



Collaborative Governance in Combating Illegal Cosmetics: A Study of Multi-Stakeholder Dynamics in South Sulawesi, Indonesia

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Abstract

Background: Distributing illegal cosmetics is a significant challenge in many countries, including Indonesia. Previous studies have shown that cosmetic products pose potential risks to health and socioeconomic, thus requiring effective collaborative governance among stakeholders. This study evaluates the implementation of collaborative governance among stakeholders in addressing illegal cosmetics in South Sulawesi, the province with the title of the largest source of illegal cosmetics in Indonesia. **Methods:** This qualitative study used the collaborative government regime framework, which focuses on collaborative dynamics. Semi-structured interviews with government actors involved in addressing illegal cosmetics and observations. Data analysis was assisted by the Nvivo 15 qualitative analysis tool, based on Collaborative Governance Regime (CGR) framework, focusing on collaborative dynamics. **Results:** This study's findings show that stakeholders are firmly committed to addressing illegal cosmetics, but several challenges exist, including stakeholders' different program priorities and capacities. We conclude that addressing illegal cosmetics

requires a synergistic effort from stakeholders with a shared responsibility and a common goal to ensure that the cosmetic products in the community are safe and of high quality. This research contributes to understanding collaborative dynamics, realizing sustainable collaboration synergism and improving a practical policy framework for addressing illegal cosmetics. This study's findings show stakeholders are firmly committed to addressing illegal cosmetics. Still, several challenges exist, including stakeholders' different priorities and capacities. This results in a dominant role held by Bpom and regulatory loopholes exploited by business actors. The study also identified shortcomings in law enforcement and public awareness.

Keywords: Illegal Cosmetics, Collaborative Governance, Stakeholder Engagement, Public Health, Policy Framework

1. Introduction

The circulation of illegal cosmetics has emerged as a pressing public health and regulatory concern in many countries. These products often fail to comply with established safety and quality standards, exposing users to a range of health risks (Dorlohtahe et al., 2024). Although banned due to their harmful effects, illegal cosmetics remain widely available and are extensively used in various regions (Juliano, 2022). Making informed choices about cosmetic use requires a thorough understanding of the potential hazards associated with these unauthorized products (Wirtu, 2024).

Significance | This study evaluates collaborative governance in South Sulawesi to address illegal cosmetics, enhancing public health, regulatory compliance, and stakeholder coordination.

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Illegal cosmetics frequently contain hazardous chemical additives, posing significant threats to public health. Prior research has underscored the dangers of unregulated cosmetic procedures, linking the use of these products to a spectrum of adverse health outcomes. These range from localized skin irritations and allergic reactions to more severe, systemic complications (Dawson et al., 2024). The widespread availability and low cost of such products, combined with limited public awareness about their risks, further perpetuate their circulation (Kohli et al., 2024). A survey conducted by M. G. et al. (2023) revealed a substantial awareness among consumers regarding the harmful ingredients in cosmetics and the likelihood of long-term side effects, including skin redness, eye irritation, and allergic reactions. These findings highlight the need for a more robust and coordinated response to ensure consumer safety.

Addressing the issue of illegal cosmetics requires a collaborative governance framework that incorporates the roles of government agencies, industry stakeholders, and the public. Such a framework should be characterized by shared responsibility, coordinated regulatory actions, and proactive engagement with market actors. The goal is to regulate the cosmetic market effectively, safeguard public health, and promote informed consumer behavior.

The impact of illegal cosmetics extends beyond public health, also threatening economic stability. This issue is particularly pronounced in Indonesia, where the proliferation of unauthorized products continues despite regulatory efforts. The cosmetics industry, both globally and in Indonesia, is undergoing rapid growth. The global market is projected to grow at a compound annual rate of 4.2% between 2023 and 2030, largely driven by rising demand for skincare and personal care products. Indonesia mirrors this trend, with its cosmetics industry estimated to grow at 7% annually (Pratiwi et al., 2024). While this growth is promising, it has also created an opening for illegal products to fulfill a portion of consumer demand.

Recent reports by the Indonesian Food and Drug Authority (BPOM) underscore the scale of the problem. BPOM's enforcement operations conducted between October and November 2024 revealed extensive violations in the production and distribution of hazardous and illegal cosmetics, with a total estimated value exceeding IDR 8.91 billion. According to BPOM, 40% of regions prone to drug and food crimes are linked to cosmetics, and nearly 43% of public complaints in 2024 concerned cosmetic products (BPOM RI, 2024a). To address this, BPOM intensified its oversight, targeting high-risk areas and online sales platforms. During this period, 53,688 links to illegal cosmetic products were reported to the Ministry of Communication and Digital Affairs and the Indonesian E-Commerce Association (idEA) for content removal. Despite these regulatory challenges, Indonesia's domestic cosmetics industry continues to expand. As of October 2024, the country had

1,249 registered cosmetic manufacturers, a 16.40% increase from the previous year. The number of cosmetic products with distribution permits reached 283,391, with local brands accounting for 68.80% of the total (BPOM RI, 2024b). These figures underscore the industry's economic significance and the urgent need for strengthened regulatory frameworks to curb the circulation of illegal products while supporting sustainable industry growth.

The Indonesian Food and Drug Authority (BPOM) has adopted a multi-pronged strategy to combat the circulation of illegal cosmetic products. This strategy includes disrupting both supply and demand chains, enhancing cross-sector collaboration to educate the public, offering technical guidance to businesses, and intensifying independent and joint supervision and enforcement efforts (BPOM RI, 2024a). To understand the regional dynamics of these efforts, this study investigates the opportunities and challenges of implementing collaborative governance in South Sulawesi, Indonesia. According to BPOM's 2022 data, the majority of illegal cosmetics are facial whitening products containing mercury and other toxic substances, underscoring the urgency for targeted interventions (Direktorat Cegah Tangkal BPOM, 2023). South Sulawesi, identified as a key source province in the distribution of such products, provides a critical context for analyzing the applicability and limitations of collaborative governance in addressing illegal cosmetics.

Addressing complex regulatory issues like illegal cosmetics requires a shift from traditional regulatory models to more adaptive and inclusive governance approaches. Collaborative governance, defined as the process through which public agencies and non-state stakeholders engage across institutional boundaries to achieve shared goals (Emerson & Nabatchi, 2015a), presents a promising model. It enables diverse actors to co-create solutions through deliberative, consensus-driven processes, which are crucial in contexts involving multiple interests, sectors, and knowledge domains (Ansell & Torfing, 2015). Unlike hierarchical or market-based approaches, collaborative governance allows for mutual learning and constructive conflict resolution (Jones & White, 2022). This framework is particularly relevant in South Sulawesi, where the complex socio-economic factors and the involvement of various actors—government agencies, local businesses, consumers, and digital platforms—make top-down interventions insufficient. By examining this provincial case, the study contributes insights into improving national strategies to curb the illegal cosmetic trade through more inclusive and effective governance mechanisms.

Collaborative Governance Regime (CGR) theory provides a comprehensive framework for analyzing the elements that enable effective cross-sector collaboration, including principled engagement, shared motivation, leadership, resources, knowledge and learning, and institutional arrangements (Emerson et al., 2012).

Applying the CGR framework to the issue of illegal cosmetics in South Sulawesi offers valuable insights into the facilitators and barriers to successful collaboration among stakeholders, thereby informing more effective regulatory and enforcement strategies. This framework is particularly useful as it offers a systematic approach for understanding how government agencies and other actors can collaboratively address complex societal challenges, such as the circulation of unauthorized and harmful cosmetic products. One of the key strengths of the CGR model is its ability to assess the motivations, constraints, and outcomes of collaborative initiatives in a structured manner (Scott & Thomas, 2017).

While collaborative governance has demonstrated success across various domains—including urban planning, environmental management, and disaster risk reduction (Beeton et al., 2024; Jones & White, 2022; Russell et al., 2021)—its application in the public health domain, particularly concerning illegal cosmetics, remains underexplored. There is limited empirical research that specifically investigates how collaborative governance can be operationalized in regulating illicit cosmetic practices. This study aims to fill that gap by examining the roles of law enforcement, local governments, and BPOM in implementing collaborative governance strategies to tackle illegal cosmetics in South Sulawesi.

The CGR framework enables a detailed exploration of how stakeholder collaboration can enhance regulatory compliance, ensure public safety, and develop sustainable solutions. It emphasizes critical elements such as shared goals, trust-building, leadership capacity, and institutional design—factors essential for addressing the multifaceted challenges posed by illegal cosmetics (Ulibarri, 2024). By focusing on these dimensions, this study provides a nuanced evaluation of collaborative efforts in a context where traditional top-down regulatory approaches often fall short. The novelty of this research lies in its intersectional focus on collaborative governance and public health, particularly within the regulatory landscape of a developing country. Although collaborative governance has been studied in various fields, its application to the illegal cosmetics trade remains largely unexamined. This research contributes empirical evidence from South Sulawesi, offering practical insights and policy recommendations for enhancing multi-stakeholder collaboration to combat illegal cosmetics and protect public health more effectively.

2. Methodology

2.1 Research Design

We explore and analyze the implementation of collaborative governance to address the issue of illegal cosmetics in South Sulawesi, Indonesia. Qualitative research explores and understands the meaning individuals or groups ascribe to a social or human problem (Creswell, 2013). The qualitative research approach is

most suitable for this study because it provides in-depth insights into government policy-making processes. It allows for an in-depth understanding of the complex dynamics and interactions among stakeholders involved in collaborative governance. This is crucial for understanding how policies are perceived and experienced by different stakeholders (Kopec, 2023).

2.2 Data Collection

Data were collected through semi-structured interviews and observations with key informants from various government agencies involved in implementing collaborative governance to address the issue of illegal cosmetics in South Sulawesi Province. In order to obtain a detailed insight into the process, we conducted 12 semi-structured interviews with the governments involved. The informants' selection targets institutions that play a critical role in the regulation, enforcement, and oversight of illegal cosmetics. Focusing on collaborative dynamic aspects such as principled engagement, shared motivation, and capacity for joint action (Grootjans et al., 2022). We were also conducted the observations to capture and better understand collaborative dynamics.

Data were collected with a triangulation of sources. The knowledge and credibility of qualitative case study research would be increased with the triangulation (Flick, 2018).

2.3 Data Analysis

The collected data were transcribed verbatim and analyzed using NVivo 15, a qualitative data analysis software that facilitates the organization, coding, and interpretation of textual data. The analysis process is based on three concurrent flows of activity: data condensation, data display, and conclusion drawing/verification (Miles et al., 2014). The analysis followed a thematic analysis approach, which involved identifying patterns and themes related to the opportunities and challenges of collaborative governance in addressing illegal cosmetics, focusing on key dimensions such as principled engagement, shared motivation, and capacity for joint action.

To analyze the data, we employed a dual-approach strategy, combining inductive and deductive reasoning. Initially, an inductive approach was used to examine the unprocessed data, identifying emergent patterns and generating initial codes. Following this, a deductive approach was implemented, utilizing the collaborative governance framework to categorize the preliminary codes and align them with the dimensions of the framework's Collaborative Governance Regime (CGR). The coded data was organized into thematic charts and matrices to facilitate comparison and identify relationships between themes. The final stage involved interpreting the data and drawing conclusions about the implementation of collaborative governance in addressing illegal cosmetics, as well as identifying opportunities for improvement. The use of NVivo not only facilitated efficient data management but also provided a systematic approach to analyzing

Table 1. Participants Study

Informant	Government	Expertise & Seniority Levels	Government Types
HOB-B	BPOM	Executive-Level	Regulatory Agency
ENF-B	BPOM	Senior-Level	Regulatory Agency
INS-B	BPOM	Senior-Level	Regulatory Agency
REG-B	BPOM	Senior-Level	Regulatory Agency
PR-B	BPOM	Senior-Level	Regulatory Agency
PE-B	BPOM	Mid-Level	Regulatory Agency
POL-C	Regional Police	Mid-Level	ICJS
JUD-D	District Court	Senior-Level	ICJS
PRO-E	Prosecutor's Office	Senior-Level	ICJS
HO-F	Health Office	Senior-Level	Local Government
CUS-G	Customs Office	Senior-Level	Local Government
TI-H	Industry & Trade Office	Senior-Level	Local Government

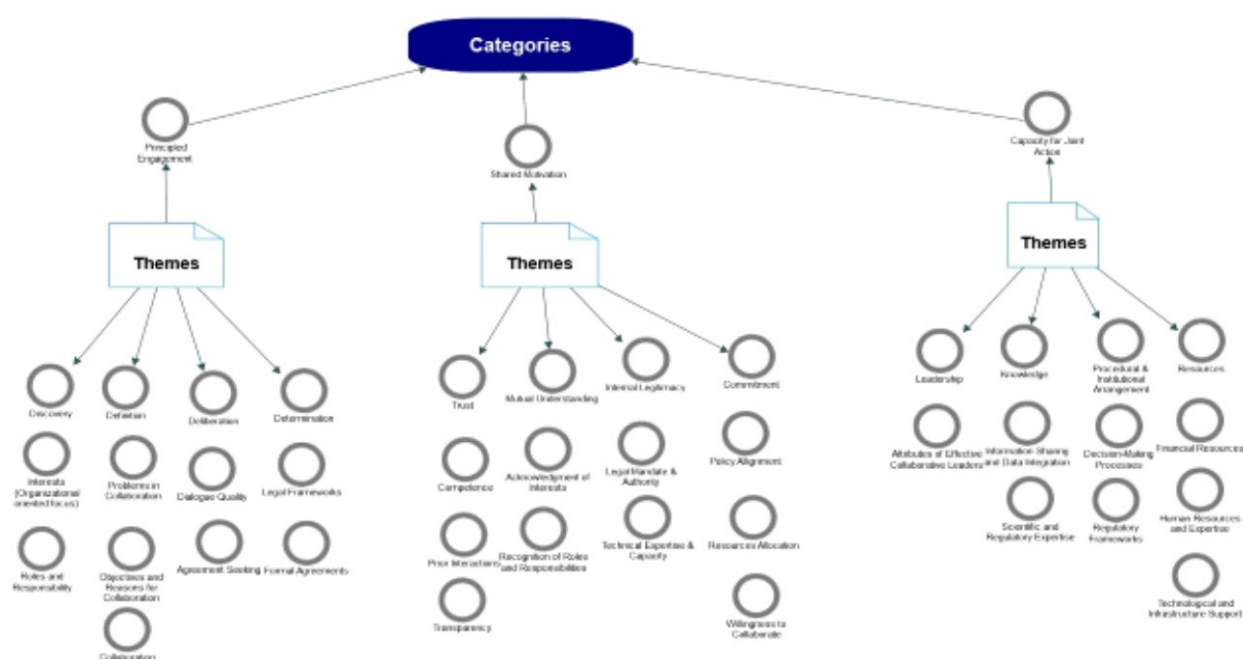


Figure 1. Thematic analysis of the data (Concept map using NVivo 15)

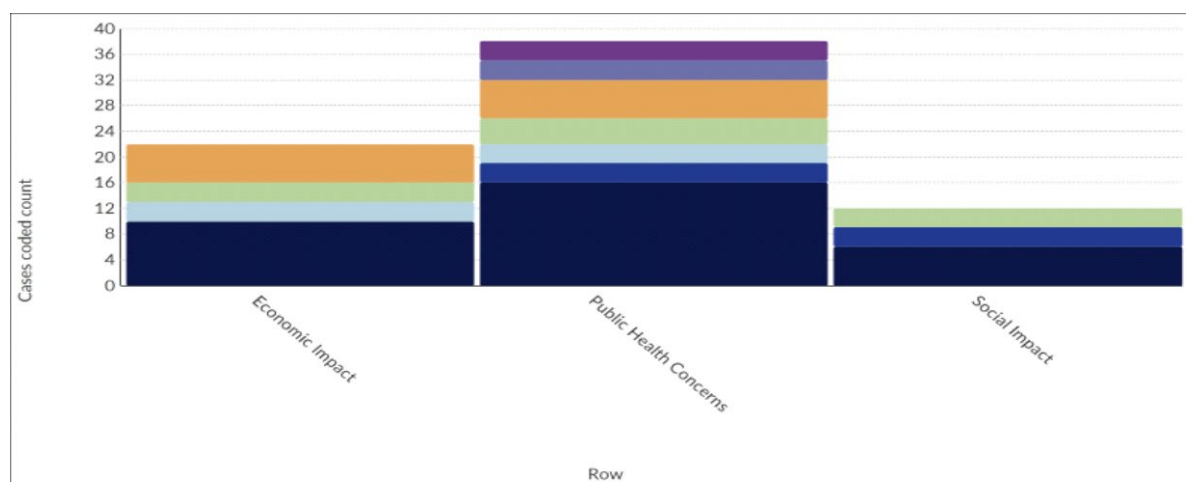


Figure 2. Dominant perceptions between actors about the impact of illegal cosmetics. (Source: Matrix coding query analysis using NVivo 15)

complex qualitative data, ensuring that the findings are robust and well-supported by the data (Woolf & Silver, 2018).

3. Results and Discussion

The study identified diverse attributes defining collaborative governance by analyzing collected data. Central to these attributes were the collaborative dynamics within the Collaborative Governance Regime (CGR), specifically encompassing principled engagement, shared motivation, and the ability to undertake collective actions (capacity for joint action). From analyzing 12 interviews and three observational captures, these findings represent recurring themes. The characteristics of the CGR will be discussed in detail in the subsequent results section.

This study explores the dynamics of collaborative governance in addressing illegal cosmetics, focusing on the perspectives of key government stakeholders. We interviewed 12 key participants from various government agencies, detailed in table 1.

3.1 Collaborative Dynamics - Principled Engagement

Principled engagement involves an iterative discovery, definition, deliberation, and determination process. In this collaborative journey, partners identify shared values and concerns, ultimately reaching a mutual understanding of the problems, the strategies to address them, and their collective purpose (Emerson et al., 2012). The high demand for illegal cosmetics presents many challenges beyond simple regulatory violations. These products, frequently containing harmful substances and manufactured under unsafe conditions, have severe economic, public health, and social implications. To effectively address these issues, it is essential to understand how key government stakeholders perceive these impacts. This insight is crucial for developing collaborative strategies for safer and more regulated cosmetic products, ultimately protecting consumers and promoting public well-being. A key aspect of principled engagement is ensuring that the 'right' people—those who are interested and affected—are involved in the process (Silvia, 2017). To visualize the interrelationships between these impact categories and the government actors involved, a matrix query was generated.

We used NVivo to analyze the interviews, looking specifically at how they perceive the economic, health, and social consequences of these illicit products (Figure 1). Figure 2 displays the results of the matrix coding query, highlighting the frequency of coded references concerning the economic, public health, and social impacts of illegal cosmetics. On the Y-axis, we see the "cases coded count," which indicates how often government actors referenced each impact category. Meanwhile, the X-axis categorizes these impacts into three distinct areas: *economic impact*, *public health concerns*, and *social impact*. This visual representation clarifies the data and underscores the multifaceted nature of the challenges posed by illegal cosmetics, emphasizing the need for a comprehensive

response from all stakeholders involved. As depicted in Figure 2, public health concerns emerged as the most frequently coded impact category, followed by economic impact and social impact.

Public Health Concerns: The high coding frequency in this category underscores the government's emphasis on safeguarding public health. All government actors consistently highlighted the dangers of unregulated cosmetic products, citing potential health hazards such as skin irritations, allergic reactions, and long-term health complications (Ebenezer Ebo Yahans Amuah et al., 2023).

A representative from BPOM highlighted the alarming prevalence of illegal cosmetics in the market, stating, "*The illegal cosmetics pose significant risks to public health, as these items often contain harmful substances that can lead to severe dermatological issues and long-term health complications like cancer. Our agency is committed to enforcing regulations, but we require the support of other governmental bodies to enhance our outreach and education efforts.*" A representative from the health department underscored the necessity of a collaborative approach to address the challenges posed by illegal cosmetics. "*These products not only undermine consumer safety but also place an additional burden on our healthcare system, as we see a rise in cases of adverse reactions. A coordinated response is vital for safeguarding public health and ensuring that consumers are protected from the dangers of unregulated cosmetic products.*"

Economic Impact: The significant number of references to economic impacts reflects the government's concern over the detrimental effects of illegal cosmetics on legitimate businesses and the overall economy. Actors like the Trade and Industry Office and Customs Office emphasized unfair competition, revenue loss, and damage to the country's reputation. We interviewed a customs official who articulated the economic challenges of illegal cosmetics, stating, "*The influx of smuggled and unregulated cosmetic products not only undermines legitimate businesses but also results in significant revenue losses for the government. These illegal goods evade taxes and tariffs, which directly impacts our fiscal health.*"

Social Impact: While less frequent than the other categories, the social impacts of illegal cosmetics were recognized. Representatives from the Integrated Criminal Justice System (ICJS), including the Regional Police and Prosecutor's Office, highlighted how these products could undermine public trust, promote a culture of lawlessness, and lead to social unrest.

Despite variations in emphasis, the consistent presence of all three impact categories across the actors suggests a collective awareness of the multifaceted nature of illegal cosmetics. This shared understanding can be leveraged to enhance collaborative governance, fostering a more integrated and practical approach to combating this issue. Government actors addressing illegal cosmetics share a common understanding of the economic, public health, and social ramifications. This shared awareness underscores

the potential for effective collaborative governance, as these actors are united in their pursuit of mitigating the detrimental effects of illegal cosmetics. The dynamics of collaboration are influenced by the system context at the outset and over time (Ulibarri et al., 2020). The thematic analysis process focuses on elements that enhance the conceptual understanding of key notions and the expectations of government actors. In relation to Emerson framework of the essential dimensions of collaborative governance, a shared understanding of the impact of illegal cosmetics significantly enriches principled engagement. Fundamental principles informed by participants characterize this engagement, a clear definition of purpose, and the discovery of common interests. The effectiveness of this typology is closely linked to the involvement of municipalities in the co-creation process, the diverse experiences, professional knowledge, resources, competencies, and ideas of stakeholders involved in a project can significantly enhance understanding of the challenges, leading to a richer pool of ideas (Merlin-Brogniart et al., 2022).

For public managers aiming to leverage Collaborative Governance Regimes (CGRs) to design and implement policies and programs more inclusively, such as addressing illegal cosmetics, understanding who benefits from CGR participation is crucial. Those who perceive tangible benefits are likely to be more engaged and willing to participate in future initiatives than those who do not see any advantage. Therefore, recognizing and addressing the interests of all stakeholders can significantly enhance participation and ultimately lead to more effective governance (Emerson & Nabatchi, 2015b).

Figure 3 shows the crosstab query analysis that reveals the frequency of codes about the roles and responsibilities applied to interviews with various government actors in South Sulawesi concerning addressing illegal cosmetics. Within collaborative governance, principled engagement emphasizes the importance of meaningful participation, constructive dialogue, and decision-making based on shared principles (Emerson & Nabatchi, 2015a). The data underscores BPOM's vital role as the primary drug and food control regulator, which aligns with its mandate. Given BPOM's extensive involvement, effective coordination with other stakeholders is essential for achieving its objectives. Effectively addressing the issue of illegal cosmetics necessitates strong coordination among various stakeholders. The "Information, Communication & Intelligence Sharing" code highlights the importance of information exchange among stakeholders. By facilitating effective communication, the government can significantly improve the efficiency of law enforcement efforts and help prevent the distribution of illegal cosmetics. In this context, the data reveals that principled engagement is fostered through the active participation of various stakeholders. However, it is essential to strengthen shared motivation and enhance the capacity for joint

action to improve the effectiveness of efforts in addressing illegal cosmetics. The analysis reveals that addressing illegal cosmetics in South Sulawesi involves various government actors with distinct roles. BPOM plays a central role, while other actors provide support in their respective areas. Collaborative governance, particularly principled engagement, is key to success. However, there is a need to strengthen coordination, information exchange, and the capacity for joint action (Emerson et al., 2012).

Multi-government partnerships framework contextualizes the issue within an existing field and redefines it as a newly emerging area of focus (Gray & Purdy, 2018). For example, one of the significant challenges in achieving a strong global climate change agreement has been establishing the necessary level of shared responsibility among all stakeholders (Ansari et al., 2013). Principled engagement unfolds iteratively, allowing governments with diverse substantive, relational, and identity goals to collaborate across institutional, jurisdictional, and sectoral boundaries. This collaborative approach is essential for effectively addressing complex problems (Emerson & Nabatchi, 2015b). In other words, principled engagement is crucial for achieving collaborative governance and resource (CGR) level goals, such as reaching policy agreements or developing regional plans. Additionally, it can facilitate valuable connections for individual actors and help them identify essential resources (Scott & Thomas, 2017).

Principled engagement is a dynamic process that enables diverse government actors (BPOM, Customs Office, District Court, Health Office, Industry and Trade Office, Prosecutors, and Regional Police) to collaborate effectively.

Discovery : This initial phase corresponds to CGRs emphasis on "initial interactions." It is where stakeholders, in this case, government agencies, begin to understand the problem's scope. The chart's "Roles and Responsibilities," "Interests," and "Shared Problems" reflect the process of identifying the issues that necessitate collaboration. This stage is about building a foundation of shared understanding, a crucial first step in any collaborative effort (Emerson et al., 2012; Emerson & Nabatchi, 2015a, 2015b). For example, during the "Discovery" phase, BPOM and the Regional Police identify common challenges related to the distribution of illegal cosmetics, even though their operational focuses differ.

Definition : This stage resembles the "framing" process, where stakeholders define the problem, clarify roles, and establish objectives. The emphasis on "Objectives and Reasons for Collaboration" underscores the importance of clarity and mutual agreement by fostering a shared understanding of the "why" and "who" stakeholders pave the way for effective collaboration. This aligns with Emerson and Nabatchi's concept of the need for clarity and agreement on the purpose and scope of collaboration (Emerson & Nabatchi, 2015b).

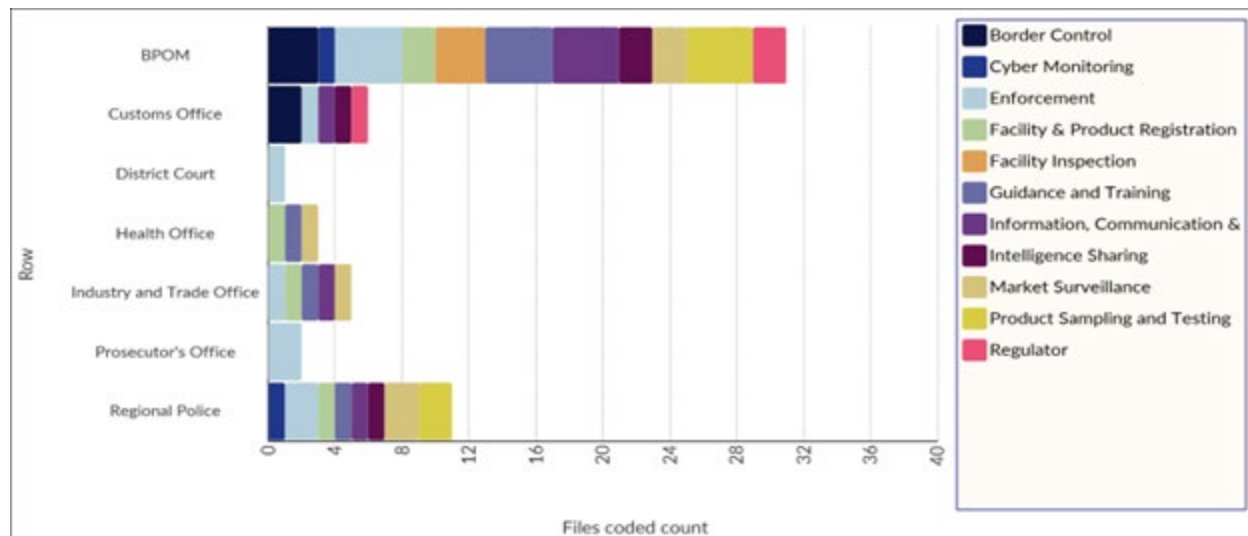


Figure 3. Distribution of Roles and Responsibilities
(Source: Crosstab query analysis using NVivo 15)

Table 2. Description of themes and sub-themes (Shared Motivation coding analysis)

Themes	Sub-Themes
Commitment	Policy Alignment
	Resources Allocation
	Budgetary Support
	HR Deployment
	Willingness to Collaborate
	Openness to interagency dialogue
	Recognition of shared responsibility
Internal Legitimacy	Legal Mandate & Authority
	Technical Expertise & Capacity
Mutual Understanding	Acknowledgment of Interests
	Balancing Competing Interests
	Understanding Priorities
	Appreciation of Expertise
	Empathy and Perspective-Taking
Trust	Recognition of sResource Limitations
	Competence
	Expertise and Capability
	Problem-Solving Availability
	Integrity
	Consistency with Values
	Ethical Behavior
	Prior Interactions
	Transparency
	Information Sharing

Deliberation : This stage represents the core of principled engagement, highlighting the significance of constructive dialogue and information exchange. The concepts of "Dialogue Quality," "Information Sharing," and "Evidence-Based Decision-Making" emphasize the necessity of open communication and informed choices. Emerson and Nabatchi underscore the importance of inclusive and transparent dialogue, precisely what this stage embodies.

Determination : This final stage marks the transition from discussion to action, where decisions are formalized and implemented. The elements of "Procedural Mechanisms," "Legal Frameworks," and "Formal Agreements" highlight the necessity for structure and established processes. It is at this point that collaborative efforts begin to yield tangible results.

3.2 Collaborative Dynamics – Shared Motivation

The qualitative analysis reveals the dynamic process of shared motivation in collaborative governance. Government actors can strengthen their commitment to addressing illegal cosmetics in South Sulawesi by fostering trust, mutual understanding, and internal legitimacy (Table 2).

The data shows the dynamics of shared motivation among government actors working to address illegal cosmetics in South Sulawesi. As illustrated in the CGRs framework, this process is through a series of elements: trust, mutual understanding, and internal legitimacy, ultimately leading to commitment.

3.3 Trust as a Foundational Element

Competence and Integrity: The codes associated with trust, such as "Competence," "Expertise and Capability," "Integrity," and "Ethical Behavior." These elements are important for establishing a robust framework for collaboration and underscore the importance of professional conduct within the government sector. *Transparency and Information Sharing:* The "Transparency" and "Information Sharing" codes are critical components of the trust equation. The degree to which agencies share information openly and operate transparently directly impacts their level of trust, ensuring that all parties involved are well-informed and actively engaged in the process. *Prior Interactions:* The significance of "Prior Interactions" in building trust cannot be overstated. The historical relationships between agencies, shaped by past decisions and actions, play a vital role in influencing future collaboration, highlighting the importance of their previous interactions.

3.4 Mutual Understanding: Bridging Perspectives

Acknowledgment of Interests and Priorities: The codes "Acknowledgment of Interests," "Balancing Competing Interests," and "Understanding Priorities" highlight the importance of mutual understanding. Effective collaboration requires actors to acknowledge and respect each other's interests and priorities. *Appreciation of Expertise and Resource Limitations:* "Appreciation of Expertise" and "Recognition of Resource Limitations"

demonstrate a pragmatic understanding of each agency's capabilities and constraints. *Empathy and Perspective-Taking:* "Empathy and Perspective-Taking" are very important to create a good mutual understanding. Those codes show that the people involved are willing to understand the other person's point of view.

3.5 Internal Legitimacy: Establishing Authority and Capacity

The "Legal Mandate and Authority" concepts are crucial for establishing the legitimacy of each agency's involvement in collaborative efforts. This foundation ensures that all participants have the legal backing to engage effectively. *Technical Expertise and Capacity* are vital for effective problem-solving. Agencies must possess the requisite knowledge and resources to contribute to the collaborative process.

Commitment: Translating Motivation into Action

The analysis of coded qualitative data reveals a complex landscape of commitment among government actors engaged in the fight against illegal cosmetics in South Sulawesi. The "Cases Coded Count" across seven dimensions of commitment (Policy Alignment, Resource Allocation, Budgetary Support, Human Resource Deployment, Willingness to Collaborate, Openness to Interagency Dialogue, and Recognition of Shared Responsibility). The data clearly demonstrates variability in commitment across the different dimensions. Notably, "Willingness to Collaborate" and "Recognition of Shared Responsibility" exhibit relatively high counts, suggesting a strong foundational commitment to the collaborative endeavor. Conversely, dimensions such as "Budgetary Support" and "HR Deployment" show comparatively lower counts. This suggests potential gaps in the structural aspects of commitment. Resource constraints and challenges in deploying adequate personnel may hinder the effective implementation of collaborative strategies. "Policy Alignment" and "Openness to Interagency Dialogue" are important components of relational commitment. The data indicates moderate activity levels in these areas, reflecting ongoing efforts to align policies and enhance communication among agencies. Nevertheless, there is still significant room for improvement to achieve greater synergy and coordination. The nature of this commitment evolves over time, as trust, mutual understanding, and internal legitimacy develop and are reinforced through principled engagement. Initially, the connections between participants may be implicit and informal, or they may depend on the completion of specific tasks or actions (Emerson et al., 2012; Emerson & Nabatchi, 2015b; Gray & Purdy, 2018).

3.6 Collaborative Dynamics – Capacity for Joint Action

The capacity for joint action combines four essential elements: procedural and institutional arrangements, leadership, knowledge, and resources (Table 3s). One or more of these elements may be presented initially as an incentive for collaboration by the initiating

Table 2. Description of themes and sub-themes (Capacity for joint action coding analysis)

Themes	Sub-Themes
Capacity for Joint Action	
Knowledge	Information Sharing and Data Integration
	Scientific and Regulatory Expertise
Leadership	Attributes of Effective Collaborative Leaders
	Inclusiveness & Empowerment
	Trustworthiness & Integrity
Procedural & Institutional Arrangement	Decision-Making Processes
	Formal vs. Informal Collaboration
	Regulatory Frameworks
Resources	Financial Resources
	Human Resources and Expertise
	Technological and Infrastructure Support

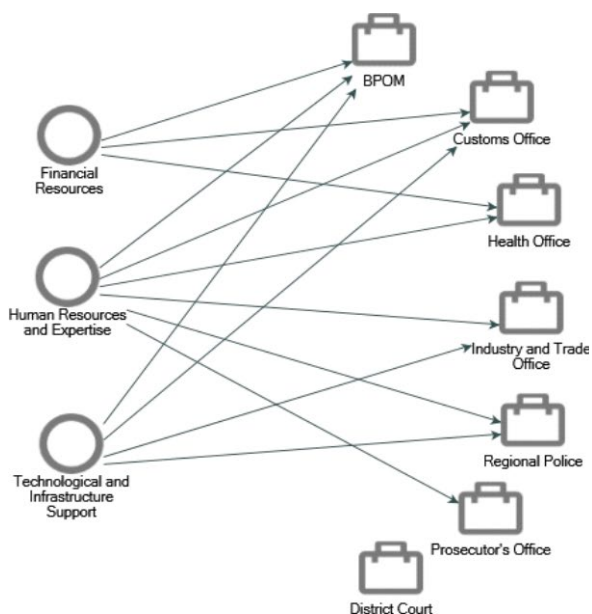


Figure 4. Resources in capacity for joint action (Source : Project map analysis using NVivo)

leader, or they may be cultivated over time through principled engagement and shared motivation (Emerson et al., 2012).

Knowledge as a Foundation for Collaborative Capacity. The observed patterns underscore the importance of "knowledge" in building the "capacity for joint action," as conceptualized in collaborative governance regime framework (Emerson & Nabatchi, 2015b). Effective collaboration hinges on the ability of actors to share information, integrate data, and leverage their respective expertise. *Scientific and Regulatory Expertise:* BPOM's dominance reflects its specialized knowledge in scientific evaluation and regulatory compliance. This expertise is essential for ensuring the safety and quality of cosmetics. The data analysis provides valuable insights into the distribution of "knowledge" as a key element of "capacity for joint action." By enhancing information sharing, leveraging scientific and regulatory expertise, and strengthening interagency coordination, government actors can effectively address illegal cosmetics in South Sulawesi.

Leadership as a Catalyst for Collaborative Action. The distribution of coding references across different government actors, highlighting their respective contributions to leadership in this collaborative effort. The data indicates that BPOM holds the highest number of coding references. This strongly suggests that BPOM is recognized as the leading sector in the collaborative governance regime for combating illegal cosmetics. BPOM's leadership role likely involves coordinating interagency efforts, setting strategic directions, and providing technical expertise. Leadership is critical in collaborative governance regime framework. It provides direction, motivation, and coordination, essential for effective joint action (Ansell & Torfing, 2015; Emerson & Nabatchi, 2015b). In the context of illegal cosmetics, BPOM's leadership is crucial for aligning policies, mobilizing resources, and ensuring the implementation of collaborative strategies. Quotes that show recognition of BPOM's Authority as the leading sector:

"In handling illegal cosmetics cases, we always coordinate with BPOM. They are the most competent party in determining whether a product contains harmful ingredients or not." (from a police officer)
"We recognize that BPOM has a central role in cosmetics supervision. We support their efforts in protecting the public from harmful products." (from a health department representative)

Procedural and Institutional Arrangements: *Structuring Collaborative Action.* This analysis specifically focuses on "Decision-Making Processes" and "Regulatory Frameworks," which are crucial for managing repeated interactions over time. By establishing clear processes and structures, government actors can enhance their collaborative efforts in addressing illegal cosmetics. The data underscores the importance of "procedural and institutional arrangements" in facilitating effective collaborative governance. These arrangements are essential for managing repeated interactions and resolving conflicts (Emerson & Nabatchi, 2015a).

BPOM exhibits the highest coding references, indicating a central role in shaping the decision-making processes. The Regional Police and the Prosecutor also demonstrate significant involvement, highlighting their contributions to law enforcement and legal aspects. The judge occupies a unique and critical role in legal proceedings against those involved in illegal cosmetic crimes. As the sole decision-maker, the judge exercises complete autonomy in delivering verdicts. This independence is a fundamental principle of the legal system, ensuring that decisions are made impartially and free from external influence or interference. Consequently, the judge operates outside interagency coordination and shared decision-making within the collaborative governance framework. The data analysis emphasizes the critical role of "procedural and institutional arrangements" in building the "capacity for joint action." Government actors can enhance their collaborative efforts in combating illegal cosmetics by establishing transparent processes and structures.

Resources: Effective collaboration hinges on the ability to share resources and the flexibility to mobilize them as needed. This includes funding, personnel, technical support, and facilitation. By fostering an environment where these resources can be readily accessed and utilized, stakeholders can enhance their collaborative efforts and achieve their common goals more efficiently (Beeton et al., 2024).

This project map offers a visual representation of how resources are allocated among key government agencies involved in addressing the issue of illegal cosmetics. It is a snapshot of a collaborative effort, showing us who brings what to the table. We see the flow of financial resources, human resources/expertise, and technological/infrastructure support moving towards agencies like BPOM, Customs, Health, Industry and Trade, the Regional Police, the Prosecutor's Office. The map illustrates a shared understanding that effectively addressing illegal cosmetics requires a multi-faceted approach. Nearly all agencies involved receive support, indicating that financial backing, skilled personnel, and technological resources are essential for success. BPOM naturally garners the most comprehensive support as the primary regulatory body, underscoring its pivotal role in coordinating and driving these collective efforts. One noteworthy observation is the position of the Judiciary. Unlike other agencies, it is not a direct recipient of resources. However, this should not be interpreted as a sign of exclusion but reflects the court's unique role within the system. The court's contribution lies in delivering legal rulings and ensuring justice, representing a different form of support. While other agencies focus on the "doing"—conducting investigations, executing seizures, and performing analyses—the court upholds the legal framework. It lends legitimacy to the entire process, reminding us that this effort is not solely about enforcement but fundamentally about upholding the rule of law. Each resource symbolizes the

dedicated efforts of individuals—scientists testing samples, officers conducting raids, and policymakers allocating funds. Visualizing these connections highlights the human element in the fight against harmful products. This serves as a potent reminder that collaboration is not merely a bureaucratic process but a collective endeavor to safeguard public health.

4. Conclusion

This study explores the opportunities and challenges of collaborative governance in addressing the circulation of illegal cosmetics in South Sulawesi, Indonesia, focusing on analyzing government actors' perceptions of the impacts of illegal cosmetics and their roles in law enforcement efforts. Through the analysis of the Collaborative Governance Regime (CGR), this study examines the dynamics of collaboration, including principled engagement, shared motivation, and capacity for joint action, using data from semi-structured interviews and observations with key informants from various government agencies. The research findings reveal that government actors have a common understanding of illegal cosmetics' economic, public health, and social impacts. However, there are differences in priorities and approaches among these agencies, leading to challenges in coordination and the effectiveness of collaborative efforts. In particular, this study highlights the need for a stronger shared understanding of each agency's roles and responsibilities and the need to enhance trust and internal legitimacy among stakeholders. Additionally, this study identifies the importance of leadership, knowledge sharing, and institutional arrangements in facilitating joint action against illegal cosmetics.

Author contributions

WH has designed and conducted the interview, observation, research, collected and analyzed the data. MAA, MY, Darmawansyah, NJ and HRN have evaluated the results and data. WH has drafted the manuscript. All the authors have read and approved the final manuscript.

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Competing financial interests

The authors have no conflict of interest.

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