Reconstructing Indicators of Narcotics Law Enforcement Effectiveness in North Sumatra through a Criminal Network Disruption Approach

Donly Calner Aruan, Suci Ramadani, Abdul Rahman Maulana Siregar

Abstract

Narcotics law enforcement in North Sumatra has traditionally been considered effective based on quantitative indicators, including the number of cases uncovered, the number of suspects apprehended, and the quantity of narcotics seized. However, these measurements do not necessarily reflect the actual success of structurally disrupting narcotics criminal networks. This situation creates a gap between the normative objectives of Law Number 35 of 2009 concerning Narcotics and law enforcement practices that remain predominantly focused on the lower levels of criminal networks. This study aims to analyze the construction and limitations of the existing indicators of narcotics law enforcement effectiveness in North Sumatra and to formulate a reconstructed indicator framework oriented toward criminal network disruption. This study employs a normative legal research method using statutory, conceptual, and case approaches. The legal materials are analyzed through a qualitative prescriptive method grounded in Soerjono Soekanto's theory of legal effectiveness, Lawrence Friedman's legal system theory, and the concept of criminal network disruption. The findings demonstrate that the existing indicators are biased toward lower level enforcement, afford insufficient attention to asset tracing, fail to measure network resilience, and are undermined by fragmented inter agency data. As an alternative, this study proposes four new indicator dimensions: the ratio of enforcement actions against key actors, the asset confiscation rate, the network resilience index, and the inter agency data integration index. This reconstructed framework is expected to correct biases in institutional performance evaluation and redirect narcotics law enforcement policy in North Sumatra toward the structural and sustainable disruption of criminal networks.

Keywords: Law Enforcement Effectiveness; Narcotics Offences; Organized Criminal Networks; Reconstruction of Legal Indicators; North Sumatra

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Introduction

The problem of illicit drug trafficking in North Sumatra Province has never truly subsided; instead, it has continued to evolve in line with the changing modus operandi of organized criminal groups. A firm legal framework for combating this problem has been established through Law Number 35 of 2009 concerning Narcotics [1], which confers both repressive and rehabilitative authority upon law enforcement agencies, including the Indonesian National Police and the National Narcotics Board. Nevertheless, this comprehensive normative framework is confronted with the distinctive geographical realities of North Sumatra. Its extensive eastern coastline, which directly borders the Strait of Malacca, has made the province one of the principal entry points for methamphetamine smuggled from the Golden Triangle into mainland Sumatra before being distributed to various regions across Indonesia [2]. Research on smuggling routes along the eastern coast of North Sumatra indicates that inadequate maritime surveillance, limited radar coverage, and personnel shortages within the Directorate of Water and Air Police constitute structural vulnerabilities that continue to be exploited by drug trafficking networks [3].

Ironically, despite the high intensity of enforcement operations reported annually by the police and the North Sumatra Provincial National Narcotics Board, the benchmarks used to assess the effectiveness of narcotics law enforcement remain highly conventional. The indicators commonly disclosed to the public are generally limited to the number of cases uncovered, the number of suspects apprehended, and the quantity of narcotics seized. From a theoretical perspective, however, Soerjono Soekanto has long emphasized that the effectiveness of law enforcement should not be reduced merely to quantitative enforcement figures. Instead, it must be assessed through five interrelated factors: the law itself, law enforcement personnel, facilities and infrastructure, society, and legal culture [4]. When indicators of success rely exclusively on arrest statistics, what is actually being measured is not the effectiveness of dismantling narcotics networks, but merely the administrative productivity of law enforcement agencies in processing criminal cases.

The discrepancy between *das sollen* and *das sein* is particularly evident in this regard. Normatively, the ultimate objective of narcotics law enforcement, as reflected in the considerations underlying Law Number 35 of 2009 [1], is the structural disruption of the illicit narcotics supply chain, including the dismantling of criminal syndicates, financing networks, and the masterminds operating behind them. At the empirical level, however, law enforcement practices tend to target users and low level couriers, while the principal actors controlling the logistical and financial flows of these networks are relatively rarely subjected to comprehensive legal proceedings. This phenomenon is further corroborated by a study on corporate criminal liability within the narcotics distribution chain under the jurisdiction of the North Sumatra Regional Police. The study concludes that the *follow the money* approach must be strengthened and that sanctions capable of dismantling the economic structure of narcotics networks must be imposed, rather than merely punishing field level offenders [5].

Several previous studies have examined narcotics law enforcement in North Sumatra from various perspectives. A study on criminal policy for addressing narcotics offences within the jurisdiction of the Sibolga Resort Police emphasizes the importance of institutional synergy and the optimization of criminology based approaches [6]. Research on the protection of suspects' rights during narcotics investigations conducted by the Directorate of Narcotics Investigation of the North Sumatra Regional Police also highlights that such protection has not yet been fully optimized, given the continuing gap between the normative provisions of the Indonesian Criminal Procedure Code and Law Number 35 of 2009 and their implementation in practice [7]. A study concerning assessments of persons with drug dependence and victims of narcotics abuse conducted by the South Tapanuli Regency National Narcotics Board similarly demonstrates that the standardization of assessment criteria still requires improved inter agency coordination [8]. Meanwhile, research on criminal law policy for addressing narcotics offences

in Indonesia confirms that national narcotics penal policy has not yet been fully oriented toward dismantling the underlying structures of criminal networks, but remains dominated by an individualized punishment paradigm [9].

Nevertheless, these previous studies have generally remained confined to descriptive accounts of the implementation of institutional authority or case specific evaluations of narcotics criminal justice processes. No study has been identified that specifically examines the construction of the indicators used to measure the effectiveness of narcotics law enforcement as an independent object of analysis, let alone one that seeks to reformulate such indicators so that they are oriented toward dismantling criminal networks rather than merely accumulating enforcement statistics. This constitutes the scholarly gap that the present article seeks to address. The fundamental problem of narcotics law enforcement in North Sumatra lies not solely in insufficient authority or resources, but also in the misdirected manner in which institutional success is measured, thereby producing potentially misleading policy evaluations.

Data published by the North Sumatra Provincial National Narcotics Board and the North Sumatra Regional Police have consistently demonstrated an annual increase in the number of narcotics cases uncovered. However, an increase in case disclosure figures cannot necessarily be interpreted as evidence of successful law enforcement. The underlying logic may, in fact, point in the opposite direction: a higher number of detected cases may indicate that narcotics trafficking has become increasingly widespread, rather than demonstrating that eradication efforts have become more effective. This ambiguity surrounding the meaning of existing indicators constitutes a fundamental and urgent issue requiring academic scrutiny, particularly because budgetary policies, institutional performance evaluations, and the strategic direction of the Prevention and Eradication of Narcotics Abuse and Illicit Trafficking (*Pencegahan dan Pemberantasan Penyalahgunaan dan Peredaran Gelap Narkotika* P4GN) program rely heavily on these quantitative indicators.

Based on the foregoing discussion, this article seeks to address two principal research questions. First, how are the existing indicators of narcotics law enforcement effectiveness in North Sumatra constructed, and what are their limitations? Second, how can indicators of narcotics law enforcement effectiveness be reconstructed to prioritize the dismantling of criminal networks as an alternative framework for future criminal law policy?

Literature Review

This section elaborates on four theoretical and conceptual frameworks that underpin the analysis presented in this article: the theory of legal effectiveness, legal system theory, criminal law policy theory, and the concept of criminal network disruption. These frameworks were selected because each is directly relevant to the two research questions, both in examining the limitations of the indicators currently in use and in formulating a more relevant reconstruction of such indicators.

2.1 Theory of Legal Effectiveness: Soerjono Soekanto's Five Factor Framework

The theory of legal effectiveness developed by Soerjono Soekanto is one of the most frequently cited analytical frameworks in Indonesian socio legal studies for assessing the extent to which a legal instrument operates as intended within society. Soekanto argues that the effectiveness of law enforcement is determined by the interaction of five factors: the legal substance itself; the quality and integrity of law enforcement personnel; the availability of supporting facilities and infrastructure; the level of public legal awareness; and the cultural factors underlying society's legal behavior [4]. These five factors do not operate independently but interact systemically, meaning that weaknesses in one factor may undermine the effectiveness of the others.

When applied to narcotics law enforcement in North Sumatra, the legal factor appears relatively adequate because Law Number 35 of 2009 concerning Narcotics [1] comprehensively regulates both repressive measures through severe criminal penalties and rehabilitative

measures for persons who misuse narcotics. However, law enforcement personnel and supporting facilities constitute recurring weaknesses identified in various studies conducted in the region. Shortages of specialized personnel, inadequate surveillance facilities, and weak inter agency data integration represent structural constraints consistently identified in empirical studies [6], [7]. Within Soekanto's framework, these conditions indicate that the principal problem does not lie in the legal norms themselves but in the institutional infrastructure supporting their implementation.

A critical point that warrants attention is that a superficial application of Soekanto's theory may lead policy evaluators into a linear line of reasoning: the stronger the five factors, the higher the resulting enforcement figures, which are then automatically treated as a proxy for effectiveness. Soekanto, however, never suggested that legal effectiveness should be measured by the quantity of enforcement actions. Rather, it should be assessed according to the extent to which the substantive objectives of the law have been achieved [4]. In the context of narcotics, these substantive objectives consist of reducing the prevalence of narcotics abuse and dismantling illicit distribution networks, rather than merely increasing the number of cases processed. Research on criminal law policy within the reform of Indonesia's criminal justice system similarly emphasizes that criminal law policy should ideally be oriented toward achieving the substantive objectives of punishment rather than merely fulfilling administrative enforcement targets [10]. This understanding constitutes the principal theoretical basis of this article's critique of the effectiveness indicators that law enforcement institutions have long accepted without sufficient critical scrutiny.

2.2 Lawrence Friedman's Legal System Theory

Lawrence M. Friedman offers an analytical framework that complements Soekanto's theory. Friedman's legal system theory divides the legal system into three principal components: legal structure, legal substance, and legal culture [11]. Legal structure refers to the institutions responsible for administering and enforcing the law, including the police, prosecution service, courts, and the National Narcotics Board. Legal substance encompasses the rules, norms, and decisions generated by the legal system. Legal culture refers to society's values, attitudes, and beliefs concerning the law, which determine how the law is used, avoided, or even misused.

Friedman's framework is relevant to examining why the indicators used to measure the effectiveness of narcotics law enforcement in North Sumatra tend to be imbalanced. The existing legal structure, comprising the Directorate of Narcotics Investigation of the North Sumatra Regional Police and the North Sumatra Provincial National Narcotics Board, has been institutionally established and possesses clearly defined statutory authority under Article 81 of Law Number 35 of 2009 [1]. In practice, however, this structure remains predominantly oriented toward the administrative disposition of individual cases rather than the mapping and dismantling of transregional and transnational criminal networks. This imbalance is consistent with the findings of research on the role of maritime agencies in combating narcotics smuggling along the eastern coast of North Sumatra, which identified weak inter agency coordination in addressing large scale smuggling networks [3].

Regarding legal substance, Law Number 35 of 2009 has, in fact, provided relatively progressive legal instruments, including provisions governing the confiscation of assets derived from narcotics offences. However, these instruments are rarely applied to their fullest extent in narcotics law enforcement practices in North Sumatra. This issue has also been identified in research on corporate criminal liability within narcotics distribution chains, which recommends strengthening the *follow the money* approach to ensure that the economic structures sustaining narcotics networks can be effectively dismantled [5]. Regarding legal culture, public awareness among coastal communities of the risks associated with involvement in narcotics smuggling networks remains limited, primarily due to economic pressures and a lack of alternative livelihood opportunities. This issue has similarly been highlighted in research on village level

drug prevention, which emphasizes the importance of community economic empowerment as an integral component of preventive strategies [12]. Friedman's three dimensions ultimately demonstrate that effectiveness indicators based solely on legal structure, without accounting for legal substance and culture, will inevitably produce a partial and potentially misleading assessment.

2.3 Criminal Law Policy Theory and the Integrated Criminal Justice System

Barda Nawawi Arief argues that criminal law policy constitutes an integral component of broader social policy. Accordingly, crime prevention should not rely exclusively on penal measures but must also be complemented by non penal measures, including social prevention and economic empowerment [13]. In the context of narcotics, excessive reliance on penal measures risks producing the overcriminalization of persons who use drugs, while major trafficking networks continue to operate because their underlying economic structures remain unaffected. This condition is substantiated by research on risk assessment as a correctional policy instrument for narcotics offenders, which reveals that correctional institutions in North Sumatra experience significant overcrowding due to the predominance of individuals convicted of low level narcotics misuse rather than principal actors within trafficking networks [14].

Romli Atmasasmita reinforces this argument through the concept of an integrated criminal justice system. This concept emphasizes that the effectiveness of combating organized crime depends substantially on coordination among the criminal justice subsystems from the police and prosecution service to the courts and correctional institutions as an interconnected system rather than a collection of entities operating independently [15]. When each subsystem separately establishes its own performance indicators for example, when the police measure success according to the number of arrests while correctional institutions assess it according to occupancy rates the resulting fragmentation of performance measurements distances the system from its overarching objective: the comprehensive disruption of narcotics crime chains.

In another work, Atmasasmita develops a restorative justice based strategy for treating offenders, which places restoration, rather than punishment alone, at the center of criminal justice performance assessment [16]. This proposition is relevant to the formulation of more holistic effectiveness indicators because the success of narcotics law enforcement should ideally be assessed not only through the repressive actions of law enforcement institutions but also according to the extent to which such processes contribute to the recovery of persons harmed by narcotics abuse and the structural weakening of the criminal networks that exploit them. The combination of penal measures directed at key actors and non penal measures oriented toward recovery therefore constitutes the central connection between criminal law policy theory and the need to reconstruct the effectiveness indicators examined in this article.

2.4 The Concept of Criminal Network Disruption and the *Follow the Money* Principle

Unlike conventional approaches that focus on apprehending individual offenders, the concept of criminal network disruption places the network structure itself, rather than the individuals operating within it, at the center of legal intervention. In his study of drug control policy, Peter Reuter demonstrates that arrests targeting the lower levels of distribution chains tend to have no significant effect on the availability of narcotics in illicit markets. Positions vacated following such arrests are rapidly filled by new actors, a phenomenon commonly referred to in criminology as the "balloon effect" [17]. Consequently, performance measurements based on the number of low level arrests do not reflect any genuine reduction in a narcotics network's operational capacity.

The *follow the money* principle, rooted in the anti money laundering approach, has increasingly been adopted within narcotics control frameworks because it enables law enforcement authorities to trace financial flows and identify criminal masterminds, financiers, and other critical nodes within a network. This approach is consistent with the *ultimum remedium* principle in criminal law, as articulated by Moeljatno, according to which criminal punishment should serve as a measure of last resort, applied in a targeted manner rather than

indiscriminately without regard to the significance of an offender's role within the criminal structure [18]. When this principle is consistently applied, the indicators used to measure law enforcement success should shift from merely counting the number of persons arrested to assessing the extent to which the network's structural capacity has been incapacitated. Such assessment should include the value of assets confiscated, the number and significance of logistical nodes disrupted, and the time required for the network to recover from law enforcement intervention.

Through his concept of progressive law, Satjipto Rahardjo further emphasizes that law must be interpreted contextually and directed toward the achievement of substantive objectives rather than confined to procedural compliance with statutory texts [19]. Viewed through the framework of progressive law, indicators of narcotics law enforcement effectiveness should not be limited to the formal legality of enforcement processes. Instead, they should be evaluated according to their tangible contribution to the broader objective of narcotics eradication: the structural and sustainable disruption of criminal networks. Collectively, the four theoretical frameworks discussed above Soekanto's theory of legal effectiveness, Friedman's legal system theory, the criminal law policy theories of Barda Nawawi Arief and Atmasasmita, and the concepts of criminal network disruption and Rahardjo's progressive law provide the analytical foundation for the discussion in the following section, particularly for reconstructing effectiveness indicators capable of addressing the two research questions examined in this article.

Research Methodology

This study employs a normative legal research method focusing on the analysis of legal norms, principles, and concepts contained in legislation, legal doctrines, and previous studies relevant to the effectiveness of narcotics law enforcement [20]. The selection of normative legal research is based on the nature of the research object, namely an evaluation of the construction of legal effectiveness indicators. This conceptual issue requires an in depth analysis of the coherence between legal norms, legal objectives, and their practical implementation, rather than merely the testing of quantitative hypotheses. Nevertheless, this study also utilizes empirical data and findings from previous field research as supporting analytical materials. Accordingly, this research may be categorized as normative legal research enriched by secondary empirical evidence.

This study employs three approaches. First, the statutory approach is used to examine Law Number 35 of 2009 concerning Narcotics [1], the Indonesian Criminal Procedure Code [21], Law Number 1 of 2023 concerning the Indonesian Criminal Code [22], Law Number 2 of 2002 concerning the Indonesian National Police [23], and implementing regulations, including Regulation of the Chief of the Indonesian National Police Number 14 of 2012 [24] and Indonesian National Police Regulation Number 8 of 2021 [25]. This approach is intended to provide an understanding of the normative framework governing narcotics law enforcement authority in Indonesia. Second, the conceptual approach is employed to examine the theory of legal effectiveness, legal system theory, the concept of criminal law policy, and the concept of criminal network disruption, as discussed in the literature review. Third, the case approach is applied on a limited basis to examine patterns in court decisions concerning narcotics offences within the jurisdiction of North Sumatra, as documented in previous studies, to identify prevailing trends in the profiles of offenders most frequently subjected to criminal proceedings.

The legal materials used in this study are divided into three categories. Primary legal materials comprise the legislation governing narcotics and the authority of law enforcement institutions, as previously described. Secondary legal materials include legal textbooks, nationally and internationally indexed scholarly journals, research reports, and conference proceedings relevant to the effectiveness of law enforcement and organized narcotics crime. These materials include studies specifically examining narcotics law enforcement practices within the jurisdiction of North Sumatra [5]–[9], [14]. Tertiary legal materials include legal

dictionaries, encyclopedias, and official data published by state institutions, such as the National Narcotics Board, which are used to enrich the empirical context of the research problem.

Legal materials were collected through library research by inventorying, identifying, and classifying primary, secondary, and tertiary legal materials relevant to the research questions. The collection process involved searching nationally and internationally indexed scholarly databases, retrieving official regulations through legal documentation and information networks, and reviewing official reports issued by relevant institutions. The collected legal materials were subsequently categorized according to their relevance to the two research questions: the construction and limitations of the existing indicators of law enforcement effectiveness, and the potential reconstruction of new indicators oriented toward criminal network disruption.

The legal materials were analyzed qualitatively using a prescriptive analytical approach. Prescriptive analysis was conducted by assessing the conformity between applicable legal norms and law enforcement practices, while qualitative analysis involved interpreting the substantive meaning underlying the data and findings of previous studies through the frameworks of legal effectiveness theory, legal system theory, and the concept of criminal network disruption discussed above. The analyzed data and legal materials were subsequently synthesized deductively to formulate a reconstructed set of indicators for assessing narcotics law enforcement effectiveness that is more closely aligned with the legal objectives to be achieved, as elaborated in the following results and discussion section.

Results

4.1 Construction and Limitations of the Indicators of Narcotics Law Enforcement Effectiveness in North Sumatra

Based on a review of institutional performance reports and academic studies examining narcotics law enforcement practices in North Sumatra, the indicators currently used to measure effectiveness can be identified as predominantly output based. They focus on three principal variables: the number of cases uncovered, the number of suspects apprehended, and the quantity or weight of narcotics seized as evidence. These three variables are routinely communicated to the public as representations of the performance achievements of the Directorate of Narcotics Investigation of the North Sumatra Regional Police and the North Sumatra Provincial National Narcotics Board. This measurement pattern is not entirely without justification because, from an administrative perspective, these variables are relatively easy to quantify, record, and report periodically compared with indicators of a more qualitative nature.

However, when examined through Soekanto's theory of legal effectiveness [4], this construction represents only a small part of the complex factors influencing successful law enforcement. It merely reflects the productivity aspect of law enforcement personnel without comprehensively addressing legal substance, facilities and infrastructure, society, or legal culture. Furthermore, the author argues that output based indicators contain a fundamental methodological weakness: they conflate activities with impacts. The number of arrests is essentially a measure of institutional activity rather than a measure of the actual effect of such activity on reducing narcotics trafficking in society. This logical fallacy may ultimately create what public policy studies describe as a perverse incentive a situation in which law enforcement institutions are indirectly incentivized to maintain or even increase case numbers because high figures are perceived as evidence of strong performance rather than as an indication of failure to prevent narcotics trafficking at the structural level.

The first limitation of the existing indicator framework is its bias toward lower level enforcement. Numerous studies have consistently demonstrated that most narcotics cases

processed in North Sumatra involve persons who use drugs, small scale dealers, or couriers, while the key actors controlling distribution networks are relatively rarely subjected to comprehensive legal proceedings. A study of risk assessment as a correctional policy instrument for narcotics offenders at the Class IIA Binjai Correctional Institution explicitly found that the institution experienced overcrowding due to the predominance of persons convicted of low level narcotics misuse. This condition reflects the substantial proportion of enforcement measures directed at the lower strata of narcotics networks [14]. Ironically, the higher the number of lower level arrests, the greater the figures reported as successful achievements, even though the distribution network may continue to operate because apprehended couriers can be rapidly replaced. This corresponds with the balloon effect described by Reuter [17].

Several other studies conducted within the Faculty of Law at Universitas Pembangunan Panca Budi reinforce this assessment. Research on the criminal liability of children involved in narcotics distribution demonstrates that children acting as couriers at the lowest level of the network are often more readily subjected to criminal proceedings than those who recruited them [26]. A study comparing rehabilitative and repressive approaches to narcotics offences also emphasizes the need to balance the two approaches to prevent disparities in the treatment of persons who use drugs and those who control narcotics networks [27]. Research on criminal law policy concerning the granting of reintegration rights to incarcerated persons further demonstrates that correctional policies are influenced by how law enforcement authorities classify the role of an offender from the investigation stage onward [28]. Meanwhile, a study of the criminal responsibility of children who commit assault provides a comparative illustration of how age and structural roles influence patterns of criminal case management in North Sumatra more broadly [29].

The second limitation is the lack of indicators measuring asset tracing and the financial flows of narcotics networks. Although Law Number 35 of 2009 concerning Narcotics [1] normatively provides legal instruments for confiscating assets derived from narcotics offences, their implementation is rarely reported as an institutional performance indicator. This problem is explicitly identified in a study on corporate criminal liability within narcotics distribution chains under the jurisdiction of the North Sumatra Regional Police, which recommends strengthening law enforcement capacity through the *follow the money* approach and imposing sanctions capable of dismantling the economic structures of narcotics networks [5]. The absence of asset tracing indicators from routine performance reports demonstrates that the successful implementation of the *follow the money* approach has not yet been institutionally regarded as an achievement of equal importance to the number of arrests. In theoretical terms, however, asset tracing is one of the most relevant indicators for measuring the structural disruption of criminal networks.

The third limitation is the absence of indicators measuring the resilience of narcotics networks following law enforcement intervention. The success of law enforcement against organized criminal networks should ideally be measured not merely by the outcome of a single intervention but also by the length of time required for the targeted network to recover or establish new operational nodes following enforcement action. Nevertheless, no institutional performance report in North Sumatra systematically monitors this variable. Research on narcotics smuggling routes in the Strait of Malacca indicates that, despite frequent enforcement operations at particular points along the eastern coast of North Sumatra, smuggling networks rapidly adapt by relocating their entry routes to areas subject to less intensive surveillance [2]. This adaptability provides tangible evidence of the limited structural effectiveness of law enforcement. Nevertheless, it remains undetected by conventional indicators that merely count enforcement actions without accounting for shifts in the operational patterns of criminal networks.

The fourth limitation, which is equally important, concerns weak data synchronization among law enforcement institutions, resulting in the absence of integrated cross institutional indicators. The police, the National Narcotics Board, the prosecution service, the courts, and correctional institutions each maintain separate performance recording systems that are not interconnected. Consequently, it is difficult to construct a comprehensive account of a narcotics case from the initial investigation through prosecution, adjudication, and correctional treatment, let alone trace connections between cases belonging to the same criminal network. This fragmented data environment has consistently been identified as an impediment in research on criminal policy for addressing narcotics offences within the jurisdiction of the Sibolga Resort Police, which explicitly recognizes weak inter agency data synchronization as a principal structural obstacle [6]. A study on the protection of suspects' rights during narcotics investigations similarly highlights the gap between normative provisions and their practical implementation resulting from weak institutional coordination [7].

Based on these four limitations, it may be provisionally concluded that the existing construction of indicators for measuring narcotics law enforcement effectiveness in North Sumatra is epistemologically misdirected: it measures institutional activity rather than the successful attainment of legal objectives. This misdirection may ultimately mislead policymakers because data that appear quantitatively positive particularly the continued increase in enforcement actions may conceal a more fundamental structural failure, namely the inability to disrupt narcotics criminal networks sustainably.

4.2 Reconstructing Indicators of Narcotics Law Enforcement Effectiveness to Prioritize Criminal Network Disruption

In response to the weaknesses of the conventional indicator framework described above, this section proposes reconstructing the indicators of narcotics law enforcement effectiveness by orienting them toward the disruption of criminal networks. This reconstruction is not intended to eliminate conventional output based indicators entirely, as data concerning arrests and seized evidence continue to possess informational value. Rather, it seeks to complement such indicators and correct their inherent biases by introducing four new groups of indicators that, when applied cumulatively, more accurately reflect the substantive objectives of law, as emphasized in Rahardjo's progressive law framework [19] and Barda Nawawi Arief's theory of criminal law policy [13].

The first group of indicators concerns the ratio of enforcement actions against key actors to those against field level actors. Instead of merely recording the total number of suspects, this indicator requires law enforcement institutions to classify each suspect according to their role within the network structure, whether as a person who uses drugs, a courier, a mid level dealer, or a network controller. The greater the proportion of key actors prosecuted relative to field level actors, the higher the effectiveness score recorded. This approach is consistent with the *ultimum remedium* principle, which requires law enforcement resources to be prioritized toward targets whose removal would have the most significant effect on the network's operational continuity [18]. It is also consistent with recommendations to strengthen the identification and prosecution of criminal masterminds presented in studies of corporate criminal liability in the narcotics sector [5].

The second group of indicators concerns the success rate of asset seizure and confiscation. This indicator measures the ratio between the estimated value of assets controlled by a narcotics network based either on financial investigations or estimated transaction values and the value of assets successfully seized and confiscated through legal proceedings. Implementing this indicator requires strengthening investigators' capacity to conduct forensic financial analysis, in accordance with the *follow the money* approach that has long been used to combat money laundering but has not yet been optimally adopted in narcotics cases in North Sumatra [5]. Such capacity building is also consistent with the need to modernize investigative technologies, as

recommended in various studies examining the role of the Directorate of Narcotics Investigation of the North Sumatra Regional Police [7], [8].

The third group of indicators comprises a post intervention network resilience index, which measures the period required for a narcotics distribution route to resume substantial operations following law enforcement intervention, such as the apprehension of a key network node or a major narcotics seizure. This indicator requires longitudinal monitoring of narcotics flows within a particular region and cannot be implemented merely by recording isolated enforcement incidents. The longer the network requires to recover or establish an alternative route, the higher the effectiveness of the intervention. This approach directly responds to findings regarding the adaptability of smuggling networks in the Strait of Malacca, which rapidly adjust to enhanced surveillance at particular locations [2]. It also emphasizes the importance of cross sectoral cooperation among the police, the Directorate of Water Police, and other maritime authorities in continuously monitoring changes in the operational patterns of criminal networks [3].

The fourth group of indicators comprises an inter agency data integration index, which measures the extent to which information concerning a narcotics case can be comprehensively traced and interconnected from the police investigation stage through prosecution, adjudication, and correctional treatment. This proposed indicator directly addresses the problem of data fragmentation identified as a principal structural constraint in several studies [6], [12]. Establishing an integrated, information technology based database shared among law enforcement institutions is an indispensable technical prerequisite for the meaningful implementation of this indicator. It would also constitute a concrete manifestation of strengthening the legal structure, as conceptualized in Friedman's legal system theory [11].

By way of comparison, the use of structurally differentiated role based indicators is not unfamiliar in other areas of Indonesian criminal law. The reformulation of corporate criminal liability following the enactment of the new Indonesian Criminal Code, for example, explicitly differentiates levels of responsibility according to an offender's structural role within an organization [30]. This logic is analogous to differentiating roles within narcotics networks. Similarly, the legal protection of children as victims of trafficking and violence emphasizes the importance of differentiated treatment based on the degree of involvement and vulnerability of the persons concerned [31]. This principle is also reflected in research on the effectiveness of the legal protection system for child victims of violence in North Sumatra, which emphasizes the need to differentiate case management policies according to individual risk profiles [32]. Research on consumer protection against the distribution of prescription only medicines without prescriptions likewise demonstrates that differentiating responsibility between organized distributors and individual offenders is already an established practice in health sector law enforcement [33]. Similar reasoning may therefore be adapted when classifying offenders' roles within indicators of narcotics law enforcement effectiveness. Court decisions concerning perpetrators of Category I narcotics offences in North Sumatra also demonstrate that judges have begun differentiating degrees of culpability according to the offender's role and scale of involvement, although this approach has not yet been systematically incorporated into institutional performance evaluation [34].

The consistent differentiation of structural roles in North Sumatra's criminal justice practices is also evident in various judicial decisions examined by researchers from the Faculty of Law at Universitas Pembangunan Panca Budi. A study of acquittals in homicide cases emphasizes the importance of judges carefully considering each offender's role and causal contribution before imposing a sentence [35]. Meanwhile, research on the challenges arising from the application of Supreme Court Regulation Number 2 of 2012 as a legal reference in theft cases demonstrates that the uniform application of technical guidelines without considering an offender's structural context may create disparities in the administration of justice [36]. Research on the effectiveness of restorative justice in resolving cases involving the

handling of stolen property also emphasizes that restorative approaches are more appropriately applied to offenders who occupy marginal roles within a criminal operation rather than to those who control its economic benefits [37]. This principle is equally relevant to the classification of actors within narcotics networks. A study of the role of the Witness and Victim Protection Agency in protecting victims of crime further underscores the importance of protecting cooperating parties who assist in exposing criminal networks as part of the non punitive incentives supporting a *follow the money* strategy [38]. Furthermore, research on criminal law policy in the regulation of criminal offences in Indonesia confirms that national criminal legislation has gradually begun to recognize the differentiation of offenders' roles as a basis for sentencing policy [39], a trend consistent with the reconstruction of indicators proposed in this article.

When integrated, these four groups of indicators would establish a more balanced performance evaluation framework encompassing both the repressive and structural dimensions of narcotics eradication. The author argues that this reconstruction is not merely a theoretical proposition but can be implemented progressively by revising the internal performance evaluation guidelines of the Directorate of Narcotics Investigation of the North Sumatra Regional Police and the North Sumatra Provincial National Narcotics Board. Such implementation could be achieved, for example, through the issuance of technical guidelines derived from Regulation of the Chief of the Indonesian National Police Number 14 of 2012 [24] and Indonesian National Police Regulation Number 8 of 2021 [25], expressly incorporating these four groups of indicators into the official performance evaluation system.

It must also be emphasized that this reconstructed indicator framework is consistent with the principles underlying Law Number 1 of 2023 concerning the Indonesian Criminal Code [22], which prioritizes corrective justice and proportionality in sentencing. Consequently, not all persons involved in narcotics offences particularly persons who use drugs should be treated as equivalent to network controllers when measuring law enforcement success. The reconstruction of effectiveness indicators proposed in this article is therefore not merely technocratic. It is also aligned with the direction of Indonesia's evolving criminal law policy, which is transitioning toward a more humane paradigm while remaining resolute in addressing the principal actors behind organized crime.

Conclusion

Based on the foregoing discussion, this study draws two principal conclusions that address the research questions formulated at the outset. First, the indicators currently used to measure the effectiveness of narcotics law enforcement in North Sumatra remain predominantly based on administrative outputs, namely the number of cases uncovered, the number of suspects apprehended, and the quantity of narcotics seized. These indicators do not adequately account for the extent to which enforcement actions produce a sustained weakening of the structural capacity of narcotics criminal networks. The fundamental limitations of this framework lie in its bias toward lower level enforcement, the lack of asset tracing indicators, the absence of measurements of post intervention network resilience, and fragmented data across law enforcement institutions. Collectively, these limitations cause the existing indicators to reflect institutional activity rather than substantive success in achieving the objectives of the law.

Second, the reconstructed effectiveness framework proposed in this study directs the assessment of narcotics law enforcement performance toward four complementary dimensions: the ratio of enforcement actions against key actors to those against field level actors; the success rate of asset seizure and confiscation; the post intervention network resilience index; and the inter agency data integration index. Together, these four dimensions shift the performance evaluation paradigm from merely counting the quantity of enforcement outputs to assessing the

extent and duration of a legal intervention's impact on the capacity of narcotics networks to resume their operations.

In light of these conclusions, this study recommends that the North Sumatra Regional Police and the North Sumatra Provincial National Narcotics Board consider revising their internal performance evaluation guidelines by progressively adopting the four proposed dimensions. The initial stages should prioritize strengthening forensic financial analysis capabilities to support the *follow the money* approach and developing an integrated database shared across law enforcement institutions. Further research should also empirically examine the application of these four indicators through concrete case studies in selected jurisdictions. Such research would enable the validity of the conceptual reconstruction proposed in this article to be tested using more measurable and longitudinal field data. Through these measures, narcotics law enforcement in North Sumatra is expected to move beyond the illusion of quantitative success and advance toward the structural and sustainable disruption of narcotics criminal networks.

References

[1] Republik Indonesia, Undang Undang Nomor 35 Tahun 2009 tentang Narkotika, Lembaran Negara Republik Indonesia Tahun 2009 Nomor 143, 2009.

[2] H. Pratiwi, A. Setiawan, and S. F. Riyadi, "Eksplorasi jalur penyelundupan narkotika di Selat Malaka: Studi kasus garis pantai timur Sumatera Utara," Parhesia, vol. 3, no. 2, pp. 186–211, 2024. doi: 10.29303/tcbcf546.

[3] D. A. Prabowo, M. L. Panggabean, and A. Hutahaean, "Peran Ditpolair Baharkam Polri dalam mencegah tindak pidana penyelundupan narkotika melalui jalur laut Nusantara," Innovative: Journal of Social Science Research, vol. 3, no. 6, pp. 367–382, 2023.

[4] S. Soekanto, Faktor Faktor yang Mempengaruhi Penegakan Hukum. Jakarta: PT RajaGrafindo Persada, 2021.

[5] M. R. Tarigan, H. Aspan, and Mhd. A. Siregar, "Analisis Yuridis Terhadap Pertanggungjawaban Pidana Korporasi dalam Rantai Peredaran Narkotika di Wilayah Hukum Polda Sumatera Utara," Judge: Jurnal Hukum, vol. 7, no. 1, pp. 25–39, 2026. doi: 10.54209/judge.v7i01.2645.

[6] T. Malau, Mhd. A. Siregar, and T. R. Zarzani, "Kebijakan Kriminal Terhadap Penanggulangan Narkotika di Polres Sibolga," Judge: Jurnal Hukum, vol. 7, no. 1, pp. 64–75, 2026. doi: 10.54209/judge.v7i01.2661.

[7] Y. Bustami, F. Rafianti, and T. R. Zarzani, "Perlindungan Hak Tersangka Dalam Penyidikan Tindak Pidana Narkotika (Studi Kasus Pada Direktorat Reserse Narkoba Polda Sumatera Utara)," Judge: Jurnal Hukum, vol. 7, no. 1, pp. 208–219, 2026. doi: 10.54209/judge.v7i01.2656.

[8] S. P. Siregar, H. Aspan, and Mhd. A. Siregar, "Implementasi Assesment Terhadap Pecandu Dan Korban Penyalahguna Narkotika Oleh Badan Narkotika Nasional Kabupaten Tapanuli Selatan Perspektif Undang Undang No. 35 Tahun 2009 Tentang Narkotika," Judge: Jurnal Hukum, vol. 7, no. 1, pp. 266–271, 2026. doi: 10.54209/judge.v7i01.2669.

[9] S. Ramadani, "Kebijakan hukum pidana dalam penanggulangan tindak pidana narkotika di Indonesia," Tesis, Universitas Andalas, Padang, 2023.

[10] Ismaidar, "Politik hukum pidana dalam pembaharuan sistem hukum pidana Indonesia," Innovative: Journal of Social Science Research, vol. 4, no. 1, pp. 7370–7382, 2024.

[11] L. M. Friedman, The Legal System: A Social Science Perspective. New York: Russell Sage Foundation, 1975.

[12] M. S. Lubis, Ismaidar, and S. Lubis, "Pemberdayaan Pemerintah Dalam Upaya Pencegahan Peredaran Narkoba Pada Masyarakat Desa Klambir Lima Kebun Kecamatan Hamparan Perak Kabupaten Deli Serdang," CERMIN: Jurnal Penelitian, vol. 6, no. 1, pp. 207–222, 2022.

[13] B. N. Arief, Masalah Penegakan Hukum dan Kebijakan Hukum Pidana dalam Penanggulangan Kejahatan. Jakarta: Kencana, 2010.
[14] N. N. Hasibuan, S. Ramadani, and Ismaidar, "Asesmen Risiko Sebagai Instrumen Kebijakan Pemasyarakatan Dalam Pemberian Hak Bersyarat Bagi Narapidana Tindak Pidana Narkotika Di Lembaga Pemasyarakatan Kelas IIA Binjai," Judge: Jurnal Hukum, vol. 6, no. 12, pp. 2683–2692, 2026. doi: 10.54209/judge.v6i12.2533.
[15] R. Atmasasmita, Sistem Peradilan Pidana Kontemporer. Jakarta: Kencana Prenada Media Group, 2011.
[16] R. Atmasasmita, Strategi Pembinaan Pelanggar Hukum dalam Konteks Restorative Justice. Jakarta: Kencana, 2017.
[17] P. Reuter, Drug War Heresies: Learning from Other Vices, Times, and Places. Santa Monica: RAND Corporation, 2001.
[18] Moeljatno, Asas Asas Hukum Pidana, Edisi Revisi. Jakarta: Rineka Cipta, 2008.
[19] S. Rahardjo, Ilmu Hukum. Bandung: PT Citra Aditya Bakti, 2006.
[20] S. Soekanto, Pengantar Penelitian Hukum. Jakarta: UI Press, 2014.
[21] Republik Indonesia, Undang Undang Nomor 8 Tahun 1981 tentang Hukum Acara Pidana, 1981.
[22] Republik Indonesia, Undang Undang Nomor 1 Tahun 2023 tentang Kitab Undang Undang Hukum Pidana, 2023.
[23] Republik Indonesia, Undang Undang Nomor 2 Tahun 2002 tentang Kepolisian Negara Republik Indonesia, 2002.
[24] Kepolisian Negara Republik Indonesia, Peraturan Kepala Kepolisian Negara Republik Indonesia Nomor 14 Tahun 2012, 2012.
[25] Kepolisian Negara Republik Indonesia, Peraturan Kepolisian Negara Republik Indonesia Nomor 8 Tahun 2021, 2021.
[26] H. R. Adrianto, Abdul Rahman Maulana Siregar, and R. Sidi, "Pertanggungjawaban Pidana bagi Anak sebagai Pengedar Narkotika (Studi Putusan Nomor 46/Pid.Sus Anak/2025/PN Mdn)," Judge: Jurnal Hukum, vol. 6, no. 9, 2026. doi: 10.54209/judge.v6i09.2256.
[27] E. Ginting, R. Rahmayanti, and Ismaidar, "Analisis Yuridis Terhadap Tindak Pidana Narkotika Ditinjau dari Pendekatan Rehabilitatif dan Represif dalam Prespektif Hukum," Blantika: Multidisciplinary Journal, vol. 3, no. 11, pp. 1710–1719, 2025.
[28] S. H. Nasution, Abdul Rahman Maulana Siregar, and Ismaidar, "Criminal law politics on the granting of reintegration rights to community inmates (Study at Class IIA Binjai Prison)," Journal Evidence of Law, vol. 4, no. 3, pp. 2151–2159, 2025.
[29] G. R. Juangsah, Sumarno, and L. R. Hasibuan, "Analisis Pertanggungjawaban Pidana Anak sebagai Pelaku Penganiayaan dalam Hukum Pidana Indonesia (Analisis Putusan Nomor 37/Pid.Sus Anak/2025/PN Lbp)," Judge: Jurnal Hukum, vol. 6, no. 9, 2026.
[30] A. K. F. Ahmad, "Reformulation of corporate criminal liability after the new criminal code," Ta'zir: Jurnal Hukum Pidana, vol. 9, no. 1, pp. 62–71, 2025. doi: 10.19109/tazir.v9i1.28294.
[31] O. Yanto, "Legal Protection of the Rights of the Child Victims in Indonesian Juvenile Criminal Justice System," Jurnal Yustika, vol. 23, no. 1, pp. 24–36, 2020. doi: 10.24123/yustika.v23i01.2818.
[32] L. M. Grand, Ismaidar, and L. R. Hasibuan, "Efektivitas Sistem Perlindungan Hukum Bagi Anak Korban Perdagangan Dan Kekerasan: Tantangan Dan Strategi," Judge: Jurnal Hukum, vol. 6, no. 12, pp. 2645–2655, 2026. doi: 10.54209/judge.v6i12.2536.
[33] S. Annisa and Ismaidar, "Perlindungan Hukum Konsumen Atas Perbuatan Seorang Apoteker Yang Dengan Sengaja Mendistribusikan Obat Keras Daftar G Dengan Tidak Menggunakan Resep Dokter," Judge: Jurnal Hukum, vol. 5, no. 2, pp. 387–396, 2024. doi: 10.54209/judge.v5i02.711.

[34] K. N. G. Gulo, F. R. Siregar, and Ismaidar, "Criminal Responsibility for Perpetrators of Class I Narcotics Crimes Based on the Decision of the Mandailing Natal District Court (Study of Decision Number 27/Pid.Sus/2025/Pn Mdl)," Judge: Jurnal Hukum, vol. 6, no. 10, pp. 1976–1994, 2026. doi: 10.54209/judge.v6i10.2371.
[35] R. A. Ginting, Abdul Rahman Maulana Siregar, and S. Ramadani, "Tinjauan Yuridis Terhadap Putusan Pengadilan yang Membebaskan Terdakwa dari Segala Tuntutan Tindak Pidana Pembunuhan (Studi Putusan Nomor 454/Pid.B/2024/PN.Sby)," Judge: Jurnal Hukum, vol. 6, no. 12, pp. 2693–2704, 2026. doi: 10.54209/judge.v6i12.2532.
[36] M. R. T. Triangga, Ismaidar, and A. R. M. Siregar, "Problematika Pemberlakuan Peraturan Mahkamah Agung Nomor 2 Tahun 2012 sebagai Rujukan Dasar Pelaku Pencurian Tandan Buah Segar di Lingkungan Perseroan Terbatas Perkebunan Nusantara IV Regional II," Judge: Jurnal Hukum, vol. 6, no. 9, 2026. doi: 10.54209/judge.v6i09.2260.
[37] A. A. Sibarani, A R. H. Hasibuan, and Abdul Rahman Maulana Siregar, "Efektivitas Penerapan Restorative Justice dalam Penyelesaian Perkara Penadahan Berupa Handphone di Cabang Kejaksaan Negeri Mandailing Natal di Natal," Judge: Jurnal Hukum, vol. 6, no. 10, pp. 1995–2009, 2026. doi: 10.54209/judge.v6i10.2372.
[38] M. Jasmine, S. Ramadani, and C. Nasution, "Analisis Peran Lembaga Perlindungan Saksi dan Korban (LPSK) dalam Melindungi Korban Penganiayaan Berat," Judge: Jurnal Hukum, vol. 6, no. 9, 2026.
[39] S. Ramadani, E. Danil, F. Sabri, and A. Zurnetti, "Criminal law politics on regulation of criminal actions in Indonesia," Linguistics and Culture Review, vol. 5, no. S1, pp. 1373–1380, 2021.