

## Regulation of Physical Data on Land Destroyed by Natural Disasters

Dikha Anugrah, Bias Lintang Dialog, Suwari Akhmaddhian, Azmy Sabila Gustianitami  
Faculty of law, University of Kuningan, West Java, Indonesia  
Email: dikha@uniku.ac.id



<https://doi.org/10.25134/unifikasi.v10i2.6144>

### ARTICLE INFO

### ABSTRACT

#### Article History

Received: June 16, 2022  
Revised: July 19, 2023  
Accepted: August 11, 2023

#### Keywords

Changes in Physical Data,  
Land Destroyed,  
Natural Disasters,  
Regulations.



Natural disaster has a multifaceted impact on the environment, the land for instance. The demolition of land boundaries and the loss of legal footing ownership intricate problem surrounding reconstruction. Not to mention the massive losses suffered by citizens as a result of natural disasters that exacerbate the situation. The study employed socio-legal method, referring to library sources such as books, journals, statutory regulations and literature reviews. According to the findings, tangible data on destroyed land caused by natural disaster is fairly organized. Furthermore, the legal position of land rights affected by an earthquake is not removed; nonetheless, the abrasion-caused is discarded. Accordingly, the government, notably the National Land Agency, should create regulations that control and streamline the procedure for victims who have lost their civil rights, land boundaries-disaster that have been lost or cannot be recognized.

### Introduction

Land related problem is intricated and required long-winded settlement as it affects all aspects of life, including social, economic, political, psychological, and others. Minor aspect should also be examined to minimize tensions that can disrupt societal stability. In Indonesian law for instance, land ownership restrictions are explained in Government Regulation No. 24 of 1997 – Land Registration A certificate is a document that validates a person's rights to land and buildings. Therefore, every individual who owns land is obliged to officially register their property with the National Land Agency to acquire a valid Certificate<sup>1</sup>. Article 33 Paragraph (3), the 1945 Constitution of the Republic of Indonesia, declares that the earth, water and natural resources contained therein are controlled by the state and utilized as much as possible for the prosperity of the people. This is in line with Article 1 Paragraph (2), the 1945 Constitution of the Republic of Indonesia which states that Indonesia is a State of Law, implying that the connection between government, society and land is founded by law<sup>2</sup>. Law serves an indispensable role in life that cannot be isolated from social life—as a sort of protection for those who are vulnerable. If the law is not followed, a country will be in chaos.<sup>3</sup>

For Indonesian, Land serves as a strategic natural resource. Indonesia is an agricultural country that the majority of them employed in the agricultural sector. Thus, the state has the

<sup>1</sup> Abdul Qodir Jaelani and Siti Munawaroh, “Penerapan Pendaftaran Tanah Di Kantor Pertanahan Di Wilayah Kota Surabaya 2,” *Judiciary: Jurnal hukum dan Keadilan* 12, no. 1 (2023): 105–120.

<sup>2</sup> Desi Apriani and Arifin Bur, “Kepastian Hukum Dan Perlindungan Hukum Dalam Sistem Publikasi Pendaftaran Tanah Di Indonesia,” *Jurnal Bina Mulia Hukum* 5, no. 2 (2021): 220–239.

<sup>3</sup> Nur Iftitah Isnantiana, “Hukum Dan Sistem Hukum Sebagai Pilar Negara,” *Jurnal Hukum Ekonomi Syariah* 2, no. 1 (2019): 19.

authority to regulate, plan, and control land right and ownership.<sup>4</sup> Under Law No. 5 of 1960—Changes to the Basic Agrarian Principles, the government is mandated to register land throughout Indonesia. By making copies of physical and juridical facts known as certificates, the community can acquire property rights and a solid legal foundation. It will be regarded solid evidence if it congruent with the data available in the measurement letter and the relevant land rights book<sup>5</sup>. The strong legal connection with land necessitates the need for legal force in it, which is only possible if the land owner has registered the land and received a certificate.<sup>6</sup>

the land rights registration program must be balanced with the community's contribution or high public awareness in registering their land rights. The first indicators of legal awareness are public knowledge about legal rules, followed by content regulations, attitudes, and legal behavior pattern.<sup>7</sup> An organization that provides legal clarity regarding land rights and land management is required—management control and right over land, as well as regulations to construct a safe and just communal life. The Ministry of Agrarian Affairs and Spatial Planning/National Land Agency is referred to as the organization<sup>8</sup>. Natural disasters, which occur frequently in Indonesia, highlight the significance of land certificates as a kind of legal authority. A natural disaster is a natural occurrence that occurs either naturally or as a result of human activity. A natural catastrophe is defined in Article 1 paragraph (2) of Law Number 24 of 2007 on catastrophe Management as a disaster caused by an event or series of events induced by nature, such as earthquakes, tsunamis, Mount Meetus, floods, droughts, storms, and land landslides.<sup>9</sup>

Dalam Peraturan Pemerintah Nomor 24 Tahun 1997 Tentang Pendaftaran Tanah tidak ada yang menjelaskan mengenai status kepemilikan tanah yang disebabkan oleh Bencana Alam. Bencana ini dapat menimbulkan permasalahan yang kompleks dalam hal rekonstruksi, selain disebabkan oleh hancurnya batas-batas tanah, juga disebabkan oleh hilangnya bukti-bukti atas kepemilikan tanah. Hal ini dapat diperparah dengan banyaknya jumlah batas tanah warga yang hilang akibat bencana alam ini.<sup>10</sup> A disaster, according to the Disaster Management Law, is an incident or set of events that endangers and disturbs people's lives and livelihoods. This disaster can be caused by natural, non-natural, or a combination of the two, and it can result in loss of life, environmental damage, material loss, and psychological effects. Natural disasters are those that occur as a result of natural phenomena such as earthquakes, tsunamis, volcanic eruptions, floods, droughts, hurricanes, and landslides. Non-

---

<sup>4</sup> Andi Bustamin Daeng Kunu, *Kedudukan Hak Menguasai Negara Atas Tanah, Fiat Justicia Jurnal Ilmu Hukum*, vol. 6, 2012.

<sup>5</sup> Christiana Sri Murni, "Peralihan Hak Atas Tanah Tanpa Sertifikat," *Lex Librum: Jurnal Ilmu Hukum* 4, no. 2 (2018): 680–692.

<sup>6</sup> Muhammad Yamin and Zaidar Zaidar, "Pendaftaran Tanah Dalam Mewujudkan Kepastian Hukum Atas Kepemilikan Tanah Dan Upaya Meminimalisir Konflik Pertanahan," *Jurnal Hukum Samudra Keadilan* 13, no. 2 (2018): 201–210.

<sup>7</sup> dkk Noval Kasim, "Kesadaran Hukum Masyarakat Dalam Memperoleh Sertifikat Hak Atas Tanah Di Kelurahan Tongano Timur Kecamatan Tomia Timur Kabupaten Wakatobi," *Jurnal Selami IPS* 12, no. 2 (2019): 7.

<sup>8</sup> Gratia Arief, "Tinjauan Yuridis Sertifikat Hak Tanggungan Yang Di Terbitkan Melalui Sistem Elektronik Menurut Peraturan Menteri Agraria Dan Tata Ruang/Kepala Badan Pertanahan Nasional No. 5 Tahun 2020 Tentang Pelayanan Hak Tanggungan Terintegrasi Secara Elektronik," *Jurnal Prespektif Hukum* 3, no. 1 (2022): 81–91, <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203%0Ahttp://mpoc.org.my/malaysian-palm-oil-industry/>.

<sup>9</sup> Hidayah Nur Asmara, "Implementasi Undang-Undang Nomor 24 Tahun 2007 Tentang Penanggulangan Bencana Di Samarinda," *Nomos: Jurnal Penelitian Ilmu Hukum* 3, no. 3 (2023): 84–91.

<sup>10</sup> Iman Wahyu Aji, "Penyelesaian Sengketa Tanah Akibat Bencana Alam Di Kecamatan Bruno, Kabupaten Purworejo," *Amnesti Jurnal Hukum* 2, no. 2 (2020): 103–113.

natural disasters are produced by non-natural phenomena such as technological failure, failed modernisation, epidemics, and disease outbreaks. In addition, there are social disasters caused by human actions, such as social conflicts between groups or communities and terrorist acts.

Natural disasters frequently result in a large number of fatalities. Floods, tornadoes, landslides, forest and land fires, tidal tides, droughts, earthquakes, and volcanic eruptions were among the 4,650 natural catastrophes that occurred in 2020. The natural disaster caused mild and heavy damage to 42,762 dwellings and 1,542 public institutions.<sup>11</sup> Damage does not only affect buildings and public facilities used as shelters, but it also affects the soil structure. According to Articles 27, 34, and 40–Basic Agrarian Law (UUPA), land rights will be lost if the land is harmed<sup>12</sup>. Disaster occurrences that cause land destruction are out of human control and is inescapable. Given the tremendous impact of losses caused by severe disasters, it is critical to offer legal certainty and protection–land ownership status for disaster-affected owners.

### Research Methods

The study used a socio-legal approach, with references to books, journals, statutory rules, and literature reviews. Approaches from the field of law are employed to handle concerns with land ownership that have been affected by disasters. The investigation begins with a look at Law of the Republic of Indonesia No. 5 of 1960–Basic Regulations on Agrarian Principles, which specifies that one of the reasons land rights might be lost is if the land is substantially harmed. Furthermore, derivative legislation and previous studies are also evaluated to establish if the status of land rights can be regarded lost or not if the land is harmed as a result of a disaster.

### Results and Discussion

The government is in charge of defending and protecting its citizens from any risks, including natural disasters. It is stated in the Preamble to the 1945 Constitution, paragraph IV (four), that the Unitary State of the Republic of Indonesia is obligated to defend the entire nation and all bloodshed, promoting general well-being. The termination of rights to land impacted by natural disasters surely does not cover the fact that it has hurt some parties. In the legislation, the government is inherently accountable for the welfare of the people, and is required to give assurances for destroyed land.<sup>13</sup> The existence of legal certainty on the status of land can also provide legal certainty to the holders of rights to the land in question by determining whether or not plots of land affected by natural disasters can be considered destroyed.

The following are the regulations that the government has developed and stated regarding Destroyed Land Caused by Natural Disasters:

#### 1. Law Number 5 of 1960 concerning Agrarian Principles

---

<sup>11</sup> Badan Nasional Penanggulangan Bencana. (2021, Juli) “Bencana Indonesia 2020: Sebaran Kejadian Bencana Alam Tanggal 1 Januari - 31 Desember 2020,” 2022, <https://gis.bnpb.go.id/>.

<sup>12</sup> Betty Rubiat Tiara Dwi Rahayu, Yani Pujiwati, “Kepastian Hukum Kepemilikan Hak Tanah Setelah Mengalami Likuefaksi Tanah,” *LITRA: Jurnal Hukum Lingkungan Tata Ruang dan Agraria* 2, no. 18 (2023).

<sup>13</sup> Bunga Desyana Pratami et al., “Status Hukum Tanah Musnah Berdasarkan Permen ATR/BPN No. 17 Tahun 2021,” *Jurnal Officium Notarium* 1, no. 2 (2021): 218–229.

Despite the fact that nothing in the basic agrarian legislation expressly or implicitly implies that land rights may be lost as a result of natural catastrophes, Article 27 specifies that property rights are lost if land belonging to the state is destroyed. Cultivation Rights are also extinguished if the term expires due to a requirement not being completed, are surrendered by the right holder before the term expires, are revoked for public purposes, abandoned, and the land is destroyed, according to Article 34. Meanwhile, Article 40 describes how building use rights are removed when their term expires, terminated before the term expires because a condition is not met, released by the right holder before the term expires, revoked for public purposes, abandoned, and the land is destroyed. Natural disasters do not result in the extinction of land ownership rights under Law No. 5 of 1960. There are still available options if the land plot is not destroyed.<sup>14</sup>

**2. Law No. 48 of 2007–Government Regulations in Lieu of Law No. 2 of 2007–Legal Issues: Rehabilitation and Reconstruction of Regions and Community Life in Nanggroe Aceh Darussalam province and the Nias Islands, North Sumatra Province**

Provisions to handle legal settlements include, among other things, legal repercussions for land destroyed as a result of natural catastrophes that render the land unfit to function, use, or be employed by its owner. Where the government has put in place a land replacement program. As a result of this substitution, any land books, land title certificates, and papers pertaining to the land in question, as well as other evidence of ownership, are no longer legitimate. Furthermore, the demolished area will be restructured in accordance with the spatial arrangement that will be established later. Article 3 states that:

- a. The land affected by natural disasters such as earthquakes and tsunamis is made up of both existing and damaged land.
- b. The Head of the Land Office determines and announces destroyed land in accordance with the principles of transparency, accountability, and fairness.
- c. The Regulation of the Head of the National Land Agency contains additional regulations regarding processes for assessing and notifying destroyed land.

**3. Government Regulation No. 18 of 2021: Management Rights, Land Rights, Flats, and Land Registration.**

Article 66 of Part Six–Destroyed Land states the following:

- a. If land cannot be defined due to a natural event because it has changed from its original shape and cannot be functioned, used, or reused as it should be, it is declared destroyed land, and the right to manage and/or land is proclaimed to be abolished.
- b. The identification, inventory, and assessment steps are used to determine devastated land as indicated in paragraph (1).
- c. Prior to being recognized as destroyed land, holders of management rights and/or land rights are given precedence to carry out land use reconstruction or reclamation.
- d. If the Central Government, Regional Government, or other parties carry out the reconstruction or reclamation described in paragraph (3), the holder of management rights and/or land rights receives financial or spiritual aid.
- e. Ketentuan lebih lanjut mengenai Tanah Musnah diatur dalam Peraturan Menteri;

---

<sup>14</sup> Bagus Rahmanda, "Perlindungan Hukum Bagi Pengusaha Pemilik Tanah Akibat Musnahnya Tanah Oleh Bencana Alam Dan Kaitannya Dengan Pihak Ketiga," *Gema Keadilan* 6, no. 1 (2019): 63.

#### **4. Presidential Regulation No. 52 of 2022–the Management of Social Impacts on Destroyed Land: Development in the Public Interest**

According to Article 4 paragraph (3), parties eligible for spiritual financial support must meet the following criteria:

- a. Land Rights Holders who do not have priority rights to reconstruct or reclamate their land since it will be used for public projects;
- b. If the topic is an individual, the local sub-district or authorized agency must authenticate his or her identity or residential information;
- c. If the subject is a legal entity, it must have a legal entity establishment deed approved by the ministry in charge of government affairs in the sphere of law and human rights; and
- d. having proof of ownership, control, usage, and/or exploitation of land plots, whether registered or unregistered.

Managing Social Impacts in line with Article 5 entails the following:

- a. Preparations;
- b. Verification of parties eligible for spiritual assistance funds;
- c. Determination of Peace Fund aid; and
- d. Documentation and administration.

Entities requiring land must submit a plan paper to the Governor to handle social ramifications. Within 5 (five) days of receiving the Governor's document submission, form an Integrated Team. According to Article 7 paragraph (8), the Integrated Team conduct preparation in accordance with a work plan that contains at least:

- a. Agenda and timetable for dealing with social impacts;
- b. Funding strategy and operational funds for Handling Social Impacts implementation;
- c. Plan for material and equipment requirements;
- d. Recognize technical issues and roadblocks;
- e. Alternative strategies and solutions to challenges and restrictions;
- f. Budget estimate for Peace Fund assistance;
- g. Suggested list of parties eligible for spiritual support funds;
- h. Recommendations for mechanisms and procedures for assisting the Spirituality Fund; and
- i. Monitoring and assessment forms and processes.

According to Article 9, the Integrated Team will notify the Parties Entitled to Receive Community Fund Assistance through the Village Head/Village Head or other equivalent name within 5 (five) days of the Integrated Team's formation. The notification is sent either directly through face-to-face contact or over the network (online) and/or indirectly through notification letters and/or announcements. Following that, the parties eligible to receive spiritual funds are validated, which is then signed by the Task Force's Head. Within 5 (five) days, the list of parties is announced at the sub-district/village office or other comparable name, sub-district office or other equivalent name, and construction location.

According to Article 13, the amount of spiritual fund for the Integrated Team is calculated based on the outcomes of identifying spiritual fund support. The amount of Peace Fund support is calculated as follows: land area x 25% (twenty five percent) of the tax object's sales value as assessed most recently by the competent authority. The tax item's sales value is

determined by regional officials in charge of provincial or district/city regional income and asset affairs. If the sales value of the final tax object for a plot of land has not been determined, use the sales value of the tax objects near the plot of land for which the sales value of the tax object has been computed. According to Article 17, payments to parties that are eligible for Spiritual Fund Assistance must be made no later than 2 (two) days following the determination of the land being damaged.

#### **5. Regulation No. 17 of 2021–the Minister of Agrarian Affairs and Spatial Planning of the National Land Agency: Procedures for Determining Destroyed Land**

The determination of destroyed land is governed by ATR/BPN Ministerial Regulation Number 17 of 2021–Procedures for Determining Destroyed Land. To implement the provisions of Article 66 paragraph (5) of Government Regulation Number 18 of 2021–Management Rights, Land Rights, Flats, and Land Registration, a Minister of Agrarian Regulation and Spatial Planning/Head of the National Land Agency is required in relation to Procedures for Determining Destroyed Land<sup>15</sup>. Article 2 explains the provisions on devastated land, which include the following:

1. Management and/or land rights are lost as a result of land destruction.
2. Destroyed land consists of pieces of land that:
  - a. It has altered from its initial form as a result of natural events
  - b. It can no longer be defined
  - c. Is unable to function, use, or utilize as it should.
3. The Head of the Land Office determines whether or not the land has been destroyed, verifies the loss of management rights and/or land rights, and documents the loss of management rights and/or land rights.

Article 3 goes into the procedures for determining devastated land, which can be done in phases, and includes the following:

- a. Location Determination;
- b. Establishment of the Destroyed Land Research Team;
- c. Socialization;
- d. Identification, Inventory and Assessment;
- e. Announcement;
- f. Reconstruction and reclamation implementation if the landowner says that he will carry out reconstruction and/or reclamation; and/or
- g. Issuing a decision deciding that land would be destroyed.

At the determination stage, the Head of the Land Agency Office determines the location of land plots recognized as destroyed land based on the findings of monitoring and assessment activities or notification information from central, regional, or community agencies or other parties. To determine the location, it is equipped with a location map and preliminary data on plots of land identified as destroyed land, including at least the name of the right holder, type and number of rights, measuring certificate number, land parcel identification number, village/sub-district, land location sub-district, land area, use/utilization of land, and/or registration records or other records. The destroyed soil research team's functions must be completed within 90 days after the date of the Decree on the Formation of the Destroyed Soil

---

<sup>15</sup> Embun Sari et al., "Politik Hukum Pengadaan Tanah Terhadap Tanah Abrasi Pasca Diberlakukan Undang-Undang Cipta Kerja," *Jurnal Ius Constituendum* 7, no. 1 (2022): 50.

Research Team. At least once, socialization activities are carried out at the village/district office where the land is located or at the designated location. Followed by land identification and inventory, covering its rights, certificate of land ownership or other rights, land ownership, land usage, current land condition, land area marked as destroyed land, and land borders. The destroyed land research team addresses the legal foundation for the abolition of management rights and/or Land Rights, as well as the elaboration, supporting data, assessment, conclusion, and recommendation for destroyed land that is designated to be destroyed in part or in whole. Article 4 governs Location Determination, which states: "The Head of the Land Office determines the location of the Land plots, which is indicated as destroyed land, referring to the following aspects<sup>16</sup>:

- a. Outcomes of monitoring and evaluation activities; or
- b. Information or notification from central government agencies, regional governments, the community or other parties.

The announcements regulated in Articles 11,12,13 are as follows:

1. The Land Office's Head declares the plot of land that will be declared as destroyed land.
2. The notification intends to prioritize holders of management rights and/or land rights for reconstruction or reclamation.
3. The announcement is made in a list that includes:
  - a. Land tract serial number
  - b. Rights holder
  - c. Land status
  - d. Object description
  - e. Use/utilization
  - f. Registration information
  - g. Field research findings.
4. Completed openly and written at the sub-district/village office or other location where the land is located, the Land Office, or on the ministry's website.
5. Performed for 14 calendar days.
6. Holders of management rights and/or land rights who will carry out reconstruction or reclamation must submit a declaration letter during the announcement period.
7. If the holder of management rights and/or land rights does not make a statement, it is assumed that they will not undertake rebuilding or reclamation, and the plot of land is labeled as devastated land.

Article 15 explains that if a land plot will be used and/or will be reconstructed or reclaimed by the Central Government/Regional Government or other parties, particularly for the development of public interest, then the holder of management rights and/or land rights is not given priority to implement reconstruction or reclamation and land plots designated as destroyed land. Meanwhile, Paragraph (2) specifies that holders of management rights and/or land rights receive financial support if the plot of land is utilised and/or reconstruction or reclamation is carried out by the Central Government or Regional Government.

---

<sup>16</sup> Emma V T Senewe Patrick William Renaldy Malangkas a, Ronald J Mawuntu b, "Konsekuensi Yuridis Diskresi Pejabat Syahbandar Pelabuhan Manado Terhadap Penetapan Lokasi Kegiatan Bongkar Muat Di Kecamatan Malalayang Yang Berdampak Hilangnya Pendapatan Negara," *Jurnal Civic Education: Media Kajian Pancasila dan Kewarganegaraan* 7, no. 1 (2023): 11-12.

High catastrophe intensity causes relatively serious damage, such as lost land borders, changes in land boundaries, and even land destruction, where the land is used as a house and a place to carry out life-fulfilling activities. Disasters such as earthquakes and abrasion, tsunamis, and landslides cause the condition. Aside from the physical condition of the land, disasters can cause damage or even the loss of proof of claim to property rights if not saved. Soil is the earth's surface layer that is generated from parent material that has been further processed as a result of natural changes induced by water, air, and a variety of living and dead species. The composition, structure, and color of weathering results demonstrate the degree of change.<sup>17</sup> Soil can alternatively be defined as a collection of natural things on the earth's surface that are arranged in horizons and are made up of a mixture of mineral components, organic materials, water, and air.<sup>18</sup> According to Kamilah, there are two principles in land law that contradict each other: the concept of vertical connection (*verticale accessie beginsel*) or the principle of accessie and the principle of horizontal separation (*horizontale schelding beginsel*). It is attached to it as a unit that is stuck as one.

Government Regulation No. 24 of 1997, Article1, defines land registration as a sequence of operations carried out by the government constantly, consistently, and regularly. The activities include collecting, processing, presenting, and maintaining physical and juridical data. Furthermore, land plots and apartment units should have documented proof of ownership, ownership rights, and certain rights encumbering them in the form of maps and lists. Referring to the aforementioned definition, land registration is a series of activities carried out by the government continuously and sustainably. The activities involve collecting, processing, accounting, presenting and storing physical data and juridical data in the form of maps and lists—land plots and flat units, as well as verification of registered property rights<sup>19</sup>.

If the land destroyed violates Articles 27, 34, and 40 of Law Number 5 of 1960 ---Changes to the Basic Agrarian Principles, land rights are abolished. A disaster occurs beyond humans capacity and is unavoidable. As a result, it is critical for disaster-affected landowners to give assurance and maintain the legal status of their land rights. The losses incurred as a result of a disaster are not trivial. In such cases, the government must ensure the restoration of natural disaster-affected land rights, including re-measuring confusing land boundaries caused by the earthquake. According to Article 6 of the Government Regulation in Lieu of Law Number 2 of 2007, land, whether registered or not, identifiable or not, will be re-measured and the boundaries will be determined based on an agreement between the land rights holder or heir and the local community, sub-district, gampong or village officials, as well as the Head of the Land Office. A land title certificate will thereafter be issued.<sup>20</sup>

---

<sup>17</sup> Michelle Fauziek and Andryan Suhendra, "Efek Dari Dynamic Compaction (DC) Terhadap Peningkatan Kuat Geser Tanah," *JMTS: Jurnal Mitra Teknik Sipil* 1, no. 2 (2018): 205.

<sup>18</sup> Mahfud Arifin et al., *Pengaruh Posisi Lereng Terhadap Sifat Fisika Dan Kimia Tanah Pada Inceptisols Di Jatiningor*, *SoilREns*, vol. 16, 2019.

<sup>19</sup> Stella Defany Muslim and Fransiscus Xavierius Arsin, "Penerapan Asas Terang Dan Tunai Dalam Jual Beli Hak Atas Tanah Yang Hendak Dibatalkan Sepihak," *Jurnal Supremasi: Jurnal Ilmiah Ilmu Hukum* 13, no. 2 (2023): 60-69.

<sup>20</sup> Ilham Adi Negara, "Pertanggungjawaban Pidana Terhadap Tindak Pidana Penguasaan Tanah Tanpa Izin Berdasarkan Pasal 6 Peraturan Pemerintah Pengganti Undang-Undang Nomor 51 Tahun 1960 Tentang Larangan Pemakaian Tanah Tanpa Izin Yang Berhak Atau Kuasanya," *PAJOUL (Pakuan Justice Journal Of Law)* 2, no. 1 (2021): 1-15.

Based on the Legal System Theory according to Lawrence M Firdman, the Legal System is divided into 3 (three) components<sup>21</sup>: Legal Structure, Legal Substance, Legal Culture. Regulation changes in Physical Data–Destroyed Land by Natural Disasters are analyzed as follows:

- a. Legal Structure, In this case, the authorized agency is the National Land Agency, which already has legal mechanisms in place. the ATR BPN ministry manages the interaction between people and land, which is regulated by the State as the Head of the Land Office stated that they could handle it. The National Administrative Board has regulated a preventive action towards a natural disaster, particularly in Kuningan Regency, notably by digitalization, so that the certificate is electronic and the data is safer.
- b. Legal Substance, the regulations clearly identify destroyed land, land registration, and the elimination of rights. The law on job creation stressed the most recent registration provisions. Nonetheless, the amount of spiritual funds obtained has yet to be discovered. As a result, there was an element of injustice where the value did not match the original land area. Furthermore, holding land registration means serving as strong evidence, so if the amount does not correspond to the prior area, it deems inconsistent with the legal goal—the justice. The following are the rules that govern devastated land:
  - 1) Basic Agrarian Principles Regulations Act No. 5 of 1960
  - 2) Law No. 48 of 2007–the Stipulation of Government Regulations in Place of Law No. 2 of 2007–the Handling of Legal Issues in the Context of Implementing Rehabilitation and Reconstruction of Areas and Community Life; Nanggroe Aceh Darussalam Province and the Nias Islands, North Sumatra Province
  - 3) Government Regulation No. 18 of 2021 relating to Management Rights, Land Rights, Flats, and Land Registration
  - 4) Presidential Regulation No. 52 of 2022 Concerning the Management of Social Impacts on Destroyed Land, the Development in the Public Interest in particular
  - 5) Regulation No. 17 of 2021 of the Minister of Agrarian Affairs and Spatial Planning of the National Land Agency–Procedures for Determining Destroyed Land
- c. Legal Culture, the community is still unaware of the significance of registering land as a certificate. As a result, when land is damaged, it is difficult to provide confirmation of rights. Accordingly, GPS global positioning system with the GNSS (Global Navigation Satellite System) and RTK (Real Time Kinematic) are employed to prepare the destruction of the land at any moment. One world will be the same because it is measured in a single global coordinate. So, if a natural disaster occurs, such as liquefaction or a tsunami, and the borders are no longer found, we may readily get the old coordinates. The database is accessible via the central data and land information server. BPN's server is in Cikeas, its security is in Batam, and another security is in the cloud. All you have to do is seek for the title number and other information, which is now made simple by technology. However, it is still regrettable that the residents of Kuningan Regency have not registered their land certificates, thus there is no solid legal protection if the land is damaged.

---

<sup>21</sup> Spiritual Sanivatun and Siti Ummu Adillah, "The Strength of Proof of Notary Deeds Made Electronically in E-Commerce Transactions in the Indonesian Legal System," *Tabellius Journal of Law* 1, no. 1 (2023): 180–188.

In other words, the land rights holders can restructure their land ownership status as long as the land is not substantially affected. As time passes, Indonesia's land sector adapts by utilizing digital technology to manage land ownership and administration data. The Job Creation Law No. 11 of 2021 and Draft Government Regulations Concerning Management Rights, Land Rights, Flats, and Land Registration support it. Certificates can also be issued electronically, making them easily replicable if they are damaged or lost. The initiative helps disaster-affected landowners protect their property rights. Now that a digital system exists, physical changes to the land and damage to land borders can be re-examined using existing digital data, including coordinates that have been registered with linked data.

### **Conclusion**

To summarize, the law changes in physical data on devastated land caused by natural disasters is comprehensive, which are as follows: Law No. 5 of 1960 relating to Basic Agrarian Principles Regulations. Law No. 48 of 2007 on Regulation Determination; Government Regulation No. 18 of 2021 on Management Rights, Land Rights, Flats, and Land Registration; Presidential Regulation No. 52 of 2022 on Handling Social Impacts on Land Identified as Destroyed Land in the Context of Development in the Public Interest; Regulation of the Minister of Agrarian Affairs and Spatial Planning of the National Land Agency Number 17 of 2021 concerning Procedures for Determining Destroyed Land.

The legal status of land rights affected by an earthquake is unaffected. It happens because the land object remains, but boundary reconstruction is required to restore the land boundaries. Another possibility is for the government to consolidate land in the disaster area and relocate it to a more earthquake-resistant area with community participation. The legal status of the land rights impacted by abrasion is destroyed since the land to which the land rights are attached is destroyed. The state cannot provide legal protection for destroyed land. The degradation of land, according to the UUPA, is one of the causes of the abolition of land rights. As a result, land loss caused by natural forces such as abrasion cannot be blamed on the state unless the government is demonstrated to have failed to take sufficient precautions.

### **Suggestion**

Despite the fact that the government has developed a Digital System, many people do not completely comprehend how it operates. As a result, it is desired that the government will conduct broader outreach of this initiative. Thus, it will greatly assist the community in managing the administration of their property rights. There are currently no concrete laws that control legal protection or assurances about people's civil rights, particularly if the boundaries of their land is no longer recognized as a result of a disaster. In this scenario, as stipulated by paragraph IV of the Preamble to the 1945 Constitution, the government's engagement in guaranteeing victims' rights is crucial. In reality, the government's handling of the matter is slow. Furthermore, they have not offered sufficient knowledge about the built-in digital systems. Therefore, it would be highly beneficial if the government, particularly the National Land Agency, could adopt regulations that control and simplify the process for people who have lost their civil rights--- the land lost or unrecognizable land due to natural disaster.

## References

- Aji, Iman Wahyu. "Penyelesaian Sengketa Tanah Akibat Bencana Alam Di Kecamatan Bruno, Kabupaten Purworejo." *Amnesti Jurnal Hukum* 2, no. 2 (2020): 103-113.
- Apriani, Desi, and Arifin Bur. "Kepastian Hukum Dan Perlindungan Hukum Dalam Sistem Publikasi Pendaftaran Tanah Di Indonesia." *Jurnal Bina Mulia Hukum* 5, no. 2 (2021): 220-239.
- Arief, Gratia. "Tinjauan Yuridis Sertifikat Hak Tanggungan Yang Di Terbitkan Melalui Sistem Elektronik Menurut Peraturan Menteri Agraria Dan Tata Ruang/Kepala Badan Pertanahan Nasional No. 5 Tahun 2020 Tentang Pelayanan Hak Tanggungan Terintegrasi Secara Elektronik." *Jurnal Prespektif Hukum* 3, no. 1 (2022): 81-91. <http://journal.um-surabaya.ac.id/index.php/JKM/article/view/2203%0Ahttp://mpoc.org.my/malaysian-palm-oil-industry/>.
- Arifin, Mahfud, Novarina Darmawan Putri, Apong Sandrawati, and Rachmat Harryanto. *Pengaruh Posisi Lereng Terhadap Sifat Fisika Dan Kimia Tanah Pada Inceptisols Di Jatinangor*. *SoilREns*. Vol. 16, 2019.
- Asmara, Hidayah Nur. "Implementasi Undang-Undang Nomor 24 Tahun 2007 Tentang Penanggulangan Bencana Di Samarinda." *Nomos: Jurnal Penelitian Ilmu Hukum* 3, no. 3 (2023): 84-91.
- Badan Nasional Penanggulangan Bencana. (2021, Juli). *Bencana Indonesia 2020: Sebaran Kejadian Bencana Alam Tanggal 1 Januari - 31 Desember 2020, 2022*.
- Fauziek, Michelle, and Andryan Suhendra. "Efek Dari Dynamic Compaction (DC) Terhadap Peningkatan Kuat Geser Tanah." *JMTS: Jurnal Mitra Teknik Sipil* 1, no. 2 (2018): 205.
- Ilham Adi Negara. "Pertanggungjawaban Pidana Terhadap Tindak Pidana Penguasaan Tanah Tanpa Izin Berdasarkan Pasal 6 Peraturan Pemerintah Pengganti Undang-Undang Nomor 51 Tahun 1960 Tentang Larangan Pemakaian Tanah Tanpa Izin Yang Berhak Atau Kuasanya." *PAJOU (Pakuan Justice Journal Of Law)* 2, no. 1 (2021): 1-15.
- Isnantiana, Nur Iftitah. "Hukum Dan Sistem Hukum Sebagai Pilar Negara." *Jurnal Hukum Ekonomi Syariah* 2, no. 1 (2019): 19.
- Jaelani, Abdul Qodir, and Siti Munawaroh. "Penerapan Pendaftaran Tanah Di Kantor Pertanahan Di Wilayah Kota Surabaya 2." *Judiciary: Jurnal hukum dan Keadilan* 12, no. 1 (2023): 105-120.
- Jayadi Setiabudi. *Tata Cara Mengurus Tanah, Rumah Serta Segala Perizinannya*. Jakarta: Suka Buku, 2012.
- Kunu, Andi Bustamin Daeng. *Kedudukan Hak Menguasai Negara Atas Tanah. Fiat Justicia Jurnal Ilmu Hukum*. Vol. 6, 2012.
- Muslim, Stella Defany, and Fransiscus Xavierius Arsin. "Penerapan Asas Terang Dan Tunai Dalam Jual Beli Hak Atas Tanah Yang Hendak Dibatalkan Sepihak." *Jurnal Supremasi: Jurnal Ilmiah Ilmu Hukum* 13, no. 2 (2023): 60-69.
- Noval Kasim, dkk. "Kesadaran Hukum Masyarakat Dalam Memperoleh Sertifikat Hak Atas Tanah Di Kelurahan Tongano Timur Kecamatan Tomia Timur Kabupaten Wakatobi." *Jurnal Selami IPS* 12, no. 2 (2019): 7.
- Patrick William Renaldy Malangkas a, Ronald J Mawuntu b, Emma V T Senewe. "Konsekuensi Yuridis Diskresi Pejabat Syahbandar Pelabuhan Manado Terhadap Penetapan Lokasi Kegiatan Bongkar Muat Di Kecamatan Malalayang Yang Berdampak Hilangnya Pendapatan Negara." *Jurnal Civic Education: Media Kajian Pancasila dan Kewarganegaraan* 7, no. 1 (2023): 11-12.
- Pratami, Bunga Desyana, Rindiana Larasati, Sri Ratu Ratna Intan, and Iqbal Kamalludin. "Status Hukum Tanah Musnah Berdasarkan Permen ATR/BPN No. 17 Tahun 2021." *Jurnal Officium Notarium* 1, no. 2 (2021): 218-229.
- Rahmanda, Bagus. "Perlindungan Hukum Bagi Pengusaha Pemilik Tanah Akibat Musnahnya

- Tanah Oleh Bencana Alam Dan Kaitannya Dengan Pihak Ketiga.” *Gema Keadilan* 6, no. 1 (2019): 63.
- Sanivatun, Spiritual, and Siti Ummu Adillah. “The Strength of Proof of Notary Deeds Made Electronically in E-Commerce Transactions in the Indonesian Legal System.” *Tabellius Journal of Law* 1, no. 1 (2023): 180–188.
- Sari, Embun, Muhammad Yamin, Hasim Purba, and Rosnidar Sembiring. “Politik Hukum Pengadaan Tanah Terhadap Tanah Abrasi Pasca Diberlakukan Undang-Undang Cipta Kerja.” *Jurnal Ius Constituendum* 7, no. 1 (2022): 50.
- Sri Murni, Christiana. “Peralihan Hak Atas Tanah Tanpa Sertifikat.” *Lex Librum: Jurnal Ilmu Hukum* 4, no. 2 (2018): 680–692.
- Tiara Dwi Rahayu, Yani Pujiwati, Betty Rubiat. “Kepastian Hukum Kepemilikan Hak Tanah Setelah Mengalami Likuefaksi Tanah.” *LITRA: Jurnal Hukum Lingkungan Tata Ruang dan Agraria* 2, no. 18 (2023).
- Yamin, Muhammad, and Zaidar Zaidar. “Pendaftaran Tanah Dalam Mewujudkan Kepastian Hukum Atas Kepemilikan Tanah Dan Upaya Meminimalisir Konflik Pertanahan.” *Jurnal Hukum Samudra Keadilan* 13, no. 2 (2018): 201–210.

*How to Cite :*

Anugrah, Dikha, et.all. “Regulation of Physical Data on Land Destroyed by Natural Disasters”  
*Unifikasi: Jurnal Ilmu Hukum* 10.2 (2023): 124-135.