



Legal Analysis of Traditional Transportation for Environmental Cleanliness Handling

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Abstract

This research focuses on analyzing the legal provisions that govern the traditional transportation policy of *delman* in relation to environmental cleanliness in Kuningan Regency. The research method used is normative legal research with a descriptive approach, by examining laws and regulations and related to factual conditions in the field. Primary legal materials include Kuningan Regency Regional Regulation Number 5 of 2010 concerning Non-Motorized Vehicles and Law Number 32 of 2009 concerning Environmental Protection and Management, while secondary legal materials are in the form of legal literature, scientific journals, and the results of interviews with the Transportation Agency. The results of the study show that regulations regarding *delman* operations are available, but they are still general and have not yet detailed regulations on environmental cleanliness obligations. The implementation of the policy by the Transportation Department through socialization, coaching, and monitoring has not been running optimally, marked by the still finding horse manure on public roads. The main obstacles include limited supervision, lack of supporting facilities, and low awareness of some *delman* coachmen. The conclusion of the study emphasizes the need to strengthen more specific regulations, increase the effectiveness of supervision, and provide adequate hygiene facilities. These efforts are expected to be able to maintain the sustainability of traditional transportation while creating a clean, orderly, and comfortable public environment.

Keywords: Traditional transportation; *delman*; environmental cleanliness; legal policy; Transportation Office.

INTRODUCTION

Transportation is an inseparable part of human life, because its existence greatly affects various aspects including economic, social, and cultural (Yacob, 2017). Among the various types of transportation that are developing in Indonesia, one of them is land transportation that has an important message from the past to the present. Although transportation technology is developing in some areas, there are still many who use animal power as a means of transportation for daily expenses. One type of traditional transportation that still survives to this day is *delman* (Dokar, n.d.), in some areas there are still many who use traditional transportation such as *delman* as a means of transportation because it is considered simple, and low cost.

The use of *delman* transportation as a traditional transportation does not only survive in some areas, but also in several points such as market areas and city centers (Wulan Sari, 2023). One of them is in Kuningan Regency, West Java, which still uses traditional *delman* transportation such as *delman* for daily activities such as delivering goods and delivering passengers around the market area or city center. The existence of *delman* in Kuningan, shows that traditional transportation still has an important role in meeting the needs of the local community, even in the midst of the development of modern transportation. However, currently the existence of *delman* transportation in Kuningan is on the verge of extinction as a result of modernization. This can be seen from the decrease in the number of *delman* transportation, originally the number of dokar or *delman* in

Kuningan Regency was recorded at 1,200 units (Asih, 2021). Meanwhile, based on the records of the Kuningan Regency Agriculture Office, it was noted that in 2008 the population of horses was 605 heads, then in 2015 there were only 478 units left. Meanwhile, in 2020 there are around 400 left and in 2025 only 165 *delman* remain still operating in Kuningan. However, behind its role, *delman*'s operations also have consequences that need to be considered, especially when it comes to the environment around the path traveled.

Environmental problems are natural problems, i.e. events that occur as part of natural processes (Y. D. Sari & Handoko, n.d.). *Delman* activities that use horses as a means of transportation often cause problems, most means of transportation often cause problems, most of these transportation facilities seem dirty, smelly, and dirty. As a result of the dirt emitted by the *delman*, the cleanliness of the environment is disturbed (Herlina, 2020). The large amount of horse manure scattered on the road, this condition causes an unpleasant odor, disturbs the comfort of other road users, and reduces public aesthetics and cleanliness. Efforts to maintain environmental cleanliness are not solely the responsibility of government institutions, but also require active participation from the community, as behavioral change toward clean and healthy living practices is most effectively achieved through collaborative models involving multiple community actors (Permana, Bharoto, Herlina, Mulyatini, & Bukhori, 2024). The lack of initiative of some coachmen to accommodate dirt makes the problem even more pronounced, especially in areas that are crowded with community activities, therefore there are many complaints from the surrounding community because it interferes with their activities. This situation can be clearly seen around the Cilimus market, where many traders on the side of the road are passed by *delman*. So that the unpleasant smell is very disturbing to the people who sell in the area. Therefore, local governments have a responsibility to ensure that transportation operations continue to run without disturbing public order and cleanliness. Efforts to regulate and enforce policies are important so that the existence of *delman* can be maintained without causing a negative impact on the environment (Nursopa, 2023).

The problem of horse manure that is not handled properly shows that *delman*'s operations have a direct impact on the environment. Dirt scattered on public roads not only causes unpleasant odors, but also interferes with the comfort of road users and reduces the quality of public spaces. This condition illustrates that the management of cleanliness in traditional transportation is still not optimal and requires special attention from related parties. In these conditions, the local government has the responsibility to ensure that the use of traditional transportation does not cause disturbances to the order, comfort, and cleanliness of the environment. The government needs to organize, coach, and supervise so that *delman* operations can still be maintained without presenting negative impacts to the community. The existence of clear and enforceable rules is important as the basis for managing traditional transportation in public spaces (Hariyati, 2025).

The novelty of this research lies in three fundamental aspects. First, this study combines normative legal analysis (a review of laws and regulations) with an empirical approach (interviews with the Transportation Agency) to comprehensively examine the regulation and implementation of horse-drawn carriage (*delman*) environmental cleanliness. Second, this study develops a policy

effectiveness analysis framework by integrating Soerjono Soekanto's legal effectiveness theory (legal factors, law enforcement officers, facilities and infrastructure, public legal awareness, and legal culture) to systematically identify factors inhibiting the implementation of Regional Regulation Number 5 of 2010. Third, this study provides specific and measurable policy recommendations, both from the aspect of regulatory reformulation (strengthening technical cleanliness obligations, monitoring mechanisms, and sanctions) and operational aspects (improving supporting facilities, strengthening supervisory capacity, and increasing legal awareness of horse-drawn carriage drivers). This novelty is important because it provides a practical contribution to local governments in balancing the preservation of traditional transportation with the management of public environmental cleanliness.

Regulations regarding non-motorized vehicles, including *delman*, have been outlined in the Kuningan Regency Regional Regulation Number 5 of 2010. The regulation contains an obligation for every user of non-motorized vehicles to maintain order, security, and cleanliness when on public roads. This provision is an important basis for assessing how local governments regulate and enforce environmental cleanliness related to *delman* operations (UMSU, 2022).

RESEARCH METHODS

This research used a normative legal approach with a qualitative research type. The normative legal method is carried out by studying written legal materials in the form of laws and regulations, legal principles, related to traditional arrangements and environmental cleanliness. This study examines related regulations (Nanda, Apriyana, Azis, & Sutrisno, 2025), such as Regional Regulation Number 5 of 2010 concerning non-motorized vehicles and Law Number 32 of 2009 concerning Environmental Protection and Management.

The data in this study was obtained through the study of hukum materials by collecting primary legal materials and secondary legal materials, in addition to this research is also supported by data from interviews with the Kuningan Regency Transportation Office to strengthen the analysis of the implementation of traditional transportation policies in the field.

The research analysis was carried out in a descriptive manner to describe the social phenomena that occur in the implementation of traditional transportation policies related to environmental cleanliness. According to Soerjono Soekanto, qualitative approach is a research procedure that produces descriptive data in the form of written and spoken words from observed behavior (Soekanto, 2014). This approach is used to understand legal phenomena more deeply so that the research not only examines legal provisions, but also their implementation in society.

RESULTS AND DISCUSSION

The results of the study show that the existence of traditional *delman* transportation in Kuningan Regency is still maintained and used by the community as one of the traditional means of transportation that has cultural and social value. The existence of *delman* has also been recognized in Regional Regulation Number 5 of 2010 concerning non-motorized vehicles as part of vehicles that can operate on public roads. In its implementation, various problems related to

environmental cleanliness are still found, especially due to horse manure scattered on public roads and causing disturbances to comfort, cleanliness, and public health. This condition shows that *delman* operations are not only related to the transportation aspect, but also have a relationship with environmental law regulations.

This study discusses the legal provisions in regulating traditional transportation policies related to cleanliness, both in terms of normative regulation and its implementation in the field.

Legal provisions in the regulation of traditional transportation related to environmental cleanliness

Legal provisions regarding traditional *delman* transportation are regulated in Kuningan Regency Regional Regulation Number 5 of 2010 concerning non-motorized vehicles. In the regulation, *delman* is allowed to operate by paying attention to aspects of order, security, and public roads. In addition to the regional regulation, the results of research with an interview with Mr. M. Satria Ardhi S.Pw (2026) the transportation section of the Kuningan Transportation Agency show that there are additional policies in the form of the latest decree (SK) issued by relevant agencies to strengthen the operational arrangements of *delman* in the field. The provisions on environmental cleanliness in the regulation are still general and have not been regulated in detail, there are no technical provisions that specifically regulate the responsibilities of coachmen in handling waste or animal waste during operation.

The applicable legal provisions have actually provided a basis for regulation of environmental cleanliness but are not yet strong enough in providing technical legal certainty. As a result, the implementation in the field is highly dependent on the awareness of each coachman and additional policies from the local government (Nurhayati, 2021). Furthermore, based on findings in the field, this situation has an effect on the presence of horse manure on a number of public routes. This indicates that general legal regulations have not succeeded in encouraging maximum compliance from *delman* coachmen in maintaining environmental cleanliness. According to the results of an interview with the Kuningan Regency Transportation Office, the implementation of the policy has been carried out through various means such as socialization, guidance, and monitoring. Monitoring is carried out regularly, even up to once a week, with officers who go to the location, especially in crowded areas. Although the number of *delman* transportation is now 165 units consisting of ornamental *delman* and conventional *delman*. However, due to the limited number of supervisory members, it still does not cover all *delman* operations optimally and one of the obstacles in the implementation of supervision.

Maintaining environmental cleanliness, the Kuningan Regency Transportation Office has given an appeal to coachmen not to let *delman* dirt pollute public land. However, in its implementation there are still problems related to the unavailability of adequate hygiene support facilities. In some situations, the *delman* coachman still needs to prepare his own cleaning equipment, such as carrying water or cleaning equipment. As a result of the analysis, even though there are legal provisions and implementation efforts in the field of environmental cleanliness management in traditional transportation operations, *delman* is still not carried out optimally

(Marlina, 2022). This shows that there is a difference between the law and its implementation in the field, so it is necessary to strengthen more detailed regulations and increase supervision and supporting infrastructure to create a clean and orderly environment.

The effectiveness of the regulation of traditional transportation in maintaining the cleanliness of the environment can be seen the purpose of the law, according to Gustav Radbruch, there are 3 (three) basic values that are the legal objectives. This is based on the reality that legal justice often clashes or there is an inequality with the usefulness and certainty of the law. First, from the aspect of legal certainty, the rules listed in the Kuningan Regency Regional Regulation Number 5 of 2010 still do not provide firm certainty because they do not regulate in detail the technical obligations of *delman* coachmen in handling animal waste. The absence of clear regulations on waste management mechanisms, the obligations of container providers, and the consequences for violations make legal norms general and can be interpreted in various ways. As a result, compliance on the ground becomes weak due to the lack of clear guidance for perpetrators. Second, the aspect of the usefulness of the applicable regulations has actually contributed in the form of recognition of the existence of traditional transportation and efforts to maintain public order. However, these benefits have not been maximized in terms of environmental cleanliness, because there is still horse manure on public roads that interfere with the comfort of residents. This shows that the law has not fully played a role as a tool to create a clean and healthy environmental state. Finally, there is the aspect of justice, according to Gustav Radbruch, which is an important contribution to legal thought, which integrates legal certainty, morality, and humanity in a holistic framework (Nadia Nurhalija, 2025). Therefore, the conditions that occur show that there is an imbalance between the interests of the *delman* coachman and the road user community. On the one hand, the *delman* coachman is given the right to operate, but on the other hand, the community must bear the negative impact in the form of environmental exposure.

Seeing the effectiveness of a regulation, it is not necessary to have legal norms alone, but there needs to be harmony between the substance of the law, the structure of law enforcement, and the legal culture of the community. The operation of traditional transportation in these three aspects has not been completely balanced. Legal material that is still general causes a lack of clear technical guidance, while in terms of structure, the limitations of supervisors are an obstacle in carrying out comprehensive supervision. The culture of community law, especially among the *delman* coachmen, has not fully described the awareness of maintaining environmental cleanliness as a legal responsibility. If viewed from the role of law as a tool of social engineering, then the law should encourage a change in the attitude of society towards a more positive one. Regulations on environmental cleanliness in *delman* operations should not only be in the form of appeals, but also equipped with mechanisms that can force or encourage compliance, both through intensive and the application of sanctions. However, according to the results of the study, there is no clear regulation that stipulates sanctions. According to the results of the research, there is no clear regulation that stipulates sanctions for *delman* coachmen who do not maintain environmental cleanliness, so that the power of the law becomes weak.

Coordination between agencies is also something that must be considered. Environmental cleanliness management is not only the task of the Transportation Office, but also involves other institutions such as the cleaning or environmental office. Lack of good coordination can result in policies that have been prepared cannot be implemented comprehensively in the field. Thus, collaboration between agencies is needed so that environmental cleanliness management in *delman* operations can be carried out more efficiently and comprehensively. From the aspect of facilities and infrastructure, the existence of supporting facilities such as waste disposal sites or water sources to clean animal manure is very crucial. Without these facilities, the obligation to maintain cleanliness becomes difficult to carry out properly. In this study, it has been found that the plan to provide water tap facilities has not been implemented due to limited funds. This indicates that the financial aspect also plays a role as one of the obstacles in the implementation of policies (Prasetyo, 2023).

The limited funds ultimately affect the lack of optimal provision of supporting facilities, which further has implications for the low level of compliance of coachmen in maintaining cleanliness. In other words, the absence of facilities is not only a technical problem, but also affects the effectiveness of law enforcement on the ground. In addition to external factors, internal factors from the *delman* coachmen also play a role in the implementation of policies. The level of awareness and legal compliance of each individual varies, so without strict supervision and clear regulations, the implementation of the obligation to maintain cleanliness becomes uneven. This can be seen from the existence of horse manure in several places on public roads, even though socialization and appeals have been carried out by the local government. The application of strict sanctions must also be considered as part of law enforcement efforts. The sanctions do not always have to be severe, but can be in the form of warnings, small fines, or other forms of administrative sanctions that can have a deterrent effect. With strict sanctions, it is hoped that the level of compliance of the *delman* coachman in maintaining environmental cleanliness can increase. Solving this problem needs to be done comprehensively by involving various parties and considering various related aspects.

The implementation of environmental cleanliness policies and handlings in *delman* operations

Based on the results of interviews with the Kuningan Regency Transportation Office, it shows that the implementation of policies is carried out through socialization, coaching, and monitoring activities on a regular basis in the field. Monitoring activities are carried out periodically, even can be carried out up to once a week, with officers who go directly to the location. In its implementation, the number of traditional transportation operating was recorded at around 165 units. which consists of conventional *delman* and ornamental *delman*. This figure shows that the existence of *delman* is still quite important so that it requires good management, especially in terms of environmental cleanliness. Regarding environmental cleanliness management, the Transportation Department has reminded coachmen to maintain cleanliness and not allow animal feces to damage public roads. In addition, there are efforts to provide supporting

facilities, although the implementation is still not optimal and, in some situations, coachmen must still provide their own cleaning equipment.

Based on the situation on the ground, horse manure is still seen on public roads which indicates that the implementation of the policy has not been fully effective (Fauzi, 2021). Influencing factors include the lack of awareness of some coachmen, the limited number of supervisory officers, and the optimality of hygiene support facilities and infrastructure that has not been achieved. Therefore, it can be analyzed that even though policies have been implemented through various efforts, handling environmental cleanliness in *delman* operations is still not running well. This indicates that there is a difference between the provisions of the law and its implementation in the field. This gap is basically due to the lack of technical and specific regulations in the applicable legal regulations. The applicable regulations are still general, so they cannot provide clear guidelines for *delman* coachmen to carry out their obligations to maintain environmental cleanliness. As a result, policy implementation relies more on personal awareness and persuasive approaches through socialization and invitations from local governments. To respond to the question of how the law regulates traditional transportation policies related to environmental cleanliness, it can be concluded that the current regulations are not fully effective in regulating the handling of environmental cleanliness. Therefore, it is necessary to strengthen more detailed and technical regulations, increase supervision, and provide proper facilities and infrastructure so that the policies that have been set can be implemented optimally in the field.

Analyzed in terms of legal effectiveness, this situation shows that the implementation of the policy has not fully achieved the desired goals. Law is basically not only a written regulation, but also a tool to direct people's behavior to be in line with existing norms (Rahardjo, 2021). Regulations related to environmental cleanliness in *Delman's* operation should encourage coachmen to consistently maintain cleanliness while on duty. However, according to the results found in the field, this has not been fully successful. The ineffectiveness was revealed from the still existence of horse manure on public roads even though the local government had made various efforts. This indicates that the methods used so far, such as socialization and development, have not been adequate to completely change behavior. In other words, the way it is implemented still needs to be supported by other, more powerful tools to improve compliance levels.

From the point of view of the legal structure, the limited number of supervisory officers is one of the main factors that contribute to the weak implementation of policies in the field. Unbalanced oversight results in not all violations being identified and responded to. As a result, there is no adequate deterrent impact for coachmen who violate environmental hygiene provisions. In this kind of situation, the existence of the law becomes less functional because it is not accompanied by consistent enforcement. On the other hand, from the perspective of legal substance, the applicable rules are still general and have not specifically regulated the mechanism for managing cleanliness in *delman* operations. The absence of technical provisions regarding the obligation to provide dirt collectors, cleaning procedures, or sanctions for violations makes coachmen not have strict guidelines in carrying out their responsibilities. This confirms the allegation that existing regulations have not been able to provide maximum legal certainty. From

the point of view of legal culture, the awareness of coachmen in maintaining environmental cleanliness is also a very influential aspect. Uneven legal awareness has resulted in the existence of attitudes.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that the legal provisions in regulating traditional transportation policies related to environmental cleanliness have been regulated in the Regional Regulation of Kuningan Regency Number 5 of 2010 concerning Non-Motorized Vehicles and supported by additional policies in the form of Decrees (SK) from related agencies. However, the arrangement is still general and has not regulated in detail the obligations of the *delman* coachman in maintaining the cleanliness of the environment, especially related to the management of animal waste during operations. In its implementation, the Transportation Agency has made various efforts, such as socialization, coaching, and monitoring regularly in the field. However, with the number of *delmans* reaching around 165 units, as well as limitations in supervision and supporting facilities, the implementation of the policy has not been running optimally. This is shown by the fact that horse dung is still found on public roads, which reflects the low level of compliance of some coachmen and the ineffective supervision in the field. Thus, it can be concluded that the existing legal provisions have not been fully effective in regulating the handling of environmental cleanliness in the operation of traditional *Delman* transportation. This is due to the lack of clear technical arrangements, limited supervision, and lack of facilities and infrastructure to support cleanliness.

REFERENCES

- Asih, Novhi Soviah. (2021). *Strategi Survival Kusir Dokar Pada Era Modernisasi di Kelurahan Purwawinangun Lebakkardin Kabupaten Kuningan*.
- Fauzi, Ahmad. (2021). Efektivitas Penegakan Hukum Lingkungan. *Jurnal RechtsVinding*, 10, 55.
- Hariyati, Yuli. (2025). Pengembangan Pupuk Organik Berbasis Kotoran Kuda melalui Pemberdayaan Masyarakat di Lingkungan Bromo. *SELAPARANG: Jurnal Pengabdian Masyarakat Berkemajuan*, 5(1), 3–5.
- Herlina, Nina. (2020). Permasalahan Lingkungan Hidup Dan Penegakan Hukum Lingkungan Di Indonesia. *Fakultas Hukum Universitas Galuh*, 2.
- Marlina, Rina. (2022). Implementasi Kebijakan Kebersihan Lingkungan di Ruang Publik. *Journal Administrasi Publik*, 9, 88.
- Nanda, Aninda Zilva, Apriyana, Zaeni Nadzif, Azis, Mohamad Feri, & Sutrisno, Endang. (2025). Penegakan Hukum Illegal Fishing Menggunakan Bahan Peledak Pada Perspektif Membangun Keadilan Lingkungan. *Jurnal Greenation Sosial Dan Politik*, 3(3), 5. <https://doi.org/https://doi.org/10.38035/jgsp.v3i3>
- Nurhayati, Siti. (2021). Kesadaran Hukum Masyarakat dalam Pengelolaan Lingkungan. *Jurnal Hukum Lingkungan Indonesia*, 7, 120.
- Nursopa, S. (2023). *Studi tentang Delman sebagai Sarana Transportasi Ramah Lingkungan dan Daya Tarik Wisata di Kecamatan Garut Kota*. Bandung.
- Permana, Ipik, Bharoto, Raden Mahendra Haryo, Herlina, Elin, Mulyatini, Nurdiana, & Bukhori, Bukhori. (2024). Community and School Collaboration Model to Encourage Clean and Healthy Living Behaviors in Remote Areas. *Prosiding Hapemas*, 4(1), 102–109.
- Prasetyo, Dedi. (2023). Pengaruh Sarana dan Prasarana terhadap Implementasi Kebijakan Publik. *Jurnal Kebijakan Publik*, 13, 102.
- Rahardjo, S. (2021). *Hukum dan Prilaku*.
- Sari, Wulan. (2023). *Eksistensi Delman Di Desa Cilimus Kabupaten Kuningan Dalam Arus Modernisasi (1990-2019)*.
- Sari, Y. D., & Handoko, W. (n.d.). *Pricing for Traditional Transportation in Malioboro, Yogyakarta City*.
- Soekanto, Soerjono. (2014). *Pengantar Penelitian Hukum* (1st ed.).
- UMSU, Tim Dosen Kesehatan Lingkungan. (2022). *Buku Ajar Kesehatan Lingkungan*. UMSU Press.
- Yacob, Dharwis Widya Utama. (2017). *Naskah Sumber Arsip Moda Transportasi Tradisional*. Jakarta: Arsip Nasional Republik Indonesia.