

Analysis of The Resolution of Traffic Accident Cases Involving Electric Bicycles in The Jurisdiction of The Sula Islands Police

Original Article

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Abstract

Traffic accidents involving electric bicycles in the Sula Islands continue to increase; however, regulatory gaps and low levels of safety awareness make case resolution by the police more complex, requiring adaptive and effective legal strategies that are aligned with local social conditions. This study aims to analyse the application of law, case resolution mechanisms, and factors influencing the handling of traffic accidents involving electric bicycles within the jurisdiction of the Sula Islands Police. The study is grounded in several theoretical and conceptual frameworks, including Progressive Law Theory, Public Policy Theory, Management Theory, Traffic Accident Concept, Electric Bicycle Concept, Restorative Justice Concept, Community Policing Concept, Case Resolution Concept, and Police Science Concept. A qualitative case study method is employed to examine empirical conditions and law enforcement practices. The findings indicate that law enforcement in electric bicycle accident cases is constrained by the absence of regional regulations, leading to reliance on supervision and appeals; case settlement therefore adopts an adaptive, restorative justice-oriented approach focused on victim recovery, accountability, and community involvement; and effectiveness is determined by officer competence, resource availability, and integrated, flexible working methods. Overall, this study underscores the urgency of strengthening local regulatory frameworks and institutional capacity to ensure legal certainty, public safety, and substantive justice in a sustainable manner.

Keywords: Electric Bicycles, Restorative Justice, Sula Islands Police, Traffic Accidents.

1. Introduction

Traffic accidents are a serious problem that directly impacts the safety, health, and socio-economic conditions of the community (Harun et al., 2024). Data from the Indonesian National Police Traffic Corps (Korlantas Polri) shows an increasing trend in the number of accidents from 131,678 cases in 2023 to 144,579 cases in 2024, reaching 79,422 cases in the first half of 2025. This increase is generally caused by the negligence of road users, low compliance with traffic rules, and high community mobility. The impact of accidents is not only physical injury, but also social conflict between the parties involved and an economic burden on the victims' families. These conditions emphasise the need for serious attention to risk factors, road user behaviour, and fair and proportional conflict resolution mechanisms in traffic accident cases.

In addition to conventional motor vehicles, traffic accidents now also involve non-conventional vehicles, particularly electric bicycles (Natallia Rungkat et al., 2023), whose use has increased rapidly in recent years (Mubalus, 2023). Electric bicycles are widely used by children and teenagers because they are considered practical, affordable, and environmentally



friendly (Hermawati et al., 2024). However, this increase in usage has not been accompanied by adequate understanding of safety and traffic rules. Electric bicycles are often used without safety equipment, even by underage users on public roads. This condition increases the risk of accidents and raises legal issues regarding the responsibility of the perpetrator and the restoration of the victim's rights. In addition, there is still a lack of public understanding that the use of electric bicycles is actually regulated in a limited manner in legislation (Pramudya, 2024)

The phenomenon of electric bicycle accidents also occurs in island regions, including the Sula Islands Regency, as seen in the accident on 14 April 2025 in Fatce Village, Sanana District, which involved a six-year-old child as the victim and a teenager riding an electric bicycle. This incident was recorded in Police Report LP/B/66/IV/2025/SPKT/POLRES KEP. SULA/POLDA MALUT and resulted in physical injuries and conflict between the victim and the perpetrator. This case reflects the increasing risk of accidents due to the improper use of electric bicycles. This situation highlights the importance of studies on safety, legal responsibility, and conflict resolution mechanisms in traffic accidents involving electric bicycles, particularly in areas with limited traffic supervision.

The number of electric bicycles in Indonesia has increased significantly in the last three years, from 15,000 units in 2021 to 132,000 units in 2023. This growth reflects the increasing public interest in electric bicycles as a practical and affordable alternative mode of transportation, especially among children and teenagers (Pramudya, 2024). However, this increase also poses new safety risks on the roads as many users do not yet understand the applicable rules of use and legal restrictions. This surge in the number of electric bicycles indicates an urgent need for effective regulations and clear legal mechanisms so that any accidents or violations can be handled fairly, effectively, and with a focus on recovery, especially in areas where traffic supervision is still limited.

The government has regulated the use of electric bicycles through Minister of Transportation Regulation No. PM 45 of 2020 concerning Certain Vehicles Using Electric Motors, which restricts the use of electric bicycles to special lanes and certain areas and requires a minimum age for users (Khairunnisa, 2024). However, this regulation is considered ineffective because it is not accompanied by strict legal sanctions, so that the public often considers violations of electric bicycle use to have no legal consequences (Rahmadani, 2023). This situation is exacerbated by the absence of explicit regulations regarding electric bicycles in Law No. 22 of 2009 concerning Road Traffic and Transportation, which has led to confusion regarding legal classification and a legal vacuum (Istiyanto et al., 2025). As a result, law enforcement officials find it difficult to determine the appropriate legal action when violations or accidents occur.

Data on electric bicycle accidents shows a significant upward trend nationally. The Indonesian National Police's Traffic Accident Data Centre recorded 652 electric bicycle accidents in 2023, which increased to 2,244 cases throughout 2024, with 647 cases occurring in the first semester and 1,760 cases in the first semester of 2025, of which 519 cases involved minors (Indonesian National Police's Traffic Accident Data Centre, 2025). At the regional level, the Sula Islands Police also recorded electric bicycle accidents, albeit in smaller numbers, ranging from 3 to 8 cases per year, with the majority involving children and adolescents. Although most of the victims suffered minor injuries, a number of cases caused conflicts between families due to the absence of a clear and structured resolution mechanism, highlighting the urgency of a more adaptive response at the local level.

This situation calls for an effective and contextual legal resolution strategy in handling electric bicycle accidents, particularly in the Sula Islands region. The absence of clear

regulations in legislation has caused legal uncertainty for victims and perpetrators and has made it difficult for the police to determine fair resolution measures (Riang et al., 2025; Maramis, 2024). Therefore, this study aims to analyse the legal settlement strategies applied by the Sula Islands Police, identify regulatory and practical obstacles, and evaluate the role of mediation and local wisdom in case settlement. The novelty of this research lies in its focus on the police station level with an approach that integrates legal, social, and local aspects to produce adaptive and sustainable resolution recommendations.

2. Literature Review

2.1. Progressive Legal Theory

The progressive legal theory developed by Rahardjo (1991) views law as a means to achieve social justice and humanity, rather than merely a set of rigid and formalistic norms. Law must be able to respond to social dynamics and resolve real issues faced by society by prioritising moral values, justice and the public interest. The main principles of progressive law include a bias towards humanity and victims, the dynamic and adaptive nature of law to social change, and the use of non-formal resolution mechanisms such as mediation and restorative justice. From this perspective, law enforcement officials do not only act as enforcers of the rules, but also as protectors of society who are responsible for realising substantive justice (Soekanto, 2006).

The function of progressive law lies in its ability to create substantive justice that is truly felt by both victims and perpetrators through conflict resolution that emphasises the restoration of social relations. This approach is in line with the principles of restorative justice, which encourages deliberation, perpetrator responsibility, and restoration of victim losses (Zehr, 2002). The implementation of progressive law requires the active involvement of law enforcement officials and the community in a flexible and participatory case resolution process. Consistent application not only reduces the burden on judicial institutions but also increases victim satisfaction, strengthens legal awareness, and rebuilds public trust in a more humane and responsive legal system (Lubis et al., 2024)

2.2. Public Policy Theory

Public policy is not only understood as a narrow instrument of government, but also as part of broader governance in managing public resources for the benefit of society. Policy is the result of the interaction of various ideas, theories, ideologies, and interests within a country's political system. Eulau and Prewitt (1973) define public policy as decisions made consistently and repeatedly by policymakers and those who implement them Agustino (2012). Agustino (2012) views policy as a series of actions to overcome obstacles in order to achieve certain goals, while Bridgman and Davis (2004) emphasise that policy includes what the government chooses to do and not to do. Policy can also be owned by non-governmental organisations as a form of public interest management (Winarno, 2007).

Bridgman and Davis (2004) explain that public policy has three main aspects, namely as an objective, as an authoritative choice, and as a hypothesis. As an objective, policy is directed at meeting the needs and expectations of the community and realising public welfare. As a legal choice of action, policies must have a clear legal basis and legitimacy so that they are binding and must be implemented by the competent authorities. Meanwhile, as a hypothesis, policy is based on cause-and-effect assumptions about human behaviour, including the provision of incentives and disincentives to achieve the desired results. Therefore, public

policy is not only a set of rules, but also a prediction that requires continuous evaluation (Hogwood & Gunn, 1984).

2.3. Management Theory

Management is generally understood as the process of planning, organising, implementing, and supervising resources to achieve organisational goals. George Terry (1972) defines management as the process of planning, organising, implementing, and supervising the efforts of organisational members and utilising all resources to achieve predetermined goals. A similar view is expressed by Robbins et al. (2014), which emphasises management as the process of planning, organising, directing, and controlling organisational activities. Sianipar et al. (2024) asserts that management is an effort to achieve goals through the management of human resources and other resources. This study uses George Terry's management theory through the stages of planning, organising, actuating, and controlling as the main analytical framework.

The stages of management according to George Terry include planning to set goals and strategies, organising to arrange resources and work structures, implementing to direct and motivate implementers, and supervising to ensure activities run according to plan. In addition, Terry (1972) explains the elements of management through the 5M concept, namely man, money, materials, machines, and methods. People are the most crucial element because they act as planners, implementers, and supervisors of the organisation. Finance supports operational continuity, materials and machines support production or service effectiveness, while methods ensure that work is carried out systematically and in a standardised manner. Integrated management of these five elements enables organisations to achieve their goals efficiently, effectively, and sustainably (Terry, 1972).

3. Methods

This study uses a qualitative approach with a case study method to gain an in-depth understanding of the legal resolution strategies applied by the Sula Islands Police in handling traffic accidents involving electric bicycles. The qualitative approach was chosen because it allows researchers to interpret the meaning, process, and experiences of subjects in their natural context (Denzin & Lincoln, 2011; Moleong, 2018). Case studies were used to answer questions of how and why related to conflict resolution practices in the field (Creswell, 2018). Data were obtained from primary sources through in-depth interviews and non-participatory observation, as well as secondary sources in the form of relevant documents and regulations (Sugiyono, 2013). Data validity is ensured through triangulation of sources and methods. Data analysis uses the interactive model of Miles et al. (2014), which includes data reduction, data presentation, and conclusion drawing and verification.

4. Results and Discussion

4.1. Legal Implementation in Traffic Accidents Involving Electric Bicycles

The enforcement of laws relating to traffic accidents involving electric bicycles in the Sula Islands faces serious challenges due to the lack of comprehensive regulations in the national traffic law system. Law No. 22 of 2009 only distinguishes between motorised and non-motorised vehicles without explicitly regulating electric bicycles. This situation has led to legal uncertainty, with law enforcement often depending on the interpretation of officials in the field. Nevertheless, every accident that occurs on public roads is still classified as a traffic

accident in accordance with Article 1 paragraph (24) of the LLAJ Law. Thus, electric bicycles are not outside the traffic law regime, but the application of the law is still general and does not provide adequate legal certainty for users and law enforcement officials.

Specific regulations on electric bicycles are only found in Minister of Transportation Regulation No. 45 of 2020, which classifies electric bicycles as certain vehicles with electric motors and restricts their operation to certain areas or lanes. However, this regulation has not been fully integrated with traffic laws and is not accompanied by detailed enforcement mechanisms at the regional level. As a result, the use of electric bicycles in the Sula Islands is unrestricted on roads alongside motor vehicles. The police still refer to the general provisions of the Road Traffic Law without the support of operational regional regulations, so that supervision and legal action against violations involving electric bicycles are limited and tend to be persuasive in nature.

Interviews with the Head of Traffic at the Sula Islands Police confirmed that accidents involving electric bicycles are still processed as traffic accidents. The source stated that:

“In principle, if an electric bicycle rider is involved in an accident on the road, either as the perpetrator or the victim, the incident is still categorised as a traffic accident.”

This statement shows that, normatively, the police continue to exercise their authority, even when faced with limitations in technical legal basis. Cases are handled through recording of incidents, examination of witnesses, and determination of responsibility, but are not yet accompanied by specific sanctions related to violations of electric bicycle use itself.

Based on field observations, electric bicycle users in the Sula Islands are predominantly children, including those below the minimum age as stipulated in Permenhub No. 45 of 2020. Many children ride electric bicycles without adult supervision and without safety equipment such as helmets. This condition indicates low compliance with safety regulations and weak supervision. In practice, the police prioritise a guidance approach involving parents, especially when accidents involve minors. This pattern shows that law enforcement has not been able to provide a deterrent effect due to regulatory limitations and authority in imposing strict sanctions.

From the perspective of Public Policy Theory, the issue of electric bicycles in the Sula Islands reflects the suboptimal function of policy as an instrument for managing public interests. According to Eulau and Prewitt (1973), public policy should consist of consistent and sustainable decisions. However, the absence of local regulations indicates that there are no clear and consistent policy options. Viewed from the concept of policy as an objective, the local government has not yet determined the direction of policy on whether electric bicycles will be restricted or integrated as an alternative mode of transportation. This ambiguity has implications for weak control over usage and an increased risk of traffic accidents.

Viewed as a legal (authoritative choice), the regulation of electric bicycles is still at the national level, so that local authorities lack the formal legitimacy to take decisive action. As a policy hypothesis, restrictions on age, operational areas, and safety obligations should reduce the risk of accidents, but because they are not implemented operationally in the regions, this hypothesis has never been tested. Within the governance framework, weak coordination between local governments, relevant agencies, and the police further exacerbates this situation. Therefore, comprehensive local policies are needed so that the use of electric bicycles can be regulated safely and orderly, providing legal certainty for the community and law enforcement officials.

4.2. Settlement of Traffic Accident Cases Involving Electric Bicycles Due to the Legal Vacuum within the Jurisdiction of the Sula Islands Police Resort

The settlement of traffic accident cases involving electric bicycles in the jurisdiction of the Sula Islands Police shows that there is a fundamental problem in the form of a lack of specific legal regulations. To date, there are no regional regulations or technical guidelines that explicitly regulate the position of electric bicycles in the traffic system. This situation has forced the police to be adaptive by using general traffic regulations and applicable criminal norms. As a result, case handling is often situational and depends on the assessment of officers in the field. This legal vacuum not only affects legal certainty but also determines the choice of case resolution mechanisms, whether through formal or non-litigation channels. Thus, the resolution of electric bicycle accident cases is not solely determined by legal events but also by the limitations of the available regulations as a basis for handling.

A concrete example of an electric bicycle accident in the Sula Islands is reflected in Police Report Number LP/B/66/IV/2025/SPKT/Polres Sula Islands/Polda Maluku Utara. The incident involved a six-year-old pedestrian who was hit by an electric bicycle rider who was a student. Based on the chronology of events, the accident occurred due to the rider's negligence in not paying attention to road conditions. This incident shows that electric bicycles have the potential to pose serious safety risks when used on public roads without clear regulations. The report became the basis for the police to begin handling the case. This case shows that even though electric bicycles are not specifically regulated, accidents caused by them are still subject to criminal law if they involve negligence and cause casualties.

Based on an interview with the Head of Traffic at the Sula Islands Police, it is known that the police still handle electric bicycle accidents even though there are no specific regional regulations governing them. The Head of Traffic emphasised that the main focus of the handling is not on the type of vehicle, but on the accident and its consequences. The source stated,

“We still handle accidents, but the basis used is still general traffic regulations. The main concern is whether or not there are victims and elements of negligence.”

This statement indicates that the authorities are using a general normative approach as a temporary solution. This reflects the police's efforts to continue providing legal protection to the community amid the lack of technical regulations on electric bicycles.

The technical handling of electric bicycle accidents in the field is carried out by the Traffic Accident Unit using the same procedures as for general traffic accidents. Based on an interview with the Head of the Traffic Accident Unit of the Sula Islands Police, every accident report is followed up through an investigation of the scene of the accident, examination of witnesses, and collection of information from the parties involved. The Head of the Traffic Accident Unit stated that:

“The type of vehicle is not an obstacle because what we look at is the chronology of events and the consequences.”

This approach emphasises that proving negligence is central to handling the case. Thus, even though electric bicycles do not yet have a clear legal classification, the investigation process continues to ensure legal accountability if criminal elements are found.

The next stage of handling the case is under the authority of the Criminal Investigation Unit, particularly in determining the classification of the criminal offence applied. The Head of the Criminal Investigation Unit of the Sula Islands Police stated that electric bicycle

accidents can be processed as criminal negligence if they result in injury or loss. The source emphasised that:

“Our focus is on the act and the consequences it causes, not merely the type of vehicle.”

Based on normative analysis, Article 360 of the Criminal Code forms the basis for criminal liability in such cases. This provision also has a counterpart in Article 474 paragraph (2) of Law Number 1 of 2023 concerning the Criminal Code. This shows that the absence of specific regulations does not prevent the application of general criminal norms to protect victims.

In practice, the absence of regulations on electric bicycles has encouraged the police to prioritise non-litigious settlement of cases through mediation mechanisms. This approach is chosen mainly in cases of accidents that do not result in fatalities. Based on an interview with the Head of Traffic at the Sula Islands Police Station, mediation is seen as the most realistic and proportionate solution. The source stated that:

“As long as the parties agree and the victim accepts, the settlement is carried out amicably so that the problem does not drag on.”

This approach aims to maintain social harmony and prevent further conflict in the community. Thus, mediation becomes an important instrument in balancing legal certainty, a sense of justice, and social stability.

The application of mediation in the settlement of electric bicycle accidents reflects the principle of restorative justice, which emphasises the restoration of the relationship between the perpetrator and the victim. In the process, the police act as facilitators who ensure that agreements are reached voluntarily without coercion. The Head of the Traffic Accident Unit of the Sula Islands Police explained that mediation is carried out by bringing the parties together to discuss responsibility, apologies, and forms of compensation. This approach provides space for victims to directly convey their needs and losses. On the other hand, perpetrators are encouraged to take moral responsibility. Thus, restorative justice not only stops the legal process but also produces a socially acceptable resolution.

The application of restorative justice in the Sula Islands is also influenced by the local wisdom values of the community. The mediation process often involves traditional leaders, religious leaders, or community leaders to create a conducive atmosphere for deliberation. The involvement of community leaders is considered to strengthen the legitimacy of agreements and increase compliance among the parties. This approach shows that case resolutions are not only based on formal regulations but also on the social values that exist in the community. By integrating local wisdom, the police are able to maintain social stability and prevent prolonged conflicts. This shows that restorative justice is implemented contextually and oriented towards the real needs of the people of the Sula Islands.

Theoretically, the practice of resolving electric bicycle accident cases at the Sula Islands Police Station is in line with Satjipto Rahardjo's Progressive Law Theory. Law is understood not as a rigid rule, but as a means to achieve substantive justice. The courage of the police to prioritise mediation and restorative justice demonstrates an orientation towards humanity and social recovery. From a progressive legal perspective, the success of the law is not measured by the severity of the sanctions, but by the achievement of a sense of justice felt by the parties. Thus, the practice in the Sula Islands reflects adaptive, responsive law enforcement that is oriented towards solving social problems in the absence of specific legal regulations.

4.3. Factors Influencing the Settlement of Traffic Accident Cases Involving Electric Bicycles in the Context of a Legal Vacuum within the Jurisdiction of the Sula Islands Police Resort

The settlement of traffic accident cases involving electric bicycles within the jurisdiction of the Sula Islands Police Resort is influenced by a combination of interrelated internal and external factors. The absence of specific regulatory provisions compels the police to rely heavily on managerial capacity and professional discretion at every stage of case handling. George R. Terry's management framework, which encompasses the elements of people, money, materials, machines, and methods, is therefore relevant for analysing the empirical conditions in the field. In this context, the effectiveness of case resolution is determined not only by legal norms, but also by the availability of resources, the competence of personnel, and the flexibility of working procedures. As stated by the Head of the Traffic Unit of the Sula Islands Police Resort:

"We continue to handle every accident, but the lack of regulations requires us to adjust to field conditions."

This statement indicates that non-regulatory factors play a significant role in determining the effectiveness of case settlement.

The human factor emerges as the most dominant element in resolving electric bicycle accident cases. The competence, experience, and communication skills of officers greatly influence the quality of crime scene processing, evidence collection, and mediation processes. The Head of the Traffic Unit noted:

"Our personnel understand general accident handling, but electric bicycle cases still require adjustments because there are no technical regulations."

This illustrates that conventional experience alone is not fully sufficient to address the characteristics of new forms of vehicles. The Head of the Accident Unit further added:

"Limited personnel numbers require us to divide tasks quickly, from crime scene processing to communication with victims' families."

These conditions demand that officers be not only technically professional, but also adaptive and humane, particularly when the perpetrators or victims are children.

Budgetary constraints constitute a crucial factor affecting the smooth handling of electric bicycle accident cases. Limited operational funding impacts officer mobilisation, the completeness of crime scene investigations, and traffic safety socialisation activities. The Head of the Traffic Unit revealed:

"Our budget allocation is limited and prioritised for routine activities, so additional programmes such as electric bicycle education have not been optimal."

This statement demonstrates that preventive efforts are often hindered by financial limitations. The Head of the Accident Unit also emphasised:

"Operational costs frequently become an obstacle, especially when incidents occur in remote areas."

Such budgetary limitations force officers to set priorities selectively, ultimately affecting the speed and depth of case handling.

The availability of materials, such as crime scene measurement tools, documentation cameras, operational vehicles, and safety equipment, significantly affects the accuracy of investigations into electric bicycle accidents. The Head of the Traffic Unit stated:

“Some of our equipment is outdated and limited in quantity, so it has to be used alternately.”

This condition has the potential to slow down data collection processes and increase the risk of inaccuracy. The Head of the Accident Unit added:

“When equipment is unavailable, we are compelled to use manual methods, which take considerably more time.”

Material limitations also affect socialisation activities due to the scarcity of banners, leaflets, and safety demonstration tools. This indicates that materials are not merely technical support, but also important instruments for prevention and public education.

Machines or operational equipment, such as official vehicles, crime scene reconstruction tools, IT devices, and communication equipment, serve as the main support for the effectiveness of police work. The Head of the Accident Unit of the Sula Islands Police Resort stated:

“Ageing and limited equipment affects both the speed and accuracy of our case resolution.”

This statement demonstrates that the quality of machinery is directly correlated with the professionalism of case handling. The Head of the Traffic Unit added:

“We conduct regular maintenance to ensure that the equipment remains operational, even though it is not yet fully ideal.”

In electric bicycle cases, limited technical measurement tools often result in analyses being conducted visually, which may reduce the precision of assessments regarding negligence.

Methods or working procedures function as the primary guidelines for ensuring consistency and accountability in case handling. The Head of the Accident Unit emphasised:

“We continue to follow standard operating procedures, but often need to adapt them to field conditions.”

Such flexibility is necessary because electric bicycle accidents frequently occur in densely populated residential areas and often involve minors. The Head of the Traffic Unit stated:

“Team coordination is key to ensuring that each stage proceeds in an orderly manner and that data remains accurate.”

However, the absence of specific technical guidelines for electric bicycles means that the methods applied still adopt standard operating procedures designed for conventional motor vehicles. Consequently, officers are required to improvise while maintaining principles of caution and safety.

The five management factors do not operate independently, but rather interact and influence one another in the practical process of case settlement. Budgetary constraints affect the availability of materials and machinery, while shortages of equipment increase the workload borne by personnel. The Head of the Accident Unit stated:

“When equipment is limited and personnel numbers are small, working methods must be truly efficient.”

This statement indicates that the success of case handling is highly dependent on the ability of officers to manage multiple limitations simultaneously. In the context of the legal vacuum surrounding electric bicycles, synergy among these factors becomes increasingly important to ensure that the case resolution process continues to uphold a sense of justice, legal certainty, and public safety protection.

Based on the analysis of human resources, budget, materials, machinery, and methods, it can be concluded that the handling of electric bicycle accident cases at the Sula Islands Police Resort still faces both structural and technical challenges. The Head of the Traffic Unit emphasised:

“We are doing our utmost with the resources available, but moving forward we require stronger regulatory support and more adequate facilities.”

This statement underlines the urgency of comprehensive system strengthening. Enhancing personnel competence, increasing budget allocations, upgrading equipment, and formulating specific technical guidelines for electric bicycles constitute strategic measures to ensure that case handling becomes more effective, consistent, and equitable. Accordingly, these factors should be understood as an integrated whole in efforts to improve traffic law enforcement.

5. Conclusion

This study concludes that the handling of traffic accidents involving electric bicycles in Sula Islands remains constrained by the absence of specific local regulations, despite the existence of a national legal framework governing road traffic. As a result, law enforcement actions are largely limited to supervision, appeals, and adaptive measures, with low public compliance further increasing accident risks. In responding to this regulatory gap, the Sula Islands Police Resort has adopted an adaptive and restorative justice-oriented approach, emphasising victim recovery, offender responsibility, and social harmony through mediation, community engagement, and proportional enforcement.

The effectiveness of case settlement is shaped by the interrelated factors of human resources, budget, materials, machinery, and working methods. Officer competence and communication skills emerge as the most decisive elements, particularly in conducting crime scene investigations and mediation in the absence of specific technical guidelines. However, limitations in funding, equipment, and operational facilities affect the speed, accuracy, and consistency of case handling. These findings highlight the need for an integrated strengthening of the legal, institutional, and operational framework. The formulation of clear local regulations, enhancement of police capacity, optimisation of resources, and development of specific technical guidelines for electric bicycles are vital to ensure more effective, consistent, and equitable traffic law enforcement while safeguarding public safety and legal certainty.

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