
VIRTUAL LAND OWNERSHIP: ESTABLISHING OWNERSHIP RIGHTS IN THE VIRTUAL FRONTIERS

Shivam Thenua, BA LLB (Hons.), CHRIST (Deemed to be University), Bangalore

ABSTRACT

The emergence of virtual land in metaverse platforms poses a formidable challenge for contemporary property law. While most other digital assets can be copied ad infinitum, virtual land is intentionally scarce, competitive, and tradeable and thus so similar to digital real estate. Such a shift poses significant questions regarding ownership, enforcement, and protection within laws never designed to deal with valuable intangible assets. Whereas in India, property law continues to concentrate on tangible property, and virtual landowners remain at the mercy of platforms under contractual arrangements, which prevail for the most part in favour of the platforms themselves. Absence of statutory recognition and regulation places the users at risk of fraud, scams, and overnight loss of assets, and this jeopardises new digital markets, potentially bringing growth and development plans of countries involved, especially in the developing world, into jeopardy. Current Indian laws pertaining to virtual land ownership come under observation, examples from the United States, United Kingdom, Singapore, and European Union jurisdictions come under analysis, and gaps and issues in operating traditional property rules over virtual spaces come under identification through this study, and through providing suggestions on legality and policy, the paper seeks to provide a roadmap for developing clear, safe, and fair ownership rights over India's virtual spaces.

Keywords: Virtual Land; Metaverse; Virtual Property; Non-fungible tokens (NFTs); Digital property rights

Introduction:

The concept of ownership of land was always tied up with physical space. However, nowadays, in the age of the internet, we hear of people selling and buying "virtual land" in virtual spaces, Decentraland and The Sandbox, for example. Whilst virtual content of the usual kind can be reproduced without end, virtual land is created in a limited quantity, can be exchanged or sold, and is increasing in value, and so some of these sales have commanded millions of dollars¹. It thus resembles real estate more than books or music files, and important questions arise of what it might be to own something which does not physically exist except in cyberspace.

Justice systems, though, have struggled to catch up. Some academics argue virtual property is a new kind of legal interest², but most jurisdictions continue to regard it as an issue of private contract law. Things are especially muddled in India: laws regarding property, such as the Transfer of Property Act, 1882, were drafted for physical land and tangibles, while virtual asset ownership is regulated largely through End User License Agreements (EULAs), which afford firms a great deal of rights control over users³. As a consequence, virtual landowners end up in a state of uncertainty, without the certain law of traditional property. This paper explores Indian law's treatment of virtual land ownership and whether extant laws will provide enough protection for users. It explores the relationship between property law, contract law, and constitutional ideals of the right to property⁴ and seeks to determine whether virtual land is harmonious with current law concepts or whether new law would be required for this developing form of virtual real estate.

Statement of Problem

The notion of owning and transacting virtual land is gaining rapid popularity in virtual spaces like the metaverse; nevertheless, there is a huge gap in India's legislation regarding the recognition, safeguard, and execution of ownership rights over virtual properties. Indian property laws are framed for physical assets and do not explicitly touch upon the peculiarities of virtual land, which exists only in virtual form and is usually conveyed through online

¹ Heiko Leonhard, Maximilian Nagl & Wolfgang Schäfers, *Virtual Land in the Metaverse? Exploring the Dynamic Correlation with Physical Real Estate*, SSRN Working Paper No. 4567859, at 4 (2023)

² Joshua A.T. Fairfield, *Virtual Property*, 85 B.U. L. Rev. 1047, 1050–51 (2005)

³ Transfer of Property Act, 1882, § 5 (India); Ryan Vacca, *Virtual Property: Real Investments with Real Rights*, 76 Tenn. L. Rev. 33, 41–42 (2008)

⁴ India Const. art. 300A

agreements or blockchain tokens.

Hence, there remain questions over ownership rights' validity and enforceability, application of existing contract and property law on virtual assets, and the protection available to users against fraud, misuse, or unauthorized loss of their virtual assets. Such ambiguity exposes virtual landowners to law and underscores the pressing need for definitions and Indian law reforms so as to regulate ownership rights in virtual space appropriately. The question, which this paper attempts to answer, is the extent to which virtual land ownership is addressed under existing laws of India and the necessary corrections or reinterpretations so as to provide fair, secure, and clear rights for ownership in virtual space.

Research Questions

The study is guided by the following research questions:

1. What is virtual land and how does it differ from other digital assets?
2. What is the metaverse and why is it significant for digital economies?
3. How does the current Indian legal framework apply to ownership and transfer of virtual land?
4. Why should virtual land be governed under property law instead of intellectual property law?
5. What are the limitations of applying traditional property laws to virtual property ownership?
6. What comparative lessons can India draw from the experiences of the U.S., U.K., Singapore, and the EU?

Significance of Research

The significance of this work lies in its application to the burgeoning discussion around digital property in India. Against the recognition of virtual digital assets for taxation purposes under the Income Tax Act of 1961⁵, there is a pressing need for developing a unifying legal

⁵ Income Tax Act of 1961 § 2(47A) (India)

framework for the protection of these assets. It attempts, through this work, to bridge the technological realities and outdated statutes of property, and deliver insights of value for lawmakers, courts, and regulators alike. Towards this end, it hopes to protect user rights, foster trust in the digital economies, and bring India at the forefront of the regulation of virtual frontiers.

Scope and Limitation of Research

The study is limited to virtual land under metaverse platforms, in particular those operating on blockchain technologies. Cryptocurrencies and pure intellectual property (songs, books, or patents) come up only wherever it is absolutely necessary for the purposes of comparisons. Indian law takes up the major attention of the work, but there is application of comparative understanding of United States, United Kingdom, Singapore, and European Union jurisdictions. Its significant drawback is the absence of Indian judicial precedents touching expressly upon virtual land, and thus there is a compulsion of resorting to analogical arguments and jurisprudence of foreign jurisdictions.

Objective of Research

This research pursues the following objectives:

1. To understand the meaning of virtual land ownership in the Indian context.
2. To analyze the legal status of virtual land ownership within existing property law frameworks.
3. To identify gaps in Indian legislation regarding virtual assets.
4. To examine the challenges of applying traditional property law principles to digital environments.
5. To compare virtual land ownership models across different jurisdictions and platforms.
6. To offer solutions and suggestions for statutory and policy reforms.

Research Methodology

This research paper adopts the doctrinal research methodology. This research paper will

include cases from the courts of the USA, the UK, and India. This research will also examine different research paper from different author and the provisions of different acts passed by different states of USA, UK, And India.

Literature Review

Relevant Statutes:

Transfer of Property Act, 1882: Transfer of Property Act usually defines property as movable or immovable, so it only accounts for tangible things. It is not possible to label virtual land as immovable property under this act because it does not physically appear and does not take up a specific place. It shows the inadequacy of law in virtual spaces.

Intellectual Property Law: virtual land and other assets, such as architectural designs, may be safeguarded through copyright and licence laws if there are original creative materials. Copyright law covers virtual creations and this may be included under virtual land ownership under IP licences and contractual agreements.

The Information Technology Act, 2000: Section 10A, affirms the validity and enforceability of electronic contracts and digital signatures. It facilitates the transfer of virtual land. Although this act does not mention virtual property or NFTs, it may be utilized in order to make virtual property transfers formal. Since virtual assets are not mentioned directly under law, there is ambiguity and the requirement for law amendments.

Constitution of India: 'No person shall be deprived of his property except by authority of law' is stated under Article 300A of the Constitution of India. It ensures the constitutional protection of ownership.

Indian Contract Act: Section 10 of the Indian Contract Act defines what constitutes a valid contract. Sections 13 and 14 go into the details of consent and free consent in a valid contract. Section 73 prescribes compensation for damages suffered by parties in online-made contracts.

Caselaws:

In *Bragg v/s Linden* case⁶, Marc Bragg purchased virtual land through his online avatar in the

⁶ *Bragg v/s Linden*, 487 F. Supp. 2d 593(ED Pa. 2007)

virtual world of Second Life, violating the rules of the platform. Linden Research, the owner of the game, terminated his account for violation of terms of use. Although the case was resolved outside the courtroom, the US District Court concurred in accepting the viewpoint of connecting with an individual in a virtual world and fulfilling the prerequisites of personal jurisdiction. The case demonstrates the increasing legal significance of virtual rights of property and the difficulties of jurisdiction in the virtual world.

In *Evans et al v/s Linden Research, Inc.*⁷, a group of persons sued Linden Lab since the company took their virtual property, in-game currency (Linden Dollars), and virtual content once they closed their accounts. People who sued clarified that at first, the game was marketed under the theme of being "owned by its residents," but later, the company altered its policies so the users only had licenses, not ownership rights. This is an example of the ambiguity of law in owning virtual land, revealing the manner through which platform policies might alter the rights of users and showcasing the difficulty of applying classic laws of property for virtual items.

Research Articles:

Money, things we own, and owning things in the Metaverse: NFTs, cryptocurrencies, Web3, and Wild Markets - Russell Belk⁸ (Journal for Business Research, Google Scholar)

The author of this piece discusses the large-scale transformation of the concept of ownership and rights over property due to virtual and digital usage, particularly the emergence of the Metaverse and Non-Fungible Tokens (NFTs). The author also highlights the difference between ownership of a real-asset property and ownership of an internet asset. The piece further addresses the complex nature of joint ownership and rights over property in the virtual space.

Regulating the Metaverse: Making Sure Legal Protection and Intellectual Property Rights Are Strong in the Digital World - by Dicky Surya Dharma⁹ (Indonesian Law Journal, Google Scholar)

The author believes there is a significant gap in the laws in Indonesia. Laws refer to intellectual

⁷ *Evans et al v/s Linden Research, Inc.*, 63 F.Supp.2d 735 (E.D. Pa. 2011).

⁸ Russell Belk, *Money, Things We Own, and Owning Things in the Metaverse: NFTs, Cryptocurrencies, Web3, and Wild Markets*, 139 J. Bus. Res. 137, 137–45 (2022)

⁹ Dicky Surya Dharma, *Regulating the Metaverse: Making Sure Legal Protection and Intellectual Property Rights Are Strong in the Digital World*, 3 Indonesian L.J. 55, 55–72 (2022).

property but do not explicitly include the Metaverse. Lack of clear regulation can damage rights of users and copyright on this new virtual platform. Most individuals misunderstand the distinction between copyright and ownership rights of NFT sales. Original content creators of an NFT always retain full copyrights and other rights, even after selling an NFT. Nevertheless, buyers typically only acquire limited rights to exhibit and use the NFT personally, without rights of selling the same, or of creating new work based thereon. This article implies that intellectual property laws in Indonesia have to be revised and enhanced and become compatible with the needs of the Metaverse and safeguard rights of creators and others involved.

Metaverse Property: Supporting Rules for Metaverse Land and Property with Real Estate Law - by Justin Kennedy¹⁰ (Hein Online)

The author states that real estate law, not intellectual property law, should apply to land and property in the Metaverse. Virtual property, like real property, is about uniqueness, rights, buying and selling, and what the users anticipate. Property rights may better protect investments, guarantee control (e.g., taxation and registration), and secure users against fraud or problems in platforms. Then, blockchain may be used instead as a form of determining ownership and increasing security. There are issues, but the author points out that real estate regulators must intervene before other agencies control regulating the Metaverse.

Legal dictionary:

A. Black's Law Dictionary:

1. Property is "the ownership of a thing is the right of one or more persons to possess and use it to the exclusion of others." It covers things and ideas; anything, in fact, which may be owned or used.
2. Personal Property: Personal property refers to "the person's belongings, excluding any land or buildings." It can either be things you can carry around or things which cannot be touched. It encompasses virtual land and digital tokens as well.
3. Virtual: "Virtual" is something "that has the qualities of a thing but is not the thing itself" or describing an action or trait "seems to exist but really does not." These would be virtual assets

¹⁰Justin Kennedy, *Metaverse Property: Supporting Rules for Metaverse Land and Property with Real Estate Law*, 45 Real Est. L.J. 211, 211–25 (2023).

like virtual land.

A. Merriam-Webster dictionary:

1. Property means something that someone owns or has, which can be physical like land and buildings, or intangible like rights and interests.

2. Virtual: Virtual means being “very close to being something without actually being it” or “existing or resulting in essence but not in actual fact, or name,” especially relating to simulation or computer context. J.H. Fairfield, in his law research paper "Virtual Property" in the Boston University Law Review, clarified that virtual property is a form of property. It is not intellectual property; it is code behaving like physical property. Virtual property is rivalrous, persistent, and interconnected. Domain names, URLs, email accounts, and virtual worlds are examples of virtual property. These are respectively code behaving like property in the virtual world. A Fulcrum Law blog describes "Virtual Property" thus: "Things of value which only exist digitally, such as website names, virtual currency, virtual accounts and even virtual land."

Scheme of Study (Body of the Paper)

I. Understanding Virtual Land and the Metaverse

Virtual land refers to pieces of virtual space located within virtual worlds commonly called the metaverse. Unlike most forms of digital content, such as e-books or software, which may be copied ad infinitum without losing value or usefulness, virtual land is purported to be scarce. This sort of scarcity is created artificially by platforms and is technically controlled by blockchain-based virtual tokens, especially non-fungible tokens (NFTs). NFTs serve as virtual identifiers that distinguish between different plots of land, so these plots of land can be traded in secondary markets¹¹. Since NFTs are non-fungible, the token is singular, which avails a degree of ownership verifiability inaccessible in the case of fungible cryptocurrencies like Bitcoin or Ethereum¹². Therefore, virtual land embodies the qualities of both digital assets and rights of property: though it is intangible and code-dependent, it is nevertheless exclusive, rivalrous, and alienable.

¹¹ Joshua A.T. Fairfield, Virtual Property, 85 B.U. L. Rev. 1047, 1050-51 (2005)

¹² Ryan Vacca, Virtual Property: Real Investments with Real Rights, 76 Tenn. L. Rev. 33, 41-42 (2008)

The key attributes of virtual land are scarcity, transferability, and blockchain authentication. Scarcity is not natural but is self-managed by platforms; Decentraland, for example, capped its total parcels at 90,601 and thus engendered a sense of scarcity and ensured each unit had economic value potential¹³. There is transferability since parcels may be bought, sold, or pledged through blockchain-based smart contracts, or traded on NFT platforms, thus increasing liquidity in virtual land markets¹⁴. Blockchain technology guarantees ownership records immutability and transparency, acting as a decentralized locator analogous to land registries in physical property law¹⁵. Taken collectively, these attributes make virtual land functionally similar to real estate, and not to other types of digital assets.

Virtual land must be differentiated from intellectual property. Intellectual property covers inventions and creative work; these rights, nevertheless, are always non-rivalrous: no use of a copyrighted piece of musical work or patented design by an individual excludes others from equally exploiting it. By virtue of this, virtual land is rivalrous, since ownership of it by an individual excludes everybody else from owning or utilizing the same lot¹⁶. Fairfield continues by describing virtual assets embodying three central characteristics of tangible property rivalry, persistence, and interconnectivity and so bring property law, more than intellectual property law, as the superior framework of law for control¹⁷. Such a differentiation betrays why intellectual property doctrines cannot, by themselves, efficiently control the distinctive characteristics of virtual land.

II. Evolution of Virtual Property Rights

The validation of virtual property rights evolved over scholarly discussion and sparse judicial participation. Fairfield's influential 2005 article argued that virtual resources, including land, satisfy the functional tests of property and so ought to be subject to principles of property law and not confined to simple contractual arrangements¹⁸. He explained that the participants will spend plenty of time, effort, and real-life funds buying and preserving virtual assets and those investments should be protected by law so that creativity and engagement in virtual economies can be promoted. By contrast, Christo J. Erlank reflected that virtual worlds rely fundamentally

¹³ Heiko Leonhard, Maximilian Nagl & Wolfgang Schäfers, *Virtual Land in the Metaverse? Exploring the Dynamic Correlation with Physical Real Estate*, SSRN Working Paper No. 4567859, at 4 (2023)

¹⁴ *Id.* at 6-7

¹⁵ *Id.* at 8

¹⁶ Fairfield, *supra*, at 1052-53

¹⁷ *Id.* at 1050

¹⁸ Fairfield, *Virtual Property*, *supra*, at 1049-50

on law of contract instead of principles of property, and he noted platforms function as personal legal regimes in which End User License Agreements (EULAs) describe the limits of rights of use by end-users¹⁹.

The law under which virtual ownership of land may be recognized derives from past theories of ownership. John Locke's theory of labor holds that if a person labors on things which no one owns, he or she becomes entitled to own such things²⁰. Users of virtual worlds fashion and define virtual places, and thus combine their intellectual and creative work and computerised shipments in a mode similar to Locke's method. Even the utilitarian method approves of it, for creativity is promoted, valuable productivity investments encouraged, and overall welfare optimised through the establishment of rights of property which may be exercised. Actants of virtual worlds design and structure virtual places, and thus combine their intellectual and creative work and computerised packages in a mode similar to that of Locke's method. Even the utilitarian method approves of it, for creativity is triggered, worthwhile productivity investments triggered, and overall welfare optimised through the formation of rights of property that may be exercised²¹. Lastly, the bundle-of-rights approach offers a more nuanced analysis by conceptualising rights of property not as a unitary absolute right, but rather a collection of entitlements use rights, rights of exclusion, and rights of alienation itself divided between platforms and users. It aptly describes the virtual world reality, whereby platforms control powers of governance and users demand alienable ownership interests²².

The courts' recognition of virtual property has been limited but significant. In *Bragg v. Linden Research, Inc.*, the plaintiff sued over the seizure of his Second Life real estate by Linden Lab. Mandatory arbitration of the End User License Agreement (EULA) of Linden was held unconscionable by the Eastern District of Pennsylvania, and so the litigation was permitted to continue in court²³. Although this decision didn't explicitly ratify virtual land as property, it was a recognition by a court of the gravity of this type of dispute and would indicate courts will be more vigilant in examining exploitative EULAs in the future.

¹⁹ Christo J. Erlank, *Acquisition of Ownership Inside Virtual Worlds*, 17 *Or. St. B. L.J.* 323, 330-31 (2020)

²⁰ John Locke, *Two Treatises of Government* bk. II, ch. V (Peter Laslett ed., Cambridge Univ. Press 1988) (1690)

²¹ Fairfield, *Virtual Property*, *supra*, at 1062

²² *Id.* at 1064

²³ *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 597 (E.D. Pa. 2007)

III. Indian Legal Framework and Virtual Land

The Indian statutes do not at present regard virtual land as property within a special category. The Transfer of Property Act, 1882 ("TPA") distinguishes transfers of property in terms of tangible immovables and some accepted intangibles, so excluding virtual assets in their entirety²⁴. Accordingly, the Registration Act, 1908, directs registration of immovable property transfers, again betraying an assumption of tangibility²⁵. Taken together, these statutes exhibit no recourse for virtual land's recognition of its status as property.

Today, ownership of virtual land in India is delineated through contracts. End-User License Agreements (EULAs) follow the Indian Contract Act of 1872. They detail ownership, usually owned by the platforms, and licenses, giving the users limited rights²⁶. In practice, this contractual landscape positions users under the platforms' sole discretion. Indian courts, as courts elsewhere, have a tendency of upholding standard-form contracts, except if these become unconscionable or not in the public good²⁷.

The Information Technology Act of 2000 affirms the validity of electronic signatures and records and thus gives them equal standing alongside paper documents²⁸. Additionally, Section 43A provides redress for improper use of personal data²⁹; nonetheless, no proprietary designations for virtual assets are created at statute law. As a result, blockchain-based NFT records may be accepted as valid electronic records, though they do not give rise to proprietary ownership rights under the law of property.

Judicial intervention in India in virtual assets has thus come through litigation in cryptocurrency. In *Internet and Mobile Association of India v. RBI*, the Supreme Court strikes down a 2018 circular of the Reserve Bank of India. It barred banks from carrying on business with cryptocurrency exchanges. It was held by the Court that the prohibition was excessive and contrary to the freedom of trade³⁰. Even though the ruling sanctioned cryptocurrency trade, it did not provide clarification on issues pertaining to NFTs and virtual land. Further, the Finance Act of 2022 amended the Income Tax Act of 1961 so as to enact a 30 percent taxation of the

²⁴ Transfer of Property Act, 1882, § 5 (India)

²⁵ Registration Act, 1908, § 17 (India)

²⁶ Indian Contract Act, 1872, §§ 10-23 (India)

²⁷ Bragg, *supra*, at 595-96

²⁸ Information Technology Act, 2000, § 4 (India)

²⁹ *Id.* § 43A

³⁰ *Internet & Mobile Ass'n of India v. Reserve Bank of India*, (2020) 10 SCC 274 (India)

transfer of "virtual digital assets," thus giving fiscal recognition but lacking proprietary protection³¹.

IV. Comparative Legal Approaches

A comparative study finds differing virtual property regimes between jurisdictions, and the conclusions have teachable relevance for India. None of the courts there has expressly identified virtual land as property, but the case of *Bragg v. Linden Research, Inc.*, for instance, shows a court's enthusiasm for scrutinizing exploitative end-user license terms (EULAs) and solemnity toward controversies connected with virtual land³². American academic opinion strongly advises identification of property rights over virtual objects, and *Fairfield* goes a long way toward emphasizing the assurance of legal safeguards of investments through users³³ while *Ryan Vacca* posits enforceable rights play an important role in maintaining user confidence and promoting economic growth in virtual worlds³⁴.

The United Kingdom has been at the forefront of conceptual developments. In 2022, the U.K. Law Commission issued a consultation paper in which it suggested creating a new "third category" of property specifically tagged for digital assets, alongside choses in possession and choses in action³⁵. Such forward-looking suggestion demonstrates an understanding that digital assets do not lend themselves easily to classic categorizations of property, but they do deserve recognition as valuable assets. Such a framework for India holds the promise of a roadmap toward the statutory recognition of virtual land.

Singapore strikes a pragmatic balance, and Hannah Yee Fen Lim's work is exemplary in this regard. Lim draws a parallel between virtual land and leasehold property, and attributes that while platforms will exercise ultimate control analogous to landlords, users will retain transferable rights analogous to tenants³⁶. This nuanced framework aligns with the bundle-of-rights approach and seeks a balance between the need for regulation of platforms and self-determination of the users.

³¹ Income Tax Act, 1961, § 2(47A) (India) (as amended by the Finance Act, 2022)

³² *Bragg v. Linden Research, Inc.*, 487 F. Supp. 2d 593, 597 (E.D. Pa. 2007)

³³ *Fairfield*, Virtual Property, *supra*, at 1055-56

³⁴ Ryan Vacca, Virtual Property: Real Investments with Real Rights, 76 *Tenn. L. Rev.* 33, 43 (2008)

³⁵ U.K. Law Comm'n, Digital Assets: Consultation Paper ¶ 6.35 (2022)

³⁶ Hannah Yee Fen Lim, Virtual Land: A "Leasehold" Interest?, 2010 *Sing. J. Legal Stud.* 304, 314-15

The European Union has approached digital assets through taxation and consumer rights more than direct classification of property. In *Skatteverket v. Hedqvist*, the European Union's Court of Justice, in essence, recognized virtual assets as real economic assets after it ruled VAT was not payable on Bitcoins³⁷. Although the EU has not explicitly included virtual land, its enthusiasm for controlling cryptocurrencies and NFTs signals the acknowledgement of digital property as integral to economic governance.

V. Challenges in Applying Traditional Property Laws

Despite the similarities between virtual and real property, there remain pertinent challenges hindering the immediate application of typical property laws on virtual land. Tangibility remains a major challenge, and Indian laws, including the Transfer of Property Act of 1882 and the Registration Act of 1908, draw upon real property, thus lacking provisions for rivalrous intangible assets like virtual land³⁸. Such a scenario presents a statutory gap, and thus, there cannot be an immediate application of the law.

Another important issue relates to the enforceability of law across national borders. Most metaverse platforms have offices outside of India, thus creating jurisdictional and conflict-of-law issues upon users back in India finding themselves in conflicts. As Erlank notes, these platforms themselves become private regimes of law, and their terms potentially conflicting with national law, so there is uncertainty over which law applies in cross-border conflicts³⁹.

Even the dominance of End User License Agreements (EULAs) adds to the complication. Such standard-form contracts almost exclusively favor the platforms, granting unilateral rights to revoke, delete, or alter ownership. Courts will usually hesitate to set these contracts aside except where they are grossly unconscionable⁴⁰. As a result, users become licensees, not owners, thus destroying expectations of permanence.

Rip-offs and scams prevail in the metaverse and NFT markets. Russell Belk outlines some of the examples of phishing scams, rug pulls, and fake land sales, and details how unregulated markets deny consumers avenues of redress⁴¹. Indian law does not have comprehensive

³⁷ Case C-264/14, *Skatteverket v. Hedqvist*, ECLI:EU:C:2015:718 (ECJ)

³⁸ Transfer of Property Act, 1882, § 5 (India); Registration Act, 1908, § 17 (India)

³⁹ Christo J. Erlank, *Acquisition of Ownership Inside Virtual Worlds*, 17 Or. St. B. L.J. 323, 329-30 (2020)

⁴⁰ Vacca, *Virtual Property: Real Investments with Real Rights*, *supra*, at 41

⁴¹ Russell W. Belk, *Money, Possessions and Ownership in the Metaverse: NFTs, Cryptocurrencies, Web3, and Wild Markets*, 17 Or. St. B. L.J. 323, 330-31 (2021)

consumer protection regimes developed specifically to battle these menaces at present.

Taxation and money laundering become further issues. Although taxation of virtual digital assets was introduced by the Finance Act, 2022⁴², this fiscal recognition does nothing to alleviate ownership issues. Additionally, the lack of express legislation against money laundering over NFTs and virtual land transaction creates opportunities for vulnerabilities that can be exploited for criminal financial flows.

VI. Ownership Models in Metaverse Platforms

Metaverse platforms have diverse ownership regimes, further complicating the environment of regulation. Decentralized platforms, such as Second Life, delineate ownership only under End User License Agreements (EULAs). End-users become and remain licensees and thus the platform maintains ultimate control⁴³.

Decentralized platforms, such as Decentraland, work differently. Land plots there are tokenized in the form of non-fungible tokens and registered in public blockchains. Their ownership of these plots is not mediated through the platform and may thus be traded or sold on secondary markets⁴⁴. It is technically closer to the old real estate model, whereby ownership is vested through a public register.

Hybrid models are increasing in number, too. They pair blockchain verification with centralized control, and so grant users more control than under full centralized platforms, but enable platforms themselves to maintain some oversight functions⁴⁵. These models indicate increasing experimentation in achieving a balance between control and regulation exercised by platforms and exercised by users.

VII. Judicial Prospects in India

While Indian courts have not yet squarely faced issues pertaining to virtual land, available jurisprudence provides hints of possible course trajectories. The decision of the Supreme Court in *Internet and Mobile Association v. RBI* betrays a court inclination to grapple with markets

⁴² Income Tax Act, 1961, § 115BBH (India)

⁴³ Bragg, *supra*, at 595-96

⁴⁴ Heiko Leonhard, Maximilian Nagl & Wolfgang Schäfers, *Virtual Land in the Metaverse?*, *supra*, at 8

⁴⁵ Michał Kowalski & Piotr Nowak, *Virtual Land Ownership in the Metaverse*, *J. Econ. Persp.* (2023)

in digital assets and suggests the courts will approach NFTs and virtual land comparably liberal⁴⁶.

Courts under the Information Technology Act, 2000, have already accepted electronic records and contracts⁴⁷, and so may blockchain-based transfers of ownership. Consumer protection law provides a potential basis for court action. Under the Consumer Protection Act, 2019, courts have jurisdiction over unfair trade practices and exploitative contracts⁴⁸. That jurisdiction may be asserted over metaverse platforms' EULAs, getting a check on exploitative practices.

In addition, the procedures for resolution of disputes provided under the Arbitration and Conciliation Act of 1996 may be adapted for resolution of cross-border virtual land disputes. Therefore, Indian courts are given the chance of increasingly recognizing ownership rights through the principle of analogies, even without statutory change.

VIII. Ethical and Policy Considerations

In addition to the formal recognition of virtual ownership of land, there are larger ethical and policy issues involved. One major issue is equity and accessibility. The virtual land prices in the most used platforms risk recreating real-life exclusionary tendencies, thus preventing excluded groups from participating in virtual economies⁴⁹. If there is no policy correction, the metaverse would contribute to inequality instead of promoting openness of access.

Security and privacy of data remain significant concerns in today's society. Buying virtual land typically includes revealing personal and financial information; however, the Information Technology Act of 2000 does not afford much safeguard⁵⁰. Not having comprehensive data protection legislation places users at higher risk of control and surveillance.

Environmental sustainability adds a further level of complexity. Proof-of-work consensus protocols, adopted in blockchain technologies, are extremely energy-intensive and environmentally detrimental. Leonhard and others relate the consumption of energy and emission of carbon footprints by virtual land transactions⁵¹. Neither can the policy framework

⁴⁶ Internet & Mobile Ass'n of India v. Reserve Bank of India, (2020) 10 SCC 274 (India)

⁴⁷ Information Technology Act, 2000, § 4 (India)

⁴⁸ Consumer Protection Act, 2019, §§ 2(47), 49 (India)

⁴⁹ Belk, Money, Possessions and Ownership in the Metaverse, *supra*, at 326-28

⁵⁰ Information Technology Act, 2000, § 43A (India)

⁵¹ Heiko Leonhard, Maximilian Nagl & Wolfgang Schäfers, Virtual Land in the Metaverse?, *supra*, at 9

turn a blind eye toward the virtual land markets' footprints on the environment.

Last but not least, fraud prevention and consumer protection measures are essential. Lacking statutory protections, consumers continue to risk scams, phishing, and rug pulls. Governance structures, according to Lim, would need to mature so as to safeguard users in these unprotected markets⁵². Comprehensive regulation is thus needed, not only to recognize ownership, but also for ethical and secure engagement in virtual economies.

Findings

The analysis in Chapter 3 identifies important shortcomings of the Indian law framework for the regulation of virtual land ownership. The Transfer of Property Act of 1882 and the Registration Act of 1908 depend on the tangibility of objects, and, hence, virtual plots of land are excluded from the entirety⁵³. Accordingly, Indian law does not have statutory acknowledgment of virtual property, and this places users under the mercy of private contractual stipulations delineated by platforms. Such End User License Agreements (EULAs) most typically classify users as licensees and not proprietors, and, hence, defeat the valid expectations of security and permanence of investments⁵⁴.

Another important discovery is tied up with the tension between contractual and property rights. Fairfield explains why considering virtual land solely as a contract misses its competitive, long-run, and interconnected qualities, and these make it almost indistinguishable from property⁵⁵. By itself, this tension in India is exacerbated by the judicial deference toward contractual autonomy, and so the risk would be running of having little meaningful redress for users against unfair End User License Agreements (EULAs).

Comparative analysis reveals instructive lessons for India. Singapore's use of a leasehold analogy, explained by Hannah Yee Fen Lim, demonstrates the possibility of effectively balancing platform governance and user autonomy through layered ownership structure⁵⁶. The United Kingdom Law Commission proposed a third kind of property in order to acknowledge

⁵² Hannah Yee Fen Lim, *Virtual Land: A "Leasehold" Interest?*, *supra*, at 318-19

⁵³ Transfer of Property Act, 1882, § 5 (India); Registration Act, 1908, § 17 (India)

⁵⁴ Ryan Vacca, *Virtual Property: Real Investments with Real Rights*, 76 *Tenn. L. Rev.* 33, 41 (2008)

⁵⁵ Joshua A.T. Fairfield, *Virtual Property*, 85 *B.U. L. Rev.* 1047, 1050-52 (2005)

⁵⁶ Hannah Yee Fen Lim, *Virtual Land: A "Leasehold" Interest?*, 2010 *Sing. J. Legal Stud.* 304, 314-15

virtual land⁵⁷. These proposals indicate the demand for new legal approaches to deal with virtual land's special issues, which the old law does not provide solutions for.

Another significant discovery is the inadequacy of intellectual property law in virtual land governance. Unlike copyrights, virtual land is rivalrous and exclusionary, and thus ownership cannot be simultaneously owned by several parties without generating discord⁵⁸. Efforts at regulating virtual land through intellectual frameworks risk eroding its economic and functional attributes.

The financial consequences of a lack of regulation of virtual land are significant. Without statutory recognition, Indian users face issues of uncertainty under the law, potentially deterring investments in virtual economies. While the Finance Act of 2022, through taxation of virtual digital assets, recognises by implication their value and existence⁵⁹, taxation without safeguard, however, places users at risk without proper protection. Moreover, unprotected End User License Agreements (EULAs) place users at risk of fraud of different types, scams, and arbitrary loss of assets, among others, as documented in the academic literature with regard to metaverse-related scams⁶⁰.

In the end, data from comparative jurisdictions suggest that courts may intervene even if there is no statutory evolution. The decision in *Bragg v. Linden Research, Inc.* illustrates the ability of courts to limit the scope of exploitative contracts⁶¹. Correspondingly, the willingness of the Indian Supreme Court toward cryptocurrency markets in *Internet & Mobile Association of India v. RBI* suggests courts would be willing to recognize user interests in virtual land⁶².

All these findings collectively highlight the inadequacy of the current Indian structure in protecting virtual ownership of land. Lacking statutory correction or proactive judicial interpretation, Indian users remain at risk of significant hazards, namely fraud, arbitrary deprivation, and absence of actionable ownership rights.

⁵⁷ U.K. Law Comm'n, *Digital Assets: Consultation Paper* ¶ 6.35 (2022)

⁵⁸ Fairfield, *supra*, at 1053

⁵⁹ Income Tax Act, 1961, § 2(47A) (India) (as amended by the Finance Act, 2022)

⁶⁰ Russell W. Belk, *Money, Possessions and Ownership in the Metaverse: NFTs, Cryptocurrencies, Web3, and Wild Markets*, 17 *Or. St. B. L.J.* 323, 330-31 (2021)

⁶¹ 487 F. Supp. 2d 593, 597 (E.D. Pa. 2007)

⁶² *Internet & Mobile Ass'n of India v. Reserve Bank of India*, (2020) 10 SCC 274 (India)

Suggestions and Conclusion

A. Suggestions

First, India needs statutory virtual property recognition. It may be in the form of a "Digital Property Act" or Information Technology Act of 2000 amendments. Such recognition would be required to articulate virtual land as a distinct type of property, valuing its rivalrous and transferable attributes⁶³.

Second, adopting the leasehold framework of the sort used in Singapore would be extremely valuable. Here, platforms would be the central landlords maintaining the power of governance, and users would be the owners of transferable leasehold rights of the sort you'd see among tenants⁶⁴. Such approach would, in effect, balance user autonomy and the oversight required by platforms.

Third, there is a need for EULA reform. Consumer Protection Act, 2019 already enables authorities to tackle unfair terms⁶⁵. Special provisions ought to be enacted so that metaverse platforms' EULAs cannot, by sole authority, deny ownership or withdraw rights without proper proceedings.

Fourth, India must regulate blockchain-transacted assets, including NFTs. It might involve regulation by the Securities and Exchange Board of India (SEBI) for ensuring market stability and by the Reserve Bank of India (RBI) for ensuring financial integrity⁶⁶. Special provisions for fraud prevention and anti-money laundering should be included for the protection of users.

Fifth, taxation regimes should be harmonized with ownership recognition. If taxpayers will be taxed on virtual land transfers, then they should simultaneously be accorded cognizable property rights so their investments will be protected⁶⁷.

Sixth, there would be a need for special resolution procedures for virtual property disputes. These might include arbitration processes online through the Arbitration and Conciliation Act,

⁶³ Joshua A.T. Fairfield, *Virtual Property*, *supra*, at 1052

⁶⁴ Hannah Yee Fen Lim, *Virtual Land: A "Leasehold" Interest?*, *supra*, at 314-15

⁶⁵ Consumer Protection Act, 2019, § 49 (India)

⁶⁶ *Internet & Mobile Ass'n of India v. RBI*, *supra*

⁶⁷ Income Tax Act, 1961, § 115BBH (India)

1996, adapted for cross-border virtual land conflicts.

Above all, ethical protections need to be incorporated into the rule of law. Policy needs to prioritize internet equality by simplifying virtual world accessibility and affordability, enhancing data security so that users' confidentiality is safeguarded, and promoting ecological fitness through the development of environment-friendly blockchain platforms⁶⁸.

B. Conclusion

One of the most significant 21st-century frontiers of law is the development of virtual land ownership, since virtual land enables rivalrous, durable, and alienable ownership in virtual environments and thus obscures the usual dichotoms of code and property. Neither India's extant law, however, founded on 19th- and 20th-century notions of property, responds satisfactorily to these new conditions of the 21st century.

This study has shown that reliance on contractual regimes alone is inadequate, and users become vulnerable to fraud, arbitrary takeover, and absence of recourse at law. Comparative frameworks of Singapore, the United Kingdom, and the European Union show that amendment is not only possible but necessary. India's judicial prospects, and more so the openness of the Supreme Court to intangible assets, suggest that there is potential for the courts to become active actors in achieving recognition.

In the end, virtual land ownership needs multi-faceted protection: statutory validation, redrafting of unfair EULAs, regulation of blockchain, reasonable taxation, and ethical protections. Such reforms would not only safeguard users, but would encourage innovation and Indian economic development in the burgeoning digital economy there. If protections of these sorts do not come into place, then India will expose its own citizens to harm in the virtual frontier, and compromise national rights and national competitive position in the international digital order.

⁶⁸ Heiko Leonhard, Maximilian Nagl & Wolfgang Schäfers, *Virtual Land in the Metaverse?*, SSRN Working Paper No. 4567859, at 9 (2023)

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