

# Government and Private Sector Responsibility for Public Health in Large Infrastructure Development: A Review of the Legal Framework and Accountability Mechanisms in Indonesia

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## ABSTRACT

Large-scale infrastructure development presents a paradox between economic stimulus and potential threats to public health. This normative legal study aims to analyse the framework for the division of responsibilities between the government and the private sector, as well as the mechanisms for legal accountability and redress for victims of health impacts in Indonesia. The study was conducted through an analysis of relevant legislation, including the 1945 Constitution, the Health Act, the Environmental Act, the Construction Services Act, and provisions of civil and criminal law. The research findings indicate that Indonesia's legal framework has established a complementary liability system. The government functions as a regulator and supervisor, whilst the private sector bears operational obligations for prevention and mitigation. Liability mechanisms are available through three channels: administrative, civil (including class actions), and criminal, with the 2023 Health Law serving as a catalyst for integrating health into development policies. Remedial measures are designed not only to provide financial compensation but also to include health services and environmental rehabilitation. The success of this system depends heavily on law enforcement capacity, inter-agency coordination, and the business sector's commitment to moving beyond formal compliance towards substantive responsibility. This study provides a comprehensive regulatory map and identifies the need for institutional capacity building and access to justice for affected communities.

## INTRODUCTION

Large-scale infrastructure development, such as toll roads, dams, airports, and industrial zones, has long been regarded as a strategic pillar in accelerating a country's economic growth. These projects are often perceived as symbols of progress and catalysts for improving connectivity, logistics efficiency, and investment. From the perspective of national development, infrastructure is considered a prerequisite for enhancing public welfare, including access to basic services (Sutiyo, 2018). However, development narratives that focus primarily on economic and technical aspects often obscure another equally crucial dimension, namely public health. Environmental and social impacts accompanying physical development processes may undermine the health status of communities surrounding project areas, creating a paradox in which instruments intended to improve welfare may

instead become sources of threats to human health.

The interaction between the built environment and human health constitutes a complex field of study. Large-scale construction activities inevitably alter ecological landscapes, mobilize natural resources, and generate waste. These changes may create new exposures or exacerbate exposure to health hazards, such as air pollution from dust and heavy equipment emissions, water pollution due to sedimentation or chemical spills, and increased risks of infectious diseases through changes in disease vectors. Beyond direct environmental impacts, social disruptions such as residential relocation, loss of livelihoods, and psychological stress are also determinants of health that cannot be ignored. Thus, large infrastructure projects essentially represent major interventions in ecological and social systems that support public health (Umar, 2023).

Within the legal and governance framework,

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responsibility for mitigating these negative impacts and ensuring the protection of public health becomes a central issue. This question leads to two primary actors: the government as regulator, planner, and licensing authority, and the private sector as implementer and operator of projects. The distribution of responsibility between these two entities is not always clear and often becomes a source of tension, particularly when failures occur in managing health risks (Widjaja, 2021). The government possesses the authority to establish standards, conduct supervision, and enforce the law, while private actors bear operational obligations to implement responsible practices on the ground. The quality of services and patient satisfaction in public health services indicate that service standards must be consistently maintained (Khayru & Issalillah, 2022). The intersection between public authority and private obligation ultimately determines the effectiveness of health protection in development processes.

In Indonesia, this dynamic operates within a regulatory framework that continues to evolve. The constitutional foundation regarding the right to a good and healthy environment, as mandated in Article 28H of the 1945 Constitution of the Republic of Indonesia, provides a strong mandate for the state to ensure such protection. This mandate is further elaborated through various sectoral laws and regulations governing environmental protection, health, labor, and spatial planning. Challenges and changes in national health development from legal perspectives, access to health services, and the management of infectious diseases require serious attention from all stakeholders (Harianto et al., 2024). An analysis of the alignment and coherence among these regulations becomes essential, considering that large infrastructure projects are multidimensional and cross-sectoral in nature. Frequently, legal gaps, overlapping authorities, or weak enforcement undermine the legal position of affected communities (Vitrianingsih & Issalillah, 2021).

Therefore, this paper arises from the need to examine the juridical aspects of the distribution and implementation of such responsibilities. The focus of the study is on how Indonesian law constructs, distributes, and enforces accountability for both government and private actors concerning public health aspects within the ecosystem of large-scale infrastructure development. The legal rights of patients, including those from disadvantaged groups, must receive protection guarantees in every health service provided (Noor et al., 2023). This examination is necessary to identify legal and governance gaps that may leave communities

vulnerable, as well as to find an optimal balance where development interests and the human right to health can coexist.

A fundamental issue that emerges is the frequent disconnection between infrastructure development planning and comprehensive public health assessments (Magrath, 2016). In many cases, Environmental Impact Assessments (AMDAL), which serve as the primary instrument, focus more on the biophysical aspects of the environment rather than directly and thoroughly addressing human health aspects. In reality, health impacts are not always linearly correlated with measurable environmental parameters. Standards for safe mineral water quality demonstrate that environmental quality standards are crucial in preventing health impacts (Issalillah et al., 2022). Factors such as population vulnerability, accessibility to health services after project completion, and socio-psychological impacts are often insufficiently analyzed. Consequently, environmental and development permits may be issued based on AMDAL documents that inadequately assess health risks, meaning that projects may already contain latent problems from the outset. This reflects a reactive approach in which health is viewed as a consequence to be addressed rather than as a prerequisite to be guaranteed during the planning phase.

The second issue lies in regulatory fragmentation and overlapping authorities that weaken supervision and law enforcement (Hermansyah et al., 2018). Responsibility for public health in infrastructure projects is distributed among various institutions, including the Ministry of Health, the Ministry of Environment and Forestry, the Ministry of Public Works and Housing, and regional governments. Each institution has its own regulations and interests, which are not always effectively integrated. This situation creates a gray area where no single entity assumes full responsibility. Private project implementers may exploit weaknesses in coordination to relax standards related to health and safety management. Legal responsibility of hospitals for service disruptions due to information system failures illustrates the complexity of accountability within the health sector (Yatno et al., 2023). Furthermore, when violations or health impacts harm communities, legal processes to seek accountability often become complicated, lengthy, and uncertain due to overlapping regulations and authorities.

Third, there is an imbalance in capacity and access to justice between project actors (government and private sector) and affected communities.

Communities, particularly those in rural areas or indigenous groups, often possess limited understanding and resources to interpret technical documents such as AMDAL or to legally advocate for their interests. They also face difficulties in collecting scientific evidence linking projects directly to deteriorating health conditions, given that health impacts are often cumulative and may have latent periods. The regulation of royalties in franchise businesses and its legal implications in Indonesia shows that fairness and legal certainty are essential in any agreement (Putra & Wibowo, 2023). Meanwhile, project developers are supported by professional legal teams and expert consultants. This imbalance renders mechanisms such as compensation claims or class action lawsuits less effective as protective instruments. As a result, the burden of health problems and medical costs often falls on affected communities themselves, while project actors may not face significant legal consequences.

The Indonesian government is currently intensifying and expanding national infrastructure development programs with ambitious targets across various sectors. This wave of development increases both the frequency and scale of interactions between large construction projects and surrounding environments and populations. In such a climate, the existence of a solid, clear, and operational legal framework becomes critically important. Without it, accelerated development risks leaving widespread and long-term health damage, which may ultimately burden the national health system and hinder the achievement of human development indicators. Juridical analysis therefore becomes a foundation for correcting and improving the system before systemic negative impacts accumulate further.

Moreover, public awareness and civil society engagement regarding the right to health and a healthy environment continue to increase. Cases of environmental pollution and social conflicts related to infrastructure projects frequently attract media attention and public scrutiny. Social and legal pressures from civil society demand greater transparency and accountability from stakeholders. In such circumstances, objective and evidence-based academic studies on the legal construction of government and private sector responsibilities can serve as valuable references for all parties. Factors such as aging populations and stress determinants must also be considered in public health policy (Issalillah & Aisyah, 2022). Such studies can contribute to the formulation of more equitable policies, the design of more effective monitoring mechanisms, and the strengthening of the legal

position of communities in advocating for their health rights.

This research aims to analyze and describe the legal construction of government and private sector responsibilities in protecting public health within large-scale infrastructure projects, as well as to evaluate the effectiveness of legal accountability mechanisms and available remedies. Theoretically, this research is expected to contribute to the development of health law studies, particularly in the context of development law and human rights. Practically, the results of this research are expected to provide input for policy formulation, the preparation of technical guidelines, and capacity building for law enforcement officials and legal practitioners in handling environmental health disputes related to infrastructure development.

## **RESEARCH METHOD**

This study employs a normative legal research method using a systematic qualitative literature review approach. Normative legal research focuses on the examination of legal principles, positive legal norms, and the existing regulatory framework with the aim of constructing a coherent legal understanding of a particular issue. This method is considered appropriate for the objectives of this research, which are to analyze the legal construction of government and private sector responsibilities as well as the accountability mechanisms regulated under Indonesian legislation. The study does not collect primary empirical data; instead, it conducts a synthesis and in-depth analysis of available primary and secondary legal sources.

The literature search strategy was carried out in stages and comprehensively. The primary legal sources examined include applicable Indonesian laws and regulations. To ensure the quality and reliability of the analysis, this research applies the principles of an audit trail and source triangulation in the literature review process. Each legal claim presented in the analysis is consistently supported by specific primary legal references, including relevant articles and clauses. Theoretical arguments and comparative perspectives are supported by credible secondary sources. Thematic synthesis is conducted by comparing and contrasting findings from various sources in order to achieve a comprehensive and balanced understanding. This approach enables the research not only to describe law in books but also to highlight challenges in its implementation (law in action), particularly in relation to the dynamics between the government, private sector actors, and affected communities.

## RESULT AND DISCUSSION

### The Distribution of Government and Private Sector Responsibilities in Protecting Public Health in Large Infrastructure Projects

The Indonesian legal framework emphasizes health as a fundamental right that must be guaranteed by the state. The legal framework governing the distribution of responsibilities between the government and the private sector in ensuring public health protection in large infrastructure development projects is rooted in the constitutional principle that health is a human right and part of social rights guaranteed by the state. Article 28H paragraph (1) of the 1945 Constitution of the Republic of Indonesia states that every person has the right to live in physical and spiritual prosperity, including the right to obtain health services. This fundamental norm forms the basis for all sectoral regulations, including Law No. 17 of 2023 on Health, which explicitly places the state as the primary responsible party while simultaneously opening space for private sector participation in the provision of health services and community protection. Good governance is essential to ensure that health services operate effectively, even when the public health sector receives increased investment along with economic growth (Naher et al., 2020). Based on this constitutional mandate, the government bears the obligation to create, implement, and supervise a system that guarantees the realization of this right. This includes legislative, executive, and judicial functions aimed at preventing any party, including private development actors, from taking actions that may neglect or violate public health rights. Legal protection for patients against negligence by medical personnel is also an important part of the health system that safeguards community rights (Lethy et al., 2023). The state's obligation to respect, protect, and fulfill the right to health creates a foundation that compels the government to actively formulate regulations and policies ensuring that development activities do not harm the health of its citizens. This legal framework ensures that development remains aligned with the protection of public health rights.

Law No. 17 of 2023 on Health emphasizes the importance of protecting public health in large infrastructure projects. In infrastructure development projects, the law highlights the importance of promotive and preventive efforts to protect communities from health risks resulting from development activities. The government is obligated to establish environmental health standards, conduct supervision, and ensure the implementation of Health Impact Assessments (HIA) that run parallel to

Environmental Impact Assessments (AMDAL). Health Impact Assessment (HIA) is a tool used to evaluate potential health impacts of proposed projects, programs, and policies (Wanjohi et al., 2021). On the other hand, private sector actors involved in development projects are required to comply with these standards, provide occupational health facilities, and implement occupational safety and health programs in accordance with Law No. 1 of 1970 on Occupational Safety and its implementing regulations. Legal dynamics related to healthcare services and patient protection continue to evolve along with social changes and technological advancement (Saputra et al., 2023). This division of duties is hierarchical and functional: the government acts as rule-maker and independent supervisor, while the private sector acts as a legal subject that must internalize these rules into every technical operation. Private compliance with government-established standards becomes the primary parameter for measuring the effectiveness of this division of responsibility and also serves as administrative and legal evidence in the event of future disputes (Wuryani et al., 2023). This hierarchy of responsibility ensures that development does not sacrifice public health rights.

Law No. 32 of 2009 on Environmental Protection and Management reinforces the principle of private sector responsibility for health impacts arising from development. The distribution of responsibilities is also regulated through this law, which requires all development activities to consider public health aspects as part of environmental protection. The government functions as regulator and supervisor, while private actors implementing development projects must bear the costs and risks arising from health impacts. Consequently, the polluter pays principle is applied, emphasizing that private actors are not only obligated to construct infrastructure but also responsible for potential health impacts arising from their activities. Studies on falsification of health certificates from criminal law and professional ethics perspectives demonstrate that public health protection requires firm legal enforcement (Hartika et al., 2023). This principle is a vital legal instrument because it shifts the economic burden from communities and the state to business actors who gain profit from potentially risky activities. Private sector responsibility under this law is broad, encompassing obligations to prevent pollution, conduct environmental recovery in case of damage, and pay compensation for losses. The government's role is to determine damage calculation methods, verify claims, and ensure enforcement of

compensation obligations so that the mechanism does not depend solely on unilateral initiatives from business actors. The polluter pays principle ensures that the burden of health impacts is borne by business actors rather than society.

The Health Law further emphasizes the integration of health protection in every stage of infrastructure development. Law No. 36 of 2009 on Health, most of whose provisions have now been updated by Law No. 17 of 2023, had previously stated that development implementation must consider public health aspects. The new law strengthens this by emphasizing the integration of health considerations into cross-sectoral policies, including infrastructure development. This means that every project stage—from planning, implementation, to operation—must incorporate clear mechanisms for health protection, with the government acting as supervisor and the private sector acting as compliant implementer. During the planning stage, the government is responsible for ensuring that technical planning documents contain adequate health assessments before permits are issued. Private actors are responsible for preparing such assessments comprehensively and transparently. During the implementation stage, the government must conduct field monitoring, while private actors must report the implementation of health and safety programs periodically. Such a division of roles creates an ideal checks and balances relationship in which each party performs specific tasks that complement one another in achieving the shared objective of protecting public health from negative development impacts. Checks and balances between government and private actors ensure that public health remains protected during development.

Law No. 23 of 2014 on Regional Government emphasizes the role of local governments in supervising the health aspects of development projects. Local governments are authorized to issue permits, conduct inspections, and impose sanctions in cases of violations of health standards. Legal rights of persons with disabilities in accessing healthcare demonstrate that access to information and services is an essential element of an inclusive health system (Subiakso et al., 2023). Private actors, such as contractors or investors, are therefore required to comply with permit requirements that include health considerations and provide risk mitigation facilities for communities around project areas. Decentralization of authority is important because local governments better understand local conditions and can respond more quickly to community

complaints. The division of responsibilities becomes more complex yet more specific: the central government establishes national standards, while regional governments are responsible for adaptation, implementation, and enforcement at the local level (Mubasyiroh et al., 2023). Private actors must interact with both levels of government to ensure compliance with national standards as well as additional local requirements based on regional social and ecological characteristics. Decentralization thus strengthens public health protection in accordance with local contexts.

The legal framework is also strengthened by Law No. 2 of 2017 on Construction Services, which obliges construction service providers to implement occupational safety and environmental protection standards. This regulation places direct responsibility on project implementers to ensure the health and safety of workers and surrounding communities. The government, through the Ministry of Public Works and Housing and other relevant institutions, acts as supervisor and enforcer of these standards, while private actors are responsible for technical implementation in the field. Consumer protection in the healthcare sector, including the legal responsibilities of pharmacists, also requires strict government supervision (Setiawan et al., 2023). This law is important because it specifically targets the construction services industry as the physical frontline of infrastructure development. Private sector responsibility here is operational and personal; project management and workers can be held accountable for negligence causing accidents or health disturbances. The government, besides acting as supervisor, also functions as facilitator by providing technical guidelines, organizing training, and certifying workforce competencies. Thus, the distribution of responsibility includes not only supervision and compliance but also capacity building and competence development among project implementers.

In practice, the licensing mechanism and cooperation contracts become the primary instruments for distributing health responsibilities in development projects. The government establishes health requirements in environmental permits and development permits, while private actors are obligated to comply with these requirements. Law No. 17 of 2023 states that failure to comply with health standards may result in administrative sanctions, fines, or even revocation of permits. Patient satisfaction with the quality of healthcare services at community health centers shows that service quality is strongly influenced by compliance

with established standards (Darmawan et al., 2022). This illustrates the balance between the government's role as supervisor and the private sector's role as responsible implementer. Therefore, the existence of clear and strong legal regulations is essential to encourage private investment in infrastructure projects because it ensures fairness and equality among all parties involved (Mabuza, 2022). Licensing thus functions as a conditional legal instrument in which the right to build is granted only if health commitments are fulfilled. The government formulates verifiable requirements, while private actors must demonstrate compliance both documentarily and factually.

The Indonesian legal framework also emphasizes the importance of community participation in supervising development projects. Law No. 17 of 2023 provides opportunities for the public to report potential health violations, while environmental law regulates the right of communities to obtain information and participate in the AMDAL process. The impact of social inequality on public health must also be examined to identify appropriate policy solutions (Nalin et al., 2022). Public health protection therefore becomes a tripartite responsibility involving government, private actors, and society. The government receives and follows up reports, private actors respond substantively to complaints, and communities act as independent social monitors in the field. This arrangement recognizes the limitations of government oversight capacity and creates a broader monitoring network. Private actors are legally obligated to provide transparent access to information and respond to community complaints through clear procedures rather than interacting exclusively with government authorities.

At the operational stage of infrastructure projects, private sector responsibilities include providing occupational health facilities, monitoring air, water, and noise quality, and reporting regularly to the government. Government agencies, particularly health departments and technical institutions, must verify these reports and conduct inspections. Law No. 17 of 2023 emphasizes that occupational and environmental health are integral parts of the national health system; therefore, violations may be considered violations of public health rights. The division of responsibilities at this stage is continuous and data-driven. Private actors must produce monitoring data that are accurate and scientifically accountable, while the government must possess technical capacity to analyze these data, detect deviations, and implement corrective

measures. The effectiveness of public health protection largely depends on the quality of this technical interaction between government and private actors.

From a juridical perspective, the Indonesian legal framework establishes a complementary system of responsibility distribution. The government functions as regulator, supervisor, and guarantor of public health rights, while private actors implementing projects must comply with standards, provide mitigation measures, and bear health risks. Law No. 17 of 2023 strengthens the government's position as the primary responsible authority while emphasizing that private actors have binding legal obligations. Legal guarantees for children's rights in education and health also form part of broader societal protection (Hariani et al., 2021). Consequently, public health protection in large infrastructure projects in Indonesia results from cross-sector regulatory synergy that balances the roles of the state, private sector, and community.

Overall, this legal framework reflects a sustainable development paradigm that prioritizes public health. Law No. 17 of 2023 acts as an umbrella regulation integrating various sectoral laws to ensure that infrastructure development is not only oriented toward economic growth but also toward the protection of public health. The distribution of responsibility between government and private actors is therefore not merely formal but constitutes a substantive legal obligation to ensure sustainable development and societal welfare. Patient intentions to visit hospitals are influenced by factors such as viral marketing and word-of-mouth communication, highlighting the importance of public trust in health institutions (Taufik et al., 2022). Future challenges lie in the consistency of implementation. Although the legal framework is already comprehensive, effective enforcement requires strong institutional capacity, inter-agency coordination, and political commitment so that the responsibilities stipulated in regulations become reality in every large infrastructure project across Indonesia.

### **Legal Mechanisms of Accountability and Recovery for Victims of Health Impacts from Infrastructure Projects**

Legal accountability for health impacts arising from development projects is rooted in the constitutional principle of human rights. Mechanisms of legal accountability for communities experiencing health disturbances due to large infrastructure development projects in Indonesia are grounded in the constitutional principle that health is a human

right guaranteed by the state. Article 28H paragraph (1) of the 1945 Constitution affirms the right of every person to live in physical and spiritual prosperity, including the right to obtain health services. This norm forms the basis that any development activity causing health impacts must be accompanied by clear mechanisms of accountability and recovery, both by the government and by private entities as project implementers. In line with current global and national health efforts, attention is focused on two main aspects: improving the quality of public services and expanding inclusive access, as progress in both areas is crucial for public health and the fulfillment of human rights (Joshi et al., 2022). The obligation of the state to fulfill this right forms the foundation for the development of various legal avenues available to victims. The constitutional norm is not merely declarative; it serves as a justification for the formation of more operational legislation that transforms the state's responsibility to protect into concrete obligations for parties causing harm to be held accountable. Thus, affected communities do not only confront project actors but possess a legal position supported by constitutional mandates, enabling them to seek recovery not merely as harmed citizens but as holders of constitutional rights violated by certain activities. The constitutional mandate therefore provides communities with a strong legal standing to demand recovery from health disturbances.

The Health Law of 2023 strengthens mechanisms of accountability for health impacts within infrastructure development projects. Law No. 17 of 2023 concerning Health reinforces the state's obligation to protect communities from health risks arising from development activities. This regulation emphasizes the importance of promotive, preventive, curative, and rehabilitative health efforts that must be available for affected communities. In infrastructure projects, if health disturbances occur, the government is obligated to provide access to healthcare services, while private entities implementing the projects must bear the cost of recovery in accordance with the principle of legal responsibility. This is consistent with the polluter pays principle also regulated in Law No. 32 of 2009 on Environmental Protection and Management. Regulations concerning health product advertising and patient protection as consumers of health services must also receive attention within a broader legal framework (Sahidu et al., 2023). The role of government in this mechanism is dual: first, as a provider of emergency services and facilitator of healthcare access for victims; second, as a guarantor

ensuring that the financial obligations of private actors to bear these costs are executed (Zuhri et al., 2023). The Health Law of 2023 transforms the right to health from a public aspiration into a legal claim that can be specifically addressed to business actors, with the government acting as mediator and enforcement guarantor. This development reduces the dependence of victims on government social budgets and directly assigns financial responsibility to the source of the problem. Transforming the right to health into a concrete legal claim strengthens the position of communities in confronting development impacts.

Law No. 32 of 2009 confirms comprehensive accountability mechanisms for health impacts arising from environmental pollution. This law explicitly stipulates that any business activity causing environmental pollution or damage, including impacts on public health, must undertake environmental restoration and provide compensation to affected communities. The mechanism includes administrative, civil, and criminal liability. Administratively, the government may impose sanctions such as fines, license revocation, or suspension of activities. Civilly, communities have the right to claim compensation for health losses suffered. Criminally, perpetrators may be prosecuted if proven negligent or intentionally causing serious health impacts. Consumer intention to purchase medical and environmentally friendly products is influenced by green consumer behavior, environmental concern, and recycling behavior (Fachrurazi et al., 2022). The most relevant mechanisms for victim recovery are the civil and administrative pathways. Administrative fines may be allocated to recovery funds, while civil lawsuits allow victims to claim more personal and specific compensation such as medical expenses, loss of income, and non-material damages for suffering. The law also recognizes strict liability in certain cases, whereby victims do not need to prove the perpetrator's fault but only demonstrate the existence of harm and a causal relationship between the business activity and the damage suffered. This principle strengthens victims' positions by facilitating easier access to recovery for health impacts.

Health Impact Assessment (HIA) is a key instrument in ensuring health protection from the early stages of project planning. Law No. 17 of 2023 also emphasizes the importance of conducting a Health Impact Assessment before a project begins. If the analysis indicates potential health disturbances, mitigation and recovery mechanisms must be

prepared in advance. If health disturbances later occur, the results of the analysis can serve as a legal basis for accountability of private actors. The government acts as supervisor and guarantor to ensure that communities receive their right to health recovery. The Health Impact Assessment document functions as a powerful form of legal forensic evidence. Within it, project developers have identified potential risks and committed to mitigation measures. Failure to implement these commitments constitutes negligence that can be readily demonstrated in court. Furthermore, if the impacts that occur are worse than predicted in the analysis, it may indicate that the analysis was conducted improperly or without independence, which can also serve as grounds for legal claims. Thus, this preventive mechanism simultaneously functions as a repressive instrument that makes it more difficult for business actors to deny responsibility. The HIA therefore serves both as a preventive mechanism and a legal instrument for enforcing accountability.

The Occupational Safety Law and the Construction Services Law affirm the obligations of private actors in ensuring safety and health protection. Law No. 1 of 1970 concerning Occupational Safety and Law No. 2 of 2017 concerning Construction Services require construction service providers to guarantee occupational safety and health, including for communities surrounding project sites. If accidents or health disturbances occur due to negligence in implementing safety standards, private actors may be held legally responsible. The government, through the Ministry of Manpower and the Ministry of Public Works and Housing, has the authority to conduct inspections, impose sanctions, and ensure the implementation of recovery programs for victims. Social support plays an important role in reducing anxiety, for example among pregnant women before childbirth, indicating that psychological aspects must also be considered in health recovery (Issalillah & Khayru, 2022). The mechanism here is technical and specific. Violations of safety standards such as the absence of safety barriers, dust management systems, or personal protective equipment for workers interacting with the community can easily be categorized as administrative violations subject to sanctions (Subhi et al., 2023). For affected community members, evidence of such technical violations strongly supports civil claims under Article 1365 of the Indonesian Civil Code regarding unlawful acts, as these violations breach specific legal provisions

designed to prevent harm. Violations of safety standards thus provide a strong basis for victims to demand legal accountability.

The Regional Government Law strengthens the role of local authorities in supervising the health aspects of development projects. Law No. 23 of 2014 concerning Regional Government mandates local governments to supervise development projects within their jurisdictions, including public health aspects. Local governments have the authority to impose administrative sanctions, facilitate health recovery, and distribute compensation to affected communities. Consequently, legal accountability mechanisms exist not only at the national level but also at the local level, which is closer to the community. Patient satisfaction based on service quality and the location of health facilities demonstrates that accessibility and service quality strongly influence public trust (Mardikaningsih, 2022). The advantage of local-level mechanisms lies in the speed of response and contextual understanding. Local governments can quickly issue stop work orders to prevent more severe impacts while legal processes proceed. They can also facilitate mediation between affected communities and project developers to reach compensation and recovery agreements without lengthy court proceedings. Local government involvement ensures that accountability mechanisms are not merely centralized and bureaucratic but can be more adaptive and responsive to local needs.

Article 1365 of the Indonesian Civil Code serves as a primary instrument for communities to claim compensation for health-related losses. Within the civil law domain, the Civil Code provides the legal basis for communities to demand compensation for health damages caused by development projects. Article 1365 concerning unlawful acts is particularly important, allowing communities to sue private actors who negligently or unlawfully cause health-related losses. Such lawsuits may be filed individually or through class action mechanisms as regulated in Supreme Court Regulation No. 1 of 2002. The COVID-19 pandemic demonstrated the relationship between social psychology and health conditions, including among pregnant women requiring special support (Issalillah, 2021). The strength of Article 1365 lies in its broad scope: any act that violates the law, legal obligations, or the subjective rights of others and results in damage may be challenged through litigation. Violations of environmental, health, or occupational safety laws can thus be constructed as unlawful acts. Class action mechanisms are

particularly crucial because they allow large groups of victims experiencing similar losses to file collective lawsuits, overcoming individual limitations in confronting large corporations in terms of cost and psychological pressure.

The criminal law domain provides a strong basis for prosecuting project actors who cause public health disturbances. Within criminal law, the Criminal Code and environmental legislation provide grounds for law enforcement against perpetrators who intentionally or negligently cause health disturbances within communities. For example, air or water pollution that causes disease may be prosecuted under environmental criminal provisions. Law No. 17 of 2023 concerning Health also provides space for criminal sanctions against serious violations threatening public health. Curcumin in turmeric has potential as a preventive measure against COVID-19 in pregnant women, illustrating the importance of preventive approaches using natural substances in maintaining health (Issalillah, 2021). Although criminal proceedings are primarily intended to punish perpetrators rather than directly compensate victims, criminal court decisions can have evidentiary value in civil lawsuits. A final criminal conviction can serve as strong evidence in civil class action cases, significantly strengthening the victims' position. Additionally, criminal sanctions function as a deterrent effect, encouraging project actors to comply with legal obligations to avoid legal proceedings that may damage their reputation and result in imprisonment for company executives (Rizkiana & Gerry, 2022).

Recovery of community health after infrastructure development projects must be comprehensive and multidimensional. Recovery efforts for affected communities should not be limited to financial compensation but must also include healthcare services, rehabilitation programs, and environmental restoration. Law No. 17 of 2023 concerning Health emphasizes that public health recovery must be conducted comprehensively, including the provision of temporary health facilities, medical rehabilitation programs, and psychosocial support. The government is obligated to ensure the effectiveness of the recovery process, while private actors must bear the financial costs and provide necessary facilities. This comprehensive approach is essential because health damages are often multidimensional. Financial compensation alone cannot fully restore individual or community health functions. Continuous medical

intervention, environmental restoration to remove sources of disease, and psychosocial support are required to address the broader impacts of illness and social conflict. This regulatory approach shifts the paradigm of recovery from merely financial transactions to a process of socio-ecological restoration, coordinated and supervised by the government.

Overall, the Indonesian legal system constructs a multi-level mechanism of legal accountability that places health as a fundamental right. The government acts as regulator, supervisor, and guarantor of community rights, while private actors implementing projects must bear the risks and costs of recovery. Communities possess the right to claim compensation and obtain healthcare services. The obligations to respect, protect, fulfill, and remedy the right to health cannot function effectively in practice without clarity regarding which actors are responsible for enforcing these obligations (Nampewo et al., 2022). With the enactment of Law No. 17 of 2023 concerning Health, which strengthens the integration of health considerations within development processes, mechanisms of legal accountability and recovery for affected communities become clearer and more structured. Consequently, large-scale infrastructure development must not sacrifice the fundamental right to health. This framework demonstrates the evolution of a legal system from reactive and fragmented approaches toward a proactive and integrated system in which recovery responsibilities are not viewed as unintended consequences but as inherent components that must be planned in every large-scale development activity.

However, the effectiveness of these legal mechanisms ultimately depends on enforcement capacity and access to justice. Comprehensive regulations must be accompanied by strong political will from government authorities to fully exercise their powers, both in imposing significant administrative sanctions and in supporting victims during legal proceedings. At the same time, communities require legal assistance and support from medical and environmental experts to build strong cases. Without these supporting elements, legal mechanisms that appear comprehensive on paper may lose their effectiveness in practice, leaving victims of health impacts trapped in losses without adequate recovery.

## **CONCLUSION**

Based on the normative juridical analysis conducted, it can be concluded that the Indonesian legal

framework has established a fairly comprehensive system to regulate the distribution of responsibilities and mechanisms of legal accountability related to public health in large infrastructure projects. The division of responsibilities between the government and the private sector is complementary and regulated in a layered manner through various laws and regulations, with the government acting as the standard setter, licensing authority, and supervisor, while the private sector bears operational obligations to prevent and mitigate health impacts. In particular, Law Number 17 of 2023 concerning Health has strengthened the integration of health aspects into all stages of development, reaffirming the constitutional mandate of the state and clarifying the obligations of business actors. On the other hand, mechanisms of accountability and recovery for victims encompass three legal pathways administrative, civil, and criminal which mutually reinforce one another and provide multiple remedies for communities experiencing health disturbances, with a strong foundation in the polluter pays principle and the instrument of class action lawsuits.

The implication of this legal construction is the creation of a normative framework that requires a high level of synergy and effective coordination among government institutions as well as between the government and business actors. On the one hand, the government is required to possess strong technical and administrative capacity in formulating standards, conducting strict and independent supervision, and enforcing sanctions consistently without discrimination. On the other hand, the business sector must internalize legal compliance in a more substantive manner by allocating adequate resources for prevention and recovery and by adopting business approaches that genuinely consider the public's right to health as an integral part of project feasibility and sustainability. More broadly, this framework encourages a paradigm shift in infrastructure development from an approach focused solely on speed and cost toward development that is sustainable and socially just, in which public health is not an externality that can be ignored but a core variable that determines the social legitimacy of a project.

To optimize the implementation of the existing legal framework, several strategic steps are required. First, the government needs to issue implementing regulations and detailed technical guidelines derived from the 2023 Health Law, particularly those regulating procedures for conducting Health Impact Assessments, standards for continuous monitoring, and clear and enforceable recovery funding schemes.

Second, strengthening the capacity of both regional and central government officials in environmental health supervision and public complaint handling is essential, including the establishment of integrated specialized units. Third, extensive legal dissemination and public education are necessary to inform communities about their rights and how to access the available mechanisms of legal accountability. Fourth, business actors and professional associations in the construction sector should develop best practice standards and stricter internal audit systems that go beyond merely fulfilling minimal administrative requirements, in order to build a culture of proactive compliance in protecting public health.

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