital transactions; however, they are not immune to fearful concerns about what a programmable currency may mean in 'the wrong hands'. Ultimately, the interplay between blockchain, crypto and CBDCs is an evolving process, which challenges the ability for states to fully understand the contoured ways in which they may affect and uproot existing regulatory and financial regimes. The response has therefore often been surrounded by scepticism and fear – which can lead to bans.

In December 2013, China banned financial institutions from dealing with Bitcoin and other cryptocurrencies, ⁸ this was not a formal ban, but it signalled the start of increased scrutiny of cryptocurrencies. Various bans or warnings were enacted in 2014 with Bangladesh, Ecuador and Bolivia. ⁹ In 2017, Morocco¹⁰ and Nepal¹¹ issued bans, and China formally prohibited the use of initial coin offerings (ICOs) to raise funds and shut down domestic cryptocurrency exchanges. ¹² In 2018, Vietnam, Algeria and India imposed bans, ¹³ but lifted them in March 2020. ¹⁴ In this process, the most cited reasons for these bans were the potential use of cryptocurrencies for illegal activities, including money laundering; the need to protect the financial system and consumers from the risks associated with virtual currencies; the speculative nature of cryptocurrency; the lack of control over decentralised cryptocurrencies; and the need to maintain control over the country's monetary system. ¹⁵ This process speaks to a resounding concern – perhaps fear – of cryptocurrency's potential, rather than an explicit problem with the underlying

¹ Robb, "The Blockchain Conundrum," 356.

² De Filippi, Blockchain and the Law, 2.

³ Everledger, "The Everledger Platform"; Beefledger, "BeedLedger.io."

⁴ Mycelia, "Mycelia"; Golem, "Golem Worldwide Supercomputer."

⁵ Weill, "Joke Cryptocurrencies."

⁶ Joo, "Cryptocurrency," 727–28.

⁷ IMF, "Central Bank Digital Currency," 5.

⁸ Hammond and Ehret, "Cryptocurrency Regulations by Country," 24.

⁹ Hammond and Ehret, "Cryptocurrency Regulations by Country"; Higgins, "Ecuador Bans Bitcoin."

¹⁰ Bziker, "The Status of Cryptocurrency."

¹¹ NRB, Notice Regarding Illegality of Bitcoin Transactions.

¹² Borri and Shakhnov, "Regulation Spillovers."

¹³ This is not an exhaustive list.

¹⁴ Vietnam Law and Legal Forum, "Legality of Cryptocurrencies"; Hammond and Ehret, "Cryptocurrency Regulations by Country."

¹⁵ Hammond and Ehret, "Cryptocurrency Regulations by Country," 6–8.

technology of blockchain. This article takes seriously the power of this fear in response to emerging technologies and an inherent danger of reactionary regulation that may stifle innovation – a globally applicable lesson.

3. The Cultural Imaginary

Blockchain is a technology that engages the cultural imaginary, creating both a cornucopian dream of potential and a dystopian fear of its results, which can directly feed into regulatory responses. The cultural imaginary refers to how the dreams and anxieties of society can shape narratives that may result in reactionary regulation. Blockchain technology fuels the imagination of developers, investors, users and critics alike. Appreciating this facet of the cultural imaginary allows for a realisation of how the narratives and hype woven around blockchain can be deemed just as crucial as the technological advancements themselves. The inherent characteristic of 'the new' is to act as a force that questions norms, disrupts traditions and challenges conventions. A balance is needed. The positive view of blockchain is that it is 'actually one of the few technologies that really can solve some of the world's most pressing problems. It's not a panacea, but blockchain has some unique features that make it very interesting.' Or, put simply, 'Blockchain is not just a technology, it's a movement.' This compares with views that focus principally on misuse, scams and frauds – this duality within the technology is a clear hallmark of the cultural imaginary drawing innovation in different directions, but this is almost a key feature of a 'revolutionary' technology. As the founder of *Wired* magazine stated:

It took us a long time to realise that the power of a technology is proportional to its inherent out-of-controlness, its inherent ability to surprise and be generative. In fact, unless we can worry about a technology, it is not revolutionary enough.¹⁸

The community's response can be ignited either by the optimistic aspirations or by apprehension and anxiety over a dystopian future. A combination of both forces has the potential to give rise to novel iterations of a technology and result in innovative legal frameworks. This interaction between 'law' and 'technology' is frequently marked by a shift from the pragmatic 'what is' to the speculative 'what could be'.¹⁹ The cultural imaginary can have regulatory force – as demonstrated by how the laws governing cloning were crafted not only in response to discussions surrounding Dolly the sheep but also to debates sparked by science fiction books and films,²⁰ or how space law arose in reaction to 'possible futures' popularised in science fiction media.²¹ In both instances, the intertwining of reality with the dreams and fears associated with a technology significantly influenced societal reactions and subsequent legislative actions.

A less science fiction-driven example is the public response to the concept of 'internet hunting'. This was a controversial practice where hunters could remotely control firearms to shoot animals at hunting locations through a computer – using a mouse to kill rather than a gun.²² In response to widespread disapproval, legislation was enacted, prohibiting the practice throughout the United States. Fascinatingly, this was only ever an idea – it was never actually put into practice. Yet, it captured the collective imagination and fear, drawing condemnation from various entities – including a strange alliance between the Humane Society of the United States and the National Rifle Association.²³ This serves as 'a testament to public alarm over internet threats and the gilded life of legislation that nobody opposes'.²⁴

As technology progresses, generating new fears and dreams, the narratives and stories surrounding it wield substantial influence. This influence translates into actions and reactions, shaping the records produced and the laws enacted. The legal dimensions ripple across all spheres; the digital record alters beliefs, behaviours and actions, creating a feedback loop with normative dreams and fears, reinforcing the perceived validity of these fears through the laws themselves. Public interaction with the technology not only shapes its developmental trajectory and consumption patterns (evidenced by phenomena such as the hype cycle and its impact on cryptocurrency value), but also influences the formulation of social and legal norms to accommodate or resist these technological shifts.²⁵ Blockchain has these competing sets of narratives between the 'dream' and the 'fear'. There is a struggle between embracing the potential uses and having no (or low) regulation, and those reacting to the

²⁰ Tranter, Living in Technical Legality, 18–27.

¹⁶ Brad Garinghouse (CEO of blockchain start-up Ripple) quoted in Kharpal, "Bitcoin is Not the 'Panacea'."

¹⁷ Don Tapscott (executive chairman of Blockchain Research Institute) quoted in SMU Blockchain, "Unlocking the Power of Blockchain."

¹⁸ Kevin Kelly (Founder of Wired magazine) quoted in Kelly, "Joke Cryptocurrencies"; Fattal, "Introduction: Social Buzz."

¹⁹ Tranter, Living in Technical Legality, 17.

²¹ Beebe, "Law's Empire"; Tranter, Living in Technical Legality.

²² Earth and Animal Advocates, "Internet Hunting."

²³ Pacelle, "Taking Aim at Internet Hunting."

²⁴ Seward, "Internet Hunting Has Got to Stop."

²⁵ Beebe, "Law's Empire"; Peters and Crawley, Envisioning Legality; Tranter, "The Law and Technology Enterprise."

fear and over-regulating, restricting or completely banning the use of cryptocurrency. This article uses the cultural imaginary to explore a case study of Nepalese cryptocurrency and blockchain laws.

4. Nepal: A Case Study

Nepal was one of the 12 countries in the world that took a wholly non-receptive approach towards cryptocurrency, placing strict regulatory restrictions in the form of an absolute ban.²⁶ Nepal has a hybrid legal system,²⁷ with influence of both common and civil law systems in its law-making process. The Ancient Nepalese legal system had distinct civil law system traits such as the codification of law. Two prominent examples are 'Nyayavikasini',²⁸ the first codified law of Nepal, and 'Muluki Ain 1854', the general law, which is foundational for modern legal texts in Nepal.²⁹ In 1950, after the political change and reception of democracy, Nepal engaged in international relations with countries beyond India and this heralded further changes and adoption of additional principles into the legal system of Nepal – notably, the country embraced principles of the rule of law, separation of power and incorporation of fundamental rights.³⁰ The Nepalese legal system also inherited the traits of the common law system after the establishment of the Supreme Court in 1956. Subsequently, modern Nepal is a mix of civil and common law systems, with the Constitution, Criminal and Civil Codes, statutes and precedents acting authoritative sources of law.

The Nepal Rastra Bank (NRB), a regulatory and supervisory body established under section 3 of the *Nepal Rastra Bank Act* 2058 (2002),³¹ has the authority to create monetary, foreign exchange and other banking-related policies in Nepal.³² In this light, the NRB issued cryptocurrency ban falls under the category of a delegated legislation, which can be overridden either by a statute or by a precedent set by court or by subsequent order given by the NRB itself.

On 13 August 2017, Nepal Rastra Bank ('NRB') issued a notice declaring all forms of Bitcoin transactions illegal in Nepal: Bitcoin सम्बन्धी कारोबार नेपालमा पूर्णरुपमा गैरकानुनी रहेको व्यहोरा जानकारी गराउँदै कसैले पनि सो सम्बन्धी कारोवार नगर्न नगराउनुहन सर्वसाधारणको जानकारीको लागि यो सूचना प्रकाशन गरिएको छ ।³³

This notice has been published to inform the general public that all forms of transaction related to Bitcoin are entirely illegal in Nepal, and to inform everyone to not engage in or cause to engage in such transactions.

Nepal was concerned with the 2017 Bitcoin craze, deeming it illegal and warning the public not to engage in any Bitcoin-related transactions.³⁴ The Nepal Rastra Bank and Nepal Law Commission conducted further investigations, with both the regulators stating that the ban should be extended to other digital assets as well in the years 2022 and 2023/24 respectively, citing reasons including volatility of these assets, problems of network marketing or pyramid schemes, and capital flight.³⁵ What started as a plain ban on Bitcoin snowballed into a larger 'blanket ban':

नेपालिभत्र बसोबास गर्ने नेपाली नागरिक/फर्म/ कम्पनी/संस्था (विदेशी समेत) र नेपाल बाहिर बसोबास गर्ने सबै नेपाली नागरिक तथा नेपालमा दर्ता भई नेपाल बाहिर रहेका, फर्म, कम्पनी, संस्था तथा त्यस्ता कम्पनी वा संस्थाका शाखा कार्यालय तथा एजेन्सीहरूले विदेशमा लगानी हुने गरी कुनै पिन प्रकारका Virtual Currency/Cryptocurrency (Stablecoins समेत), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi), पिरामिडमा अधारित Network Marketing तथा Hyper Fund कारोबार गरे/गराएको पाएमा तथा सोको प्रयोग/संलग्नता/सदस्यता/लगानी/स्वामित्व ग्रहण/स्थानान्तरण/विप्रेषण/विनिमय/Mining सम्बन्धी कार्य गर्ने/गराएको पाएमा प्रचित कानूनबमोजिम कारबाही हुने व्यहोरा सम्बन्धित सबैको जानकारीका लागि विदेशी विनिमय (नियमित गर्ने) ऐन, २०१९ को दफा १२ ले दिएको अधिकार प्रयोग गरी यो सार्वजनिक सूचना प्रकाशन गरिएको छ।³⁶

³³ NRB, Notice Regarding Illegality of Bitcoin Transactions in Nepal 2017.

²⁶ Based on the data collected by the end of 2021, the list of the 12 countries that have absolutely banned cryptocurrency includes Algeria, Bangladesh, Bolivia, Burundi, China, Egypt, Iraq, Maldives, Morocco, Nepal, Tunisia and Qatar. See Ba, "Explaining Variation," 1475.

²⁷ Acharya, "Prescription to Reform Nepalese Legal System," 1.

²⁸ NLC, Laws Made by King Sthitiraj Malla in Bikram Era 1436 (Nepal Era 500) Nyayavikasini (Manavanyayashastrat).

²⁹ Rana was greatly influenced by the Napoleon Code and the Civil Code of France and the essence of Muluki Ain still lives on today in four parts as the general law of the land: Criminal Code 2017, Criminal Procedure Code 2017, Civil Code 2017 and Civil Procedure Code 2017.

³⁰ Tiwari, "Introduction to Political and Historical Development."

³¹ Nepal Rastra Bank Act 2058 (2002). Note that, due to Nepalese date formats, these dates have been transposed into the western (Gregorian) Calendar. It appears in the document as 'Nepalese (Western)' as this is the style adopted by the Nepalese Government.

³² Nepal Rastra Bank Act 2058 (2002), s 5.

³⁴ NRB, Notice Regarding Illegality of Bitcoin Transactions in Nepal 2017.

³⁵ NRB, Notice Regarding the Illegality of Transaction/Business Conducted through Virtual Currency/Cryptocurrency and Network Marketing; Nepal Law Commission, Study on Cryptocurrencies.

³⁶ NRB, Notice Regarding Illegality of Cryptocurrency/Virtual Currency, Non-Fungible Token, Digital Asset, Decentralized Finance, Network marketing and Hyper Fund.

Any Nepali citizen/firm/company/institution (including foreigners) residing within Nepal and all Nepali citizens residing outside Nepal as well as any firm, company, institution registered in Nepal but located outside Nepal, the branch office or agency of such company or institution, if found to have engaged in/caused to engage in any transaction resulting in any kind of investment abroad involving Virtual Currency/Cryptocurrency (including Stablecoins), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi), Pyramid-based Network Marketing and Hyper Fund or if found to have engaged in/caused to engage in the use/involvement/membership/investment/ ownership acquisition/transfer/remittance/ exchange/mining-related activities of such, will be punished in accordance to the prevailing laws.³⁷

Put simply, any activity related to cryptocurrency within Nepal (by the Nepalese or foreigners) and by Nepalese abroad is banned.

Following the notices, Nepal government began its crackdown on individuals engaged in Bitcoin-related transactions as early as October 2017.³⁸ Offenders were charged under either the *Nepal Rastra Bank Act 2058* (2002) or the *Foreign Exchange (Regulation) Act 2019* with a possibility of confiscation of property, fines and/or imprisonment of up to seven years.³⁹

The NRB is statutorily authorised to form binding monetary, foreign exchange and other relevant banking policies as it deems necessary and appropriate. Of Generally, Bitcoin falls under foreign exchange transactions, and such transactions can only be carried out after obtaining a licence from the NRB. Because the NRB does not recognise Bitcoin as a currency in Nepal, it deems any act related to its transaction as illegal. This remained the stance in Nepal throughout the ICO craze of 2017, as its neighbours responded similarly to the technology, with China doubling down in 2017 by formally prohibiting the use of initial coin offerings (ICOs) to raise funds and shut down domestic cryptocurrency exchanges. However, India's imposed ban in 2018 was lifted in March 2020. Despite this, Nepal stayed the course and maintained the ban, adding further clarity to it over the following years.

On 9 September 2021, the NRB added further restrictions by issuing an amended notice of the crypto ban. ⁴⁵ This notice restricted all forms of cryptocurrencies, not just Bitcoin. The notice also expanded the illegal activities, making transaction, use and mining of all forms of cryptocurrencies illegal in Nepal.

On 22 January 2022, the NRB expanded its original position of the crypto-ban to be a prohibition on all Nepali citizens, regardless of where they resided – and to prohibit encouraging others to engage in crypto-based enterprises. More restrictions were added on 15 August 2022, including restrictions to companies and organisations, and extending the lists of illegal cryptocurrency projects. ⁴⁶ On 3 April 2023, the NRB reiterated the 15 August 2022 crypto-ban and added non-fungible tokens (NFTs), digital assets and decentralized finance (DeFi) to the list. ⁴⁷ To further implement the crypto-ban, the Nepal Telecommunication Authority (NTA), the telecommunication regulatory body of Nepal, ordered ISPs and ESPs to block all crypto trading websites, apps or online networks. ⁴⁸

³⁹ Nepal Rastra Bank Act 2058 (2002), s 96; Foreign Exchange (Regulation) Act 2019, s 17; Nepal Law Commission, "Study on Cryptocurrencies."

³⁷ All translations from original Nepalese are completed by Samagya Pradhan and Bikalpa Rajbhandari for the purposes of this article. Translations in this document appear first in original Nepalese script as found in listed sources and then appear immediately afterwards translated into English. Where official translations are available, these have been used, but many amendments are not yet officially translated. Any errors in translation or choices in interpretation are the sole responsibility of the authors, not the publisher. All translations updated and confirmed as of 31 March 2025.

³⁸ Kathmandu Post, "7 Nabbed."

⁴⁰ The Nepal Rastra Bank Act 2058 (2002) and Foreign Exchange (Regulation) Act 2019 grant the authorisation.

⁴¹ Foreign Exchange (Regulation) Act 2019, s 12; Nepal Rastra Bank Act 2058 (2002), s 5.

⁴² NRB, Notice Regarding Illegality of Bitcoin Transactions in Nepal 2017.

⁴³ Borri, "Regulation Spillovers Across Cryptocurrency Markets."

⁴⁴ Hammond, "Cryptocurrency Regulations by Country."

⁴⁵ NRB, Notice Regarding the Illegality of Cryptocurrency Transactions.

⁴⁶ NRB, Notice Regarding the Illegality of Virtual Currency/Cryptocurrency, Network Marketing and Hyper Fund Related Transactions.

⁴⁷ NRB, Notice Regarding Illegality of Cryptocurrency/Virtual Currency, Non-Fungible Token, Digital Asset, Decentralized Finance, Network marketing and Hyper Fund.

⁴⁸ Nepal Telecommunication Authority, Directive Issued by Nepal Telecommunication Authority on Cryptocurrencies, Bitcoin, Hyper Networking, Online Gambling, etc. Operated via Online Technology.

On 12 April 2024, section 262A of the Penal Code was amended:

२६२क. <u>अभौतिक मुद्राको प्रयोग गर्न नहुनेः</u> (१) नेपाल राष्ट्र बैङ्कले जारी गर्ने मुद्रा बाहेक कसैले पनि नेपालमा प्रयोग गर्ने, गराउने वा नेपालिभत्र वा बाहिरको व्यावसायिक कारोबारको भुक्तानी लिने, दिने वा हिसाब मिलान गर्ने वा अन्य कुनै प्रयोजनको लागि मुद्राको नाम लिई वा नलिई अभौतिक (भर्चुअल) मुद्राको उत्पादन, बिक्री, कारोबार, सटही वा स्थानान्तरण गर्न, राख् न (होल्ड गर्न) वा त्यस्तो मुद्रा जारी वा हस्तान्तरण गर्न वा गराउन हुँदैन।

स्पष्टीकरणः यस दफाको प्रयोजनको लागि "अभौतिक (भर्चुअल) मुद्रा" भन्नाले क्रिप्टोग्राफी वा अन्य कुनै तरिकाले सिर्जना वा उत्पादन गरिएको विद्युतीय माध्यमबाट मूल्य दर्शाउने वा मूल्यको प्रतिनिधित्व गर्ने व्यापारिक क्रियाकलापमा महत्व वा उपादेयता रहेको वा मूल्य वा खाताको एकाइमा सञ्चित वा भण्डारण गर्न सिकने सूचना, कोड वा सङ्केत नम्बर, टोकन, क्रिप्टो करेन्सी वा यस्तै किसिमको भर्चुअल सम्पत्ति सम्झनु पर्छ।

- (२) उपदफा (१) विपरीत कसैले कुनै व्यावसायिक कारोबारको वास्तविक हिसाब किताब नदेखिने गरी सो सम्बन्धी रकम कुनै पनि माध्यमबाट भुक्तानी लिने दिने गर्नु हुँदैन ।
- (३) कसैले उपदफा (१) वा (२) बमोजिमको कसूर गरेमा बिगो र सोबाट बढे वा बढाएको सम्पत्ति समेत जफत गरी पाँच वर्षसम्म कैद र बिगो बमोजिम जरिबाना ह्नेछ ।⁴⁹
- 262A. <u>Virtual currency not to be used</u>: (1) With the exception to the currency issued by Nepal Rastra Bank no one shall, use or cause to use in Nepal, or receive or make payments or settle accounts related to commercial transactions within or outside Nepal, or for any other purpose, conduct or cause to conduct any act relating to production, sale, transaction, exchange or transfer, holding of or issuance or transfer of such currency with or without specifying the name of the currency.

<u>Explanation</u>: For the purpose of this Section, 'Virtual currency' means any information, code, or identifier number, token, cryptocurrency or any other similar virtual asset that are created or produced through cryptography or any other means which can display value through electronic means or having significance or utility in a commercial activity representing value, or that can be accumulated or stored in a unit of value or account.

- (2) No one shall receive or make payments through any means that does not show the actual accounting of that transaction for any commercial transactions in contravention to subsection (1).
- (3) If anyone commits an offence pursuant to sub-section (1) or (2), the principal amount and the appreciation from it shall be forfeited and they shall be liable to imprisonment for up to five years and shall be fined an amount equal to the principal amount in question.

The Nepalese crypto-ban began with a complete restriction on Bitcoin transactions in 2017; this has now led to criminalisation with the incorporation in the Criminal Code in 2024.

5. Analysis: Nepal and Blockchain

While not dystopian, the criminalisation of cryptocurrency in Nepal is a key illustration of a fearful reaction, insofar as the fear of what crypto represents has forced a legal reaction that can have unintended consequences. The fearful reaction stems from the financial risks associated with crypto due to its volatility, and the negative impact it could have on the economy due to capital flight. However, the ban itself extends far beyond mere crypto to include digital assets and DeFi, among other things. There is a misguided reading that the crypto ban means blockchain is banned altogether; however, this is untrue. The cryptocurrency ban therefore has a clear impact on the underlying technology of blockchain. There is a distinction between cryptocurrency systems and blockchains. While all cryptocurrency relies upon a blockchain, not all blockchains create and trade in volatile cryptocurrency assets. Instead, blockchains could still be used for data, security and transparency purposes, such as in consortiums or even in DAOs.

The 'Crypto-Ban' in Nepal is a result of government's well-founded fears related to the risks posed by digital currencies. The NRB was driven to ban cryptocurrency due to a fear of the risk that cryptocurrency could directly challenge the monetary policy and financial stability of the country. As stated in the preamble to the 2023 ban expansion:

नेपालमा विदेशी विनिमय वा मुद्राको रुपमा Virtual Currency/Cryptocurrency (Stablecoins समेत), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi) ले कानूनी मान्यता नपाएको, नेपालमा कानूनी ग्राह्य (Legal Tender) नभएको, नेपाल

⁴⁹ The National Penal (Code) Act 2074 (2017), s 262 A.

सरकारको जमानत प्राप्त नभएको,यस बैंकले निष्कासन समेत नगरेको तथा कुनै पनि किसिमको सुरक्षण नभएको र यस्तो कारोबारबाट विदेशमा लगानी हुने देखिएकोले Virtual Currency/Cryptocurrency (Stablecoins समेत), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi) को कारोबार विदेशी विनिमय (नियमित गर्ने) ऐन, २०१९ र विदेशमा लगानी गर्न प्रतिबन्ध लगाउने ऐन, २०१९ बमोजिम गैरकानूनी रहेको छ। साथै, Virtual Currency/Cryptocurrency (Stablecoins समेत), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi), पिरामिडमा आधारित Network Marketing तथा Hyper Fund मा सम्पत्ति शुद्धीकरण तथा आतङ्कारी क्रियाकलापमा लगानी, ठगी, कर छली, लगानीको असुरक्षा, पुँजी पलायन, मूल्यमा अस्थिरता एवम् उतारचढ़ाव, सट्टेबाजी आदि सम्बन्धी जोखिमहरु अन्तरनिहित हने विषय समेत स्मरण गराइएको छ।

Since Virtual Currency/Cryptocurrency (including Stablecoins), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFI) do not have legal recognition as a form of foreign exchange or currency in Nepal, are not accepted as legal tender in Nepal, are not guaranteed by the Government of Nepal, are not even issued by this Bank nor are secured in any kind, and because these kinds of transactions seem to cause investments abroad, transactions involving Virtual Currency/Cryptocurrency (including Stablecoins), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance are illegal pursuant to Foreign Exchange (Regulation) Act 1962 (2019) and Act Restricting Investment Abroad 1964 (2021).⁵⁰

Also, it is reminded that Virtual Currency/Cryptocurrency (including Stablecoins), Non-Fungible Token (NFT), Digital Asset, Decentralized Finance (DeFi), Pyramid-based Network Marketing and Hyper Fund involves inherent risks related to money laundering and investment in terrorist financing, fraud, tax evasion, investment insecurity, capital flight, price instability and volatility, gambling and other related issues.

To maintain monetary control, government authorities chose the seemingly Draconian option of banning cryptocurrency.⁵¹ All the ban-related notices issued by the Nepal Rastra Bank (NRB) portray cryptocurrency as a threat to the economy. The risks of people getting scammed, losing domestic funds, money laundering, funding terrorism, tax evasion, investment insecurity, price volatility and fluctuation and gambling also persist.⁵² However, the most commonly cited reasons are capital flight and fraud on the public.⁵³ The risks on which they rely – illegal purchases, scams, risks, volatility, terrorism funding, money laundering – are very common fears throughout the world as regulators respond to the technology.⁵⁴ However, hidden within the list is a fascinating reason: 'unlawful capital flight to other countries'.⁵⁵ Capital flight is not a new or unique phenomenon for cryptocurrencies – after all, the ban from China was a direct response to fears that the 'whale investors' would take large volumes of money and invest in foreign crypto projects.⁵⁶ But what makes Nepal's fear interesting is that it goes against the public understanding of 'blockchain-to-help' and the classic example of remittances. For any ban – albeit aimed mainly at cryptocurrencies – to be positioned in such a broad manner places an uncertain burden on the future of blockchain. The fearful response to scams, volatility and economic threats is not actually present in every instance of blockchain, yet the wide net of the ban can have far-reaching consequences. We next explore three key areas that are important for understanding the relationship between Nepal, blockchain and the cultural imaginary that evokes novel uses and unintended consequences: blockchain entrepreneurism, remittances and central bank digital currencies.

5.1 Nepal and Blockchain Entrepreneurs

Nepal has definitively banned cryptocurrencies; however, there is no specific law to regulate the underlying technology of blockchain.⁵⁷ It appears that the ban is inadvertently read widely by the public and investors, which discourages innovation with blockchain. Cryptocurrencies are the assets (tokens, coins, money) that are used, sold and traded on blockchain platforms. However, there are many use cases of blockchain that do not involve cryptocurrency. The wide reading of the ban could affect the hype and scalability of blockchain technology in Nepal.

In 2023 the Nepal Law Commission ('NLC') defined blockchain as follows:

⁵² NRB, Notice Regarding Illegality of Cryptocurrency/Virtual Currency, Non-Fungible Token, Digital Asset, Decentralized Finance, Network Marketing and Hyper Fund.

⁵⁰ Note that these dates have been translated and transposed into the western (Gregorian) Calendar. It appears in the document as "Nepalese (Western)".

⁵¹ Ba, "Explaining Variation," 1472.

⁵³ NRB, Notice Regarding the Illegality of Cryptocurrency Transactions.; NRB, Notice Regarding the Illegality of Transaction/Business Conducted through Virtual Currency/Cryptocurrency and Network Marketing.; NRB, Notice Regarding the Illegality of Virtual Currency/Cryptocurrency, Network Marketing and Hyper Fund Related Transactions.; NRB, Notice Regarding Illegality of Cryptocurrency/Virtual Currency, Non-Fungible Token, Digital Asset, Decentralized Finance, Network marketing and Hyper Fund.

⁵⁴ Aquilina, "Tackling the Risks in Crypto."

⁵⁵ Aquilina, "Tackling the Risks in Crypto."

⁵⁶ Shin, "What's Behind China's Cryptocurrency Ban?"

⁵⁷ NRB, Is Nepal and Nepalese People Deprived?

Blockchain distributed ledger एउटा सूचना श्रृङ्खला हो जसले डिजिटल लेनदेनहरुको तथ्य र डेटा भण्डार (Timestamp) गर्दछ। जस्तै प्राप्तकर्ता र प्रेषक, लेनदेनमा संलग्न सिक्काहरु/टोकनहरु/स्मार्ट कन्ट्रयाक्टको संख्या र क्रिप्टोग्राफिक ह्यास आदि भण्डारण भएको हुन्छ। ब्लकचेन लेजर सबैको लागि पहुँचयोग्य हुन्छ।⁵⁸

Blockchain distributed ledger is an information chain that stores the facts and data (timestamp) of digital transactions. It stores data such as the receiver and sender, number of coins/tokens/smart contract involved in the transaction, cryptographic hash etc. The blockchain ledger is accessible to everyone.

This definition is distinct from the cryptocurrencies that are banned. However, a well-designed blockchain policy that more explicitly made this clear would be helpful to encourage the form of 'safe' innovation that may benefit Nepal. It would certainly make it easier for blockchain developers, investors and users to capitalise on the benefits of the technology with government-enacted policy in Nepal.

Blockchain is an innovative technology that has the potential to bring benefits to the various socioeconomic sectors of Nepal. Its unique features, such as transparency and security, could solve key existing challenges. For instance, blockchain has the potential to revolutionise the country's agricultural sector.⁵⁹ Major hindrances to agricultural development – inefficient supply chain, intermediary manipulation, price discrepancy, subsidy corruption, lack of certification of produces and fraud in packaging⁶⁰ – could be overcome by using blockchain. Furthermore, blockchain promises supply chain benefits, transparency and access to credit.⁶¹

The cultural imaginary of blockchain has been expressed through the hype and promise of this technology since its mainstreaming in 2012 and the rise of ICOs in 2017. The narrative has long been that it can revolutionise finance, data and management. Instead, blockchain has become a technology seen by many as one of scams, illegal transactions and an unregulated market. These attitudes see it as a general failure because there are very few actual clear-use cases that truly embrace the technology beyond the volatility of cryptocurrency and some relatively small-scale proofs of concept. This can be predominantly a western-centric view of the technology as something related predominantly to volatility, speculative value and scams. However, this fails to see some of the potential and success that the technology has had in developing countries.

One example is AgUnity,⁶² which uses blockchain to provide farmer cooperatives with greater access to agricultural advancements as enabled by digital assets and smart contracts. This ensures compliance with documents, increases digital literacy and reduces finance risks. This allows for increased operational efficiencies because access to barriers to finance and advanced equipment are removed. Farmers in developing countries have faced barriers to efficiently harvest or grow crops because they lack seed funding or short-term loans to enable them to access these tools. Smart contracts and digital assets through the AgUnity platform bridge that gap by allowing for funding to be supplied from the start as a bridging loan and then repaid after the harvest cycle is complete. It does this not only by providing a platform, but also providing the smartphone needed to run the blockchain system and, by extension, better manage the overall operation of the farm. This project has been ongoing since 2016 and has expanded beyond the initial financing project, working with fair trade transparency and farmer basic income projects.

To this extent, it is important to view blockchain through a tempered lens: while the cultural imaginary that grew in 2017s hype made it seem that the technology would revolutionise finance if only for the 'killer app', the reality is more subtle. Blockchain is an underlying feature of projects seeking greater security and transparency. While the western world may see blockchain as series of crypto scams, there are parts of the world that are being enabled through this technology. This demonstrates the potential for blockchain in environments beyond the speculative value of cryptocurrencies, and in ways that can directly impact developing countries; yet, it is distinctly absent from Nepal, as the ban on cryptocurrency creates uncertainty for innovators in terms of how projects in the country can be constructed without falling foul of prohibitive regulations.

In this context, blockchain-based programs can have a competitive advantage over traditionally structured programs. UNICEF's 'Rahat' humanitarian aid program was a blockchain-based cash transfer system based in Jaleshwor Municipality of the Madhesh Province of Nepal. The findings suggest that the blockchain-based system has more benefits than the conventional humanitarian cash and voucher assistance (CVA) programs, such as transparency, accountability, reduced corruption, improved security and

⁵⁸ Nepal Law Commission, "Study on Cryptocurrencies."

⁵⁹ Thapa, "Blockchain-Based Secured Traceability System."

⁶⁰ Thapa, "Blockchain-based Secured Traceability System."

⁶¹ Sylvester, E-Agriculture in Action; Thapa, "Blockchain-based Secured Traceability System."

⁶² AgUnity, "Australian Startup Using Blockchain."

programmability.⁶³ Beyond the agricultural supply chain and humanitarian aid use cases, blockchain applications are also being piloted in other multiple sectors: education,⁶⁴ land registration,⁶⁵ identity documents management⁶⁶ and healthcare.⁶⁷ Research also shows that blockchain can be leveraged to deliver effective public service and voting,⁶⁸ and to manage the supply chain for handicrafts.⁶⁹ However, these projects have uncertain futures because of the ban on cryptocurrencies. At the time of writing, none of these listed has yet to be a 'test case', but the design of blockchain systems can intrinsically use cryptocurrencies – even if the purpose is not financial – and the ban may therefore prohibit them if it is enforced. Some tech-startup companies such as AgriClear⁷⁰ and PK Agriculture⁷¹ are already providing blockchain-based agricultural services in Nepal. However, more globally successful agricultural companies such as AgriLedger⁷² and AgUnity⁷³ are not expanding into Nepal despite the similarity between use cases. It appears that there is currently not an appetite to pursue projects that are using 'tokens' and 'assets' in the underlying technology; however, using wide definitions, it is very easy to characterise these as cryptocurrencies if there is a regulatory whim to do so.⁷⁴

Nepal has historically banned other technology that was seen as risky – its ban on internet telephony such as Voice Over Internet Protocol (VOIP) in the 2000s, ⁷⁵ its TikTok ban in 2023 ⁷⁶ and the existing cryptocurrency ban ⁷⁷ are some examples of the fearful response. However, research shows that consumers have viewed cryptocurrency favourably, which runs contrary to the government's existing stance. ⁷⁸ Exceptionally, Nepal MP Binod Chaudhary stated that Nepal could be a hub for crypto mining. As Nepal is rich in hydro-energy, the electricity generated could prove to be very useful – as it has been in Bhutan. ⁷⁹

This path would be aligned with the 2019 Digital Nepal Framework and the Nepal Law Commission study that suggested Nepal should embrace the ongoing blockchain revolution:

"नेपाललाई डिजिटल नेपाल बनाउने राष्ट्रिय उद्देश्य नेपाल सरकारको रहेको कुरा स्पष्ट छ। पहिले इन्टर्नेट क्रान्ति, त्यसपछिको Artificial Intelligence (AI) क्रान्तिबाट नेपालले उल्लेखनीय लाभ लिएको अवस्थामा अहिलेको Blockchain क्रान्तिमा हामी पछि पर्न अवश्य हुँदैन।"⁸⁰

It is clear that the national objective of Nepal Government is to make Nepal a digital nation. After benefiting significantly from the internet revolution and the subsequent Artificial Intelligence (AI) revolution, Nepal must not lag behind in the current Blockchain revolution.

The Digital Nepal Framework 2019 made recommendations that blockchain (including cryptocurrency) strategy and programs must be launched to promote innovations surrounding the emerging technology. 81 Furthermore, it recommended that research and development should be prioritised and start-up companies needed to be strengthened to ensure smooth application of the technology. 82 It was clearly stated that meeting Nepal's aim to attain middle-income country status by 2030 would depend on of digital transformation, especially by utilising disruptive technologies. 83

Nepal is in a unique position because of its size, economy and legal system. It is a clear use-case for the technology in areas such as agriculture, education and remittance. The potential is there – but without clarity about how tokens and cryptocurrency

⁶³ UNICEF, "Evaluation of Blockchain Based Cash Transfer Pilot."

⁶⁴ Duwadi, "A Systematic Review."

⁶⁵ Bhoo.me, "What is Bhoo.me."

⁶⁶ eSatya, "Our Portfolio."

⁶⁷ Upadhyaya, "Revolutionizing Healthcare Systems."

⁶⁸ Kshetri, "Blockchain Technology for Improving Transparency"; Shrestha, "Blockchain Interfaced Sacure E-Voting System."

⁶⁹ Bhatta, "Blockchain in Handicraft Supply-Chain Management."

⁷⁰ AgriClear, "About Us."

⁷¹ PK Agriculture, "Agro Blockchain."

⁷² AgriLedger, "Who We Are."

⁷³ AgUnity, "Australian Startup Using Blockchain in Agriculture."

⁷⁴ See issues of language and definitions in Sewell, "Asset, Token, or Coin?"

⁷⁵ Goodman, The Internet from the Top of the World, 45.

⁷⁶ Oi, "Nepal Bans TikTok."

⁷⁷ NRB, Notice Regarding Illegality of Cryptocurrency/Virtual Currency, Non-Fungible Token, Digital Asset, Decentralized Finance, Network Marketing and Hyper Fund.

⁷⁸ Adhikari, "A Bitcoin Conscience," 20.

⁷⁹ Sergeenkov, "How Bhutan Quietly Built \$750 Million."

⁸⁰ Nepal Law Commission, "Study on Cryptocurrencies," 61.

⁸¹ MOCIT, 2019 Digital Nepal Framework, 153.

⁸² MOCIT, 2019 Digital Nepal Framework, 153.

⁸³ MOCIT, 2019 Digital Nepal Framework, 2.

are treated, uncertainty remains about what aspects of the technology are permitted. This threatens the prospect of both internal and external innovation and entrepreneurs are unlikely to risk the wrath of a restrictive government mandate in Nepal.

5.2 Nepal and Remittance

The ban on cryptocurrencies prevents the use of crypto-remittance services, and while this may be counter-intuitive for a remittance-central economy, the decision in fact has clear historic and economic motivations. Remittance is a valuable source of income for many Nepali people. Nepali migrant workers remit 'funds for the folks back home' to support their families and livelihoods. In turn, remittances help to boost the household and national income of the country at large. Economically, Nepal is classified as a lower middle-income country. All Its GDP per capita for 2024 is US\$1400, as calculated by the International Monetary Fund (IMF). While service, agriculture and industry sectors are the greatest contributors to the GDP, Almost four decades ago, Nepali workers began to formally seek foreign employment with the implementation of *Foreign Employment Act 1985*. This was the first legislation to formalise remittance in Nepal. Since then, the remittances sent back to Nepal have played a critical role in shaping the country's economy. There has been exponential growth in the amount of remittances received by Nepal over the years – from NPR 809.1 million (approximately US\$44.95 million) in 1985 to NPR 1445.32 billion (US\$10.86 billion) in 2023. Remittances remain a crucial contributor to the economic growth of the country.

Formal remittances are embraced by Nepal; however, the use of informal means to remit money, via personal networks or through agents – popularly known as *hundi*⁹⁵ – has long plagued Nepal's financial system. Regular channels through the traditional banking system are usually costly, time-consuming, inaccessible and complex, so there is substantial leakage of remittance funds due to workers' preference to send money through irregular channels. The issue is further exacerbated by the extensive population of informal Nepali migrant workers in the destination countries. The issue is further exacerbated by the extensive population of informal Nepali migrant workers in the destination countries. Blockchain technology offers a unique opportunity to overcome the challenges of formal remittances and provide a stronger and safer informal process. Blockchain systems can make cross-border transactions cheaper, faster, more secure and more personalised than the traditional banking system. Because blockchain replaces traditional intermediaries, it eliminates burdensome exchange rate fees and delays, creating a cost-effective and timely transaction process that can be widely accessible. For instance, Ripple, a blockchain-based remittance transfer system, provides its services at all hours, uses its own cryptocurrency (XPR) for transactions and allows users to conveniently convert the XPR into fiat currency, thereby costing less and performing faster than conventional methods such as SWIFT in real time. This only involves a brief conversion to cryptocurrency to facilitate the payment; however, this function would be prohibited in Nepal due to the ban.

This cornucopian promise of 'banking for the unbanked' is often tempered by the reality that many populations that would benefit from it may lack digital literacy and access to blockchain technology. This is why the maturation of the technology being seen at the time of writing is of such importance, as there is a greater embedding of the technology behind clearer user interfaces. Similarly, we see success in projects such as the aforementioned AgUnity, which realised the barriers posed by the

⁸⁴ Ratha, "Remittances."

⁸⁵ Sijapati, Labour Migration and the Remittance Economy," 57.

⁸⁶ World Bank, "GDP (current US\$) - Nepal"; International Labour Organisation, "Country Catalogue: Nepal."

⁸⁷ GDP is low compared with its neighbours: China – US\$12,970, India – US\$2,700 or the western countries: USA – \$86,600; UK – US\$52,420; Switzerland \$106,100; Malta – \$44,140. See International Monetary Fund, "GDP Per Capita."

⁸⁸ NRB "Current Macroeconomic and Financial Situation of Nepal," 1.

⁸⁹ World Bank, "Nepal Development Update."

⁹⁰ Adhikari, "The Foreign Employment, Remittance," 646.

⁹¹ The World Bank states that the remittances received by Nepal in 2023 constituted 26.2 per cent of the total GDP. World Bank, "Personal Remittances, Receives."

⁹² Dhungana, "Remittance and Nepalese Economy," 7.

⁹³ Nepal Rastra Bank, Current Macroeconomic and Financial Situation of Nepal, 5.

⁹⁴ Panthi, "Remittance Inflows."

⁹⁵ *Hundi* is an illegal mechanism for remitting money in Nepal conducted via brokers, which is outside the traditional banking system.

⁹⁶ MOLESS, Nepal Labour Migration Report 2022, 123.

⁹⁷ Informal migrant workers are workers who do not possess government-issued labour permits and seek foreign employment through informal means, such as through India or by using visitor visas. They are unable to send remittances through regular banking systems, primarily because they are undocumented and lack proof of documentation.

⁹⁸ Christodoulou, "Transforming the Remittance Industry," 1552.

⁹⁹ Christodoulou, "Transforming the Remittance Industry."

¹⁰⁰ Qiu, "Ripple vs. SWIFT," 433.

¹⁰¹ The National Penal (Code) Act 2074 (2017), s 262A.

technology and therefore simply supply users not just with the application and platform, but also the mobile phone. This, of course, causes problems at scale, but it demonstrates that the technology and access may not always be an immediate barrier.

While the clearest benefit to crypto remittances is the cost-saving due to reduced fees, greater benefits are being missed by Nepal. The Finance-Against Remittance (FAR) project¹⁰² suggests that entities are using blockchain to democratise remittances throughout the world. Blockchain could advance financial inclusion and provide 'banking for the unbanked' by instilling trust among users through its secured system.¹⁰³ Again, however, such a function would run tantamount to the Nepal Ban. At first glance, this seems to be a problem – the economy of Nepal is intrinsically linked to remittances, yet the ban prohibits the use of remittances in a way that is faster and wastes less money on fees. However, the ban does still have a clear logic.

Blockchain is a double-edged sword in Nepal. While it has a remittance-boosted economy, the very same process would allow for more money to be sent informally out of the country. This is the risk of capital flight and is feared by the government to be an economic 'death of a thousand cuts'. 104 As banking becomes easier and is enabled through blockchain systems (including cryptocurrencies), the ability to send money out of the country in the form of cryptocurrency becomes easier and is no longer controllable by the state; hence, capital flight is one of the main reasons to ban cryptocurrency in Nepal. 105 Nepal's history of capital flight dates to the 1800s, with the Shah and Rana regimes physically moving substantial amounts of gold and silver out of the country. This had a crippling effect on the Nepalese economy, 'stifling investment in critical sectors such as road, irrigation, industry, healthcare and education, perpetuating the cycle of underdevelopment'. 106 The fears of these actions being perpetuated by subsequent rulers, and a wider, public flight, are powered by illegal mechanisms such as hundi and currency smuggling.¹⁰⁷ While crypto-enabled capital flight is a fundamentally different type of object, the fear underpinning the impact of such outflow on the economy remains similar. This history is interwoven with the imposition of the cryptocurrency ban. Nepal has reacted to the fear of blockchain; it is something that is under-regulated, uncertain and can cause issues that are not always understood simply. It is hard for western cultures to see the risks posed by remittance systems when such systems are two-way in nature. To this extent, the ban may very well be justifiable; however, the ban has clear effects on how the country can embrace blockchain as a tool beyond cryptocurrency – as a tool for data management, record-keeping and integrity. These potential pathways are therefore closed off to entrepreneurs due to the fear created by the ban.

5.3 Nepal and CBDCs

Nepal's blockchain reactions are a microcosm of many blockchain nuances and debates, including that of central bank digital currencies (CBDCs). CBDCs are 'a new form of digitized sovereign currency, generally conceived to be equal to physical cash or reserves held at the central bank'. A CBDC is a digital currency issued by a central bank and held in digital wallets. As illustrated by scholars, the CBDC represents an asset that is wholly distinct from cryptocurrencies. They are unique cryptocurrencies because they are centrally issued stablecoins that pegged (or tethered) to the value of the central bank's FIAT currency. This brings together the digital nature of cryptocurrency with the lessened volatility of a FIAT currency. CBDCs can be categorised into retail and wholesale versions. Retail CBDCs are accessible to the public and can be used domestically or cross-border. A wholesale CBDC is designed to be used among banks and other institutions. Many countries are researching the prospects of CBDCs as a digital fiat currency, including Sweden, China, Europe and Australia. However, at the time of writing, very few have actually taken steps to implement them beyond pilot programs – such as the Sand Dollar in the Bahamas, 16 the Jamaican JAM-DEX and the Nigerian eNaira. Nepal shares this interest and there have been clear steps towards this since 2021.

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102 UNCDF, "Blockchain for Financial Inclusion."
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¹⁰³ Rühmann, Can Blockchain Technology Reduce the Cost? 19.

¹⁰⁴ Luckner, Crypto as a Marketplace.

¹⁰⁵ NRB, Notice Regarding the Illegality of Virtual Currency/Cryptocurrency, Network Marketing and Hyper Fund Related Transactions.

¹⁰⁶ Ghimire, "From Historical Context," 81.

¹⁰⁷ Ghimire, "From Historical Context," 92.

¹⁰⁸ International Monetary Fund, "Central Bank Digital Currency."

¹⁰⁹ Lanquist, Central Bank Digital Currency Policy-Maker Toolkit, 8.

¹¹⁰ Avgouleas, "A Critical Evaluation of Central Bank Digital Currencies," 107–08.

¹¹¹ Waliczek, Central Bank Digital Currency, 6.

¹¹² Sveriges Riksbank, "Work on the e-krona Continues."

¹¹³ Xia, Understanding the Adoption of China's Digital Currency," 20.

¹¹⁴ Huber, "The Digital Euro First Generation."

¹¹⁵ Reserve Bank of Australia, "Central Bank Digital Currency."

Howcroft, "Bahamas to Regulate Banks"; Sand Dollar, "About Us."

¹¹⁷ Dowd, So Far, Central Bank Digital Currencies Have Failed," 78–79.

¹¹⁸ Monye, "Why Nigeria's Controversial Naira Redesign Policy."

The Nepal Rastra Bank began an exploration of CBDCs through a concept report and scoping exercise in 2021 to gauge its feasibility and usage. 119 The possibility of the CBDC has been continuously mentioned throughout Nepal's legal reaction to digital assets, 120 and it has been raised as the sole push towards amending the prohibition on digital currencies in Nepal. 121 Nepal announced on 9 August 2024 that it had created a prototype of the CBDC system, 122 and at the time of writing a pilot program to test the CBDC on a small scale is set to be 'initiated by 2026'. 123 However, these announcements indicated a need for caution:

At this stage, a strong security measure would be implemented to safeguard transactions and user data ... We understand that CBDC roll out is not an end, it is crucial for continuous monitoring of the CBDC's impact on the economy, financial stability, and payment systems. 124

This caution is reflected in a widespread 'fear' of CBDCs. CBDCs are a key exemplar of the cultural imaginary as they capture contemporary fears and hopes within blockchain technology. They are seen as a widely adoptable form of cryptocurrency, but also as a dystopian nightmare of state control and the fear of a digital future where physical cash is replaced with reprogrammable money. In the global CBDC scoping exercises, CBDCs are commonly heralded as 'safe' because they are 'not subject to risks associated with, for example, runs, partial insurance, or capital losses, like bank deposits'. 125 And by being tethered to a fiat currency, they can overcome the volatility issues of traditional cryptocurrencies. The value of this has longsince been realised by stablecoins, such as Tether, which are used to ramp in and off the more volatile systems, but these too have had their controversies. 126 The CBDC – backed by a state bank but made fluid by the digital – is therefore potentially the solution, but there are lingering fears about what this means for 'control.'

The emergence of CBDCs has raised fears around government control, surveillance, privacy and cyber security. The fearful narrative is that a digital currency is 'programmable' and, if fearful of an authoritarian state (or simply fearful of expanding state power), the risk is that all spending information will become visible to the government and it can place restrictions on this under the guise of state intervention. 127 As clearly stated in a 2022 Forbes article, 'The problem is that there is no limit to the level of control that the government could exert over people if money is purely electronic and provided directly by the government.'128 This represents a shift in the power roles of currency. A state-issued fiat currency is typically something that can be spent freely and (apart from inflation) its value is fixed and knowable. The power is now with the programmer of the currency - the government - and this means the central government that owns the CBDC can 'determine what people can do with it. They can even take it away from you.'129

This fear is exemplified by the narratives that stem from autocratic governments, for which this technology may represent a dream come true. 130 For this, the most common stories come from the Chinese digital Yuan (e-RMB/e¥). This is seen as a culmination of many Chinese economic and social policies, as it can integrate with the Chinese social credit system in a manner that has been described as 'wholly authoritarian'. 131 This fear points to how individuals and organisations that run counter to the government's desires (which in China may be human rights organisations, legal services for refugees and religious donations) are able to be de-banked and have their assets unilaterally frozen – all under the pretext of protecting public order. 132 Outside an authoritarian government, the increased power to program users under the promise of protecting the public can have far-reaching consequences. This builds off fears of big government and the 'nanny state', and suggestions have included the ability to limit the purchase of items for people with related offences (firearms, alcohol, narcotics), which can easily be extended to 'social engineering' outcomes that limit the sale of the same items (and likely also tobacco) to certain groups, ages and classes. 133 As a contemporary example, it was also suggested that if CBDCs had been in common use during the COVID-19

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¹¹⁹ Nepal Rastra Bank, Monetary Policy for 2021/22.

¹²⁰ Adhikari, "Efforts of the Nepal Rastra Bank"; Nepal Rastra Bank, "Governor Adhikari Elected"; Nepal Rastra Bank, "An Awareness Material Published."

¹²¹ Shrestha, "Central Bank Working."

¹²² Baral, "Rastra Bank Has Created a Model."

¹²³ NRB, "Governor Adhikari Attended the 43rd SEACEN," 2.

¹²⁴ Adhikari, "The Changing Face of Financial Services."

¹²⁵ Minesso, "Central Bank Digital Currency," 54–55.

¹²⁶ Hart, "Tether Untethered."

¹²⁷ Sayyid, "Central Bank Digital Currencies"; Howcroft, "Bahamas to Regulate Banks."

¹²⁸ Michel, "Central Bank Digital Currencies."

Michel, "There Is No Good Version."
 Michel, "There is No Good Version"; Rancic, "Central Bank Digital Currency," 4–5.

¹³¹ Sayyid, "Central Bank Digital Currencies."

¹³² Cheng, "Advantages and Disadvantages," 39; Rancic, "Central Bank Digital Currency."

¹³³ Norbert, "The Risks of CBDCs," 8.

pandemic, then they could have been programmed to directly restrict the ability of locked down citizens to make purchases for anything not explicitly listed as 'essential'. 134 At its core, the CBDC represents a form of technological management: technology can act in a 'constitutive' manner; it can 'prevent, or disable, or compel certain actions'. 135 It can become another tool of the regulator to enforce and compel compliance with both laws and social norms. Even outside authoritarian environments, the best intentions are only ever a few moments away from abuses of power.

Outside the fear, there are simple realities of adoption and problems of transition. The three key examples of deployed CBDCs – the Sand Dollar, JAM-DEX and eNaira – have all faced problems within usage and adoption, with the Sand Dollar accounting for less than 1 per cent of the currency in circulation, ¹³⁶ the JAM-DEX only accounting for 0.14 per cent at its peak ¹³⁷ and the eNaira reaching 0.5 per cent at its peak. ¹³⁸ This meant early adopters had nowhere to spend it. This concern fed back into the system and decreased adoption even further. In the Bahamas, the limited CBDC adoption meant that the 'carrot was turning into stick and commercial banks were now being told of regulations that will effectively force them to distribute [the CBDC]'. ¹³⁹ The Nigerian attempt to increase adoption was a dramatic strategy whereby cash was forced to be returned and reissued, with non-returned notes being forced to expire. This led to a cash shortage, protests and riots – but ultimately increased the CBDC adoption to 6 per cent because people had no alternative. ¹⁴⁰

Many countries and regions that have explored the possibility of CBDCs are reporting that they are simply not necessary. In Sweden, reports indicated that there was 'insufficient social need' for the e-Krona. ¹⁴¹ Similarly in Europe, a CBDC for the Euro is often remarked upon as lacking any true 'value-add for stakeholders'; and in the American context, the situation can be expressed as a 'threat':

A CBDC would fail to offer the benefits its proponents suggest ... threaten financial privacy and financial freedom ... and undermine the banking and cryptocurrency industries. It's due to these fundamental threats to the American economy that policy analysts, industry representatives, and even government officials themselves are pushing back against CBDCs. 142

In many contexts, the promise of the CBDC is not enticing enough to encourage adoption. The global scoping activities in which nations have engaged since the 2020s have been returning mixed interest and limited benefits. When weighed against the poor adoption in countries such as Nigeria, Jamaica and the Bahamas, it becomes a tougher prospect to sell as a beneficial financial strategy. A core reason for CBDCs being issued in countries is to combat problems of banking and institutional instability. But the issue of a CBDC does not solve the initial deep-rooted causes. Often, scenarios best suited to CBDCs are those that have innate issues with banking and institutional stability – but CBDCs are not able to holistically solve all these embedded problems. As remarked upon in Jamaica, the poor financial inclusion of its people is a complicated process, and while digital currencies can attempt to 'bank the unbanked', there are many complicated issues, including KYC and AML problems, distrust in authority and poor relationships with banks, 'Simply offering a new digital currency – even if it is free and easy to set up and has simplified KYC requirements – does not address these problems.' 143

For Nepal, the rollout is still in its infancy, but perhaps the control inherent in CBDCs is exactly the reason why it may work. The fear of the government and banks losing money through cryptocurrency can be offset by the ability to intimately control the functions of the Nepalese CBDC. The cultural imaginary may be an expression of the fears and hopes associated with this technology, but this tension in Nepal's relationship with blockchain highlights the way this is more than merely something to soberly assess. For Nepal, there is a battle between the fears – the fear of escaped capital, compared with the fear of monitored CBDCs. Ultimately the nature of CBDCs is one that resonates with this interesting interplay between the cultural imaginary and the technology. The threat and fear of programmable currencies are something many countries are hesitant to embrace because there is not a clear reason for such currencies to be adopted – and the people themselves are responding in fear to the technologically enabled authoritarian futures in which they do not wish to find themselves. Yet, Nepal may be a place where CBDCs are the future. The control they allow, while potentially authoritarian, may in fact be exactly the control needed to alleviate the fears of the economic sieve – that CBDCs may grant the benefits of the technology while preventing capital flight.

¹³⁴ Norbert, "The Risks of CBDCs."

¹³⁵ Brownsword, Law, Technology and Society, 55; Hildebrandt, Legal and Technological Normativity."

¹³⁶ Howcroft, "Bahamas to Regulate Banks."

¹³⁷ Dowd, "So Far, Central Bank Digital Currencies Have Failed," 78–79.

¹³⁸ Anthony, "Bahamians Didn't Want CBDCs."

¹³⁹ Anthony, "Bahamians Didn't Want CBDCs."

¹⁴⁰ Anthony, "Bahamians Didn't Want CBDCs."

¹⁴¹ Sveriges Riksbank, "Work on the e-krona Continues."

¹⁴² Michel, "The Risks of CBDCs."

¹⁴³ Dowd, "So Far, Central Bank Digital Currencies Have Failed."

Regardless, there is a need to embrace a stronger culture of digital innovation if progress is to be made towards the goals of a Digital Nepal.

6. Conclusion

Nepal is an expression of blockchain's cultural imaginary: it contains the wonder of the technology, but also the accompanying fear and uncertainty. This article has explored how blockchain and cryptocurrency evoke reactions that translate into legislative action. The Crypto ban appears to be an over-correction to a fearful prospect of uncertain technologies, but it may in fact be a measured response. However, this has created the problem of a widely read ban that challenges the future of blockchain – and not just cryptocurrency – within the country. The crypto ban can have unintended consequences for the way entrepreneurs and innovators are inspired to invest in the country's technological potential, and a wide ban places this beyond the risk-appetite of many companies, with Nepal potentially losing these unrealised benefits.

Nepal faces a dilemma in its approach to digital currencies. On the one hand, there is concern about capital flight, while on the other there is apprehension about the potential surveillance aspects of CBDCs. However, Nepal has an opportunity to learn from global experiences and concerns surrounding digital currencies Through an appreciation of the cultural imaginary – its fears, hypes and potential – Nepal can develop a CBDC system that addresses the issues it perceives in cryptocurrencies while fostering a robust culture of digital innovation. This approach could help Nepal to overcome its reluctance towards new technologies that threaten its economic stability and instead allow the country to position itself at the forefront of digital financial innovation in the region. While it may appear to be a poster child for remittances, the reality is that crypto remittances may threaten to turn the economy into a sieve. Yet the potential for blockchain is more than just cryptocurrency. Embracing blockchain innovation can help diverse industries and the often-feared CBDC may in fact be well positioned to help Nepal navigate this balance between dream and fear, utility and collapse.

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