

Effectiveness Implementation Electronic Land Certificates In Preventing Land Mafia Practices

Mutmainna Samad Fahri Bachmid Dwi Handayani Faculty of Law, Universitas Muslim Indonesia, Indonesia Faculty of Law, Universitas Muslim Indonesia, Indonesia Faculty of Law, Universitas Muslim Indonesia, Indonesia

This study aims to examine and explain the effectiveness of implementing electronic land certificates in preventing land mafia practices, the factors influencing it, and to investigate the application of electronic land certificates in Pinrang Regency. The research employs an empirical legal research method, with the study conducted at the ATR/BPN Office in Pinrana Regency. Data were collected through interviews and literature studies, which were analyzed then qualitatively and descriptively. The findings indicate that the introduction of electronic land certificates significantly enhances transparency in land ownership, allowing the public easier access to information and thereby reducing the likelihood of fraud. Additionally, the study finds that a digitized and integrated land registration system can lead to a significant reduction in land disputes, particularly those triggered by land mafia activities. However, the research also highlights potential technical challenges and cybersecurity threats that could compromise the integrity of electronic certificates, emphasizing the need for robust security measures to protect against data breaches and fraud. Based on these findings, the study recommends the establishment of comprehensive cybersecurity protocols and public education initiatives to ensure that landowners and potential buyers can effectively verify the authenticity of electronic land certificates. Furthermore, it suggests that policymakers are prioritizing the digital transformation of land management systems to enhance efficiency and public participation in governance.

INTRODUCTION

Certificate land is document official proof ownership land and is results end from the registration process land . [1] In Indonesia, the institution registration land was founded in 1960 after implementation Regulation Government Regulation No. 10 of 1961 which regulates registration land . [2] This institution formed based on Constitution Main Point Agrarian Affairs (UUPA) no. 5 of 1960, aims For give certainty law about right on land to society . Article 19 of the UUPA emphasizes that certainty law This will come true through registration land throughout Indonesia . Land plays a role role important in life man Because provide various benefits , so people continue make an effort For master it . [3]

Registration process land is step very important law Because related with rights every individual . Civil rights reflect implementation of human rights Humans , so that right This need respected and prioritized . With progress rapid technology , efforts For ensure security on ownership the land also experiences change . Digitalization utilized For increase protection to ownership land . [4]

According to Adinegoro , digital transformation in the sector public covers development and implementation technology information as well as communication For increase efficiency and effectiveness service public , as well as For strengthen participation public in the process of development . [5] Modernization related services with improvement security ownership land set up in Regulation of the Minister of ATR/BPN Number 1 of 2021, which was issued on January 12, 2021, and is now has replaced by the Regulation of the Minister of Agrarian Affairs and Spatial Planning/

Head of the National Land Agency of the Republic of Indonesia Number 3 of 2023 concerning Publishing Electronic Documents in the Land Registration Process . [6]

Digitalization in service ownership land use technology aiming For reduce human - caused errors , such as dispute or overlapping data overlap . In this digital transformation process , the Ministry is implementing improvement digital services and switching from method manual data entry to digital system , which is expected can reduce dispute land . However , the steps This Not yet fully ensure data security for owner land . Therefore that , is needed supporting regulations problem This is for protect data, government has emit Constitution Number 27 of 2022 which aims to For protect right personal data owner . [7]

Situation This cause land own mark high economy , so become object land grab . land mafia generally do action they with careful planning . Mastery or robbery land in a way illegal often triggers conflict or dispute , which resulted in loss significant . [8] Uncertainty law and injustice This obstruct investment , so that reduce trust public to government .

Through digital transformation implemented by the Ministry of ATR/BPN, the launch certificate land electronic expected can simplify and improve security for owner land . Services standard international This ensure security certificate electronic with Features like use paper equipped QR code , which is only Can accessed through application official "Touch My Land " from the Ministry of ATR/BPN. In addition , protection sign hand electronics on documents certificate land electronic give level more security high . [9]

Regency Pinrang , which is located in South Sulawesi, has source Power abundant nature and land . However , the potential This often hampered by problems dispute land . Data from the local National Land Agency (BPN) show that amount dispute reported land Keep going increase every year . Situation This confirm the need effective solution For handle problem said . One of the proposed solution is implementation certificate land Electronics . Certificate land electronic is digital system that stores information about ownership land with a safe and transparent way . With utilise technology information , expected can reduce possibility forgery document .

Use certificate land electronic can increase transparency in land data management . With existence system this , society can more easy access information regarding ownership status land , which has the potential reduce disputes caused by lack of information . In addition , the system certificate land electronic allow acceleration in publishing certificate land new . The previous process considered slow and complicated now can simplified through automation , so that public No need emit a lot of time and money For get certainty law . [10]

Currently , the Regency Pinrang Still use system certificate land conventional , which has a number of weaknesses , such as slow processes , risks forgery documents , and lack of transparency . Many people No own sufficient access to information regarding ownership status land they . Situation This open opportunity for land mafia practices For developing , where individuals utilise ignorance public about rights they on land . With implementation certificate land electronics , expected Regency Pinrang can increase land data management .

For face various challenge said , it is important For do study about effectiveness implementation certificate land electronic in prevent land mafia practices . Research This expected can give description clear about How system This can help reduce dispute land . Through study This , it is also hoped , can found recommendation concrete about steps needed taken For increase effectiveness implementation certificate land electronics . Recommendations This will become reference for government and parties related others . Based on background the back that has been described above , then writer focus study this is in the formulation problem following : How is it? form advantages and disadvantages certificate land electronic compared to certificate land analog?. Factors that influence certificate land electronic can minimize land mafia practices ?

METHOD

Study This use method study law empirical with method qualitative . [11] Primary data was obtained through interview with party associated with location research at the ATR/BPN Office of the Regency Pinrang . Data collected through technique interviews and literature studies , which were then analyzed in a way qualitative descriptive .

DISCUSSION

Advantages and Disadvantages Electronic Land Certificates Compared Analog Land Certificate

Naturally digitalization document This offer a number of superiority compared to form conventional as it will be explained in the discussion following this : [12]

Ease of Access to Information

Superiority main certificate electronic is convenience access information document for the owner . Every certificate equipped with QR Code that leads direct to document electronics . This QR Code also makes it easier archiving and reducing risk document is lost or No complete with so , if you need look after file land , you don't need worry For return to House take missing documents . In addition , this QR Code easy scanned by you or officer related , and can sent through application message or other media .

More Data Security Guaranteed

In terms of security , digital documents provide more protection good and minimize risk forgery or lost . Certificate land electronic containing information about related obligations and prohibitions with rights , restrictions and responsibilities answer . Information This arrange necessary actions taken by the owner certificate , things that must be avoided , as well as not quite enough answer in guard document the .

In addition , the certificate electronic equipped with code unique (hashcode) generated in a way random by the system . This code covers number series consisting of from combination letters and numbers , so that No can printed carelessly by other parties . Certificate electronics also require the owner For use sign hand electronic (TTE) for use prevent forgery sign hand on behalf of another person. To using TTE, the owner must own sign hand certified electronics in accordance with provisions of the Ministry of Communication and Information . Signature This can made through application sign certified digital hand such as Privy, which is recognized by Kominfo in matter data security and validity use sign hand . With Thus , TTE is generated through Privy you can used For needs administration and documents official .

Efficiency Filing

Another advantage of certificate electronic is its efficiency in archiving and administration document . Different with certificate conventional which requires a number of number , such as Measurement Letter Number , Rights Number , Field Map Number , and Land Number Identification Field , certificate electronic only use One number , namely NIB (Number Identification Field), as identity main . With So , you just need show number the For access all information with fast and easy . In addition , the archiving process become more efficient Because information in digital documents have been summarized and arranged in a way solid . You don't need Again fill in form or sheets of blanks , making this process more practical . [13]

Reduce risk lost or damage

Because of the certificate land electronic stored in digital format, certificate This No prone to to damage physique as can be happened to the certificate paper . There is none risk lost document physique Because certificate saved in system BPN electronics . [14]

According to results interview with Mrs. Andini Cahyani Yusuf. Whose status is as Staff Implementer (Land Law Analysis) at the ATR/BPN office , Pinrang Regency State that : " Excess certificate land electronic that is :

1). Giving certainty of valid data in the land system .

2). Improve efficiency and transparency registration land .

3). The existence of a function mitigation on disaster natural like floods , landslides and earthquakes earth .

4). Reduce obligation public For come to office land up to 80%.

5). Can printed in a way independent on application touch my land .

6). Legality same / equal with certificate analog land ."

According to results interview with Mr. Safri Awal whose status is as one of the Notary & PPAT located in Pinrang Regency State that excess certificate land electronic that is :

Book land and letters measuring from certificate land electronic has done validation , so that the physical data and legal data listed in it is valid.

More easy accessed by the holder right through application touch my land owned by the Ministry of Agrarian Affairs and Spatial Planning/ National Land Agency (ATR/BPN).

More easy and more fast the registration data maintenance process is carried out land , such as transition right and loading right liabilities and others.

Factors Affecting Electronic Land Certificates Can Minimize Land Mafia Practices

Minister of Agrarian Affairs and Spatial Planning/ National Defense Agency (ATR/BPN), Mr. Hadi Tjahjanto , stated at the launch certificate land electronics at the State Palace in Jakarta in 2022 that implementation certificate land electronic create a registration process land become more effective and efficient . In addition , the certificate This also protects security document from risk disaster natural like flood and earthquake earth , and reduce possibility error in making certificate . Which is more important , Hadi added that existence certificate land electronic will narrow down room movement of the land mafia . Electronic Land Certificates are expected can reduce land mafia practices in Indonesia with various factors , namely : [15]

Improvement Data Security

Certificate land electronic offer more protection Good against ownership data land . With use digital systems , risk lost or damage physical on document certificate can minimized . This is give certainty more laws strong for owner land , so that reduce opportunity for land mafia For do fraud or mastery illegal on land .

Accessibility and Transparency

Use technology information in registration and management certificate land increase data accessibility for society . With more system transparent , society can with easy check ownership status land , so that reduce possibility the occurrence disputes that are exploited by parties who are not responsible answer .

Administrative Process Efficiency

Certificate electronic speed up the registration and validation process right on land . This reduces slow bureaucracy , which is often exploited by land mafia For slow down or complicate the legalization process right on land . With more processing efficient , society will more fast get certainty law on right his own .

Quality Human Resources

Success implementation certificate land electronics also depend on quality source Power human resources (HR) involved in the process . Training and improvement HR capabilities in the field technology information and administration land is very important For ensure that system walk with good and able overcome potential abuse .

Supervision and Law Enforcement

The existence of a certificate electronic allow improvement supervision to transaction land . System This can equipped with mechanism reporting and enforcement more laws well , so land mafia action can detected and followed up in a way more effective .

According to results interview with Mrs. Andini Cahyani Yusuf. Whose status is as Staff Implementer (Land Law Analysis) at the ATR/BPN office, Pinrang Regency State that : " Certificate electronics expected capable reduce land mafia practices Because all recording Already use sign hand electronic so that expected No There is data misuse with sign hand false from individuals who are not responsible answer." According to results interview related whether certificate electronic can reduce risk forgery document explained by Mr. Muhammad Adli Ikram Arif, whose status as Notary & PPAT in Regency Pinrang state that : " Yes, the certificate land electronics is very possible reduce risk forgery document because service storage the data Already plot -based which data is Already stored in a way electronics in the land database . So according to I reduce risk forgery document because No easy For accessed by outsiders ". According to results interview with Mr. Safri Awal. Whose status is as Notary & PPAT located in Pinrang Regency state that :

"Factors that can minimize land mafia practices that is certificate electronic Already Certain has done mapping and validation of physical data , so that reduce / close possibility existence effort from person certain that have a binding wicked For sit down more from One certificate on one field same land (certificate) double), besides That signing certificate land electronically by authorized officials Already use signature electronic so that more minimize forgery signature . Then besides than That public specifically candidate buyer the land to be do transaction sell buy land , more made easy For do effort mitigation simple For check authenticity from certificate land electronic from candidate seller with method perform a barcode scan using application touch my land Then match the data contained in the physical certificate electronics and data contained in the application touch my land ". As for the steps taken For prevent risk data loss or abuse information in certificate electronic delivered by Mrs. Andini Cahyani Yusuf, who is Staff The Implementer (Land Law Analysis) at the ATR/BPN office , Pinrang Regency , stated that :

Certificate land electronic using secure paper equipped with invisible fluorescent green ink which if in the vision with UV rays will glow with color green and has the ATRBPN logo and the words K

ATR/BPN. Behind certificate land electronic there is secure access in the form of a QR Code which can scanned on the application touch my land , if mold certificate held in accordance with documents on the application touch my land so certificate the original (valid).

Electronic Certificate signed in a way electronic so that ensure No There is illegal data changes on certificates " The OTP (one time password) system is implemented when logging in to application (good) For BPN employees and to BPN Partners , namely PPAT/PPATS, Regional Government and Financial Services Partners. The provision of an internal hotline/ complaint of the Ministry of ATR/BPN if happen data leak /hacking on the system.

CONCLUSION

Certificate electronic offer superiority significant , especially in security blessing technology encryption and sign digital hand that made it difficult forged . Saved digitally , certificate this is also more durable compared to certificate paper , and owner land can access it When just through the official portal of the National Land Agency (BPN) or " Touch " application My Land ," which speeds up the administration and transaction process . However , there is weakness like dependence on infrastructure lack of technology good in some area , as well as access limited for public with low digital skills . Risk technical and threats security cyber is also worthy noted , added with change continuous regulation , which forces organization For adapt to stay comply applicable regulations . The Ministry of ATR/BPN should carry out improvement security system electronic or server to avoid from crime cyber . Security good cyber is very important For protect important data and ensure service public walk with smoothly . With increase system security , society will more believe For use service land , because they know their data safe . Therefore that 's important For apply technology latest and provide training to staff so that they Ready face threat cyber that continues develop . This step No only protect data, but also improve trust public to system administration land .

References

- H. Sumiati, Andriansah, and B. Kadaryanto, "Kepastian Hukum Sertifikat Hak Milik atas Tanah Dalam Hukum Pertanahan Indonesia," Yust. MERDEKA J. Ilm. Huk., vol. 7, no. 2, pp. 135–145, 2021, doi: 10.33319/yume.v7i2.111.
- 2. S. A. Kartono, "Politik Hukum Pertanahan Dalam Rangka Percepatan Pendaftaran Tanah Di Indonesia," J. Esensi Huk., vol. 2, no. 1, pp. 97–112, 2020.
- 3. D. Apriani and A. Bur, "Kepastian Hukum Dan Perlindungan Hukum Dalam Sistem Publikasi Pendaftaran Tanah Di Indonesia," J. Bina Mulia Huk., vol. 5, no. 2, pp. 220–239, 2020, doi: 10.23920/jbmh.v5i2.11.
- 4. R. Ramadhani, "Pendaftaran Tanah Sebagai Langkah Untuk Mendapatkan Kepastian Hukum Terhadap Hak Atas Tanah," J. Sos. dan Ekon., vol. 2, no. 1, pp. 31–40, 2021, [Online]. Available: http://jurnal.bundamediagroup.co.id/index.php/sosek
- 5. K. R. A. Adinegoro, "Tantangan Implementasi Sertipikat Tanah Elektronik di Kementerian Agraria dan Tata Ruang/Badan Pertanahan Nasional Republik Indonesia," J. Ilmu Kenotariatan, vol. 4, no. 2, p. 130, 2023, doi: 10.19184/jik.v4i2.41314.
- 6. R. A. R. M. Dewi and C. Susantio, "Penggunaan Sertifikat Elektronik untuk Meningkatkan Efisiensi Pendaftaran Tanah dalam Upaya Pencegahan Mafia Tanah," J. Syntax Admiration, vol. 5, no. 9, pp. 3382–3392, 2024, doi: 10.46799/jsa.v5i9.1441.
- 7. F. Priscyllia, "Perlindungan Privasi Data Pribadi Perspektif Perbandingan Hukum," Jatiswara, vol. 34, no. 3, pp. 239-249, 2019, doi: 10.29303/jtsw.v34i3.218.
- 8. I. Novita, "Kebijakan Hukum Kementerian ATR/BPN Terhadap Pencegahan Mafia Tanah Dalam Basis PEnerapan Sistem Pendftaran Tanah," 2022.
- 9. G. Assidiqih and I. F. Susilowati, "Tinjauan Yuridis Sertifikat Tanah Elektronik Sebagai Alat Bukti Kepemilikan Tanah Di Indonesia," Novum J. Huk., no. Salam 2020, pp. 57-72, 2021.
- 10. M. I. D. Putranto and A. Mansyur, "Urgensi Penerapan Sertipikat Tanah Secara Elektronik,"

Repert. J. Ilm. Huk. Kenotariatan, vol. 12, no. 1, pp. 15–26, 2023, doi: 10.28946/rpt.v12i1.2645.

- 11. F. S. R. Nurul Qamar, Metode Penelitian Hukum: Doktrinal dan Non-Doktrinal, vol. 11, no. 1. 2020. [Online]. Available: http://scioteca.caf.com/bitstream/handle/123456789/1091/RED 2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco. 2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETU NGAN_TERPUSAT_STRATEGI_MELESTARI
- 12. T. J. Monalu, T. F. Sumakul, and M. T. Sondakh, "Kedudukan Yuridis Penerbitan Sertifikat Tanah ke Sistem Elektronik sebagai Jaminan Keamanan," Lex Priv., vol. XI, no. 2, pp. 1–10, 2023, [Online]. Available:
- https://ejournal.unsrat.ac.id/v3/index.php/lexprivatum/article/view/46654 13. S. Hidayah, "Tantangan dan Peluang Sertifikat Elektronik dalam Reformasi Pendaftaran
- Tanah di Era Digital .," vol. 1, no. 6, pp. 186–199, 2024.
- 14. Isnaini and A. A. Lubis, Hukum Agrari : Kajian Komprehensif. 2022.
- 15. H. S. Maulana, N. Rangga, A. Nugraha, R. Mas, and A. Arinda, "Urgensi Sertifikat Elektronik dengan Pemantauan Berbasis AI untuk Efisiensi Pendaftaran Tanah dan Mitigasi Mafia Tanah di Indonesia," no. 1, pp. 1–9, 2024.