

# Is More Always Merrier? An Exploration of Co-production Underlying Open Government Data in Indonesia\*

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## Abstract

This paper explores the local actors' involvement behind an integrated waste management information system in Indonesia known as Sistem Informasi Pengelolaan Sampah Nasional (SIPSN), testing whether more people always lead to better outcomes or the opposite. This research explores the involvement of multiple actors' at the local level in data provision for SIPSN as open government data (OGD). We embrace the data-driven service co-production framework by Toots et al. (2017) and information exchange flows by Chen et al. (2023). Two regional apparatuses and a client-user were interviewed to probe the actors' contribution from the lens of government-to-government (G2G), citizen-to-government (C2G), citizen-to-citizen (C2C), and government-to-citizen (G2C) information circulation. Our contribution lies in discussing regional-level case that highlights the data shortage as a pain point that drives data-driven public service initiation.

## Keywords

Open Government Data, Co-production

## 1. Introduction

With the increasing concern for sustainability, Indonesia has channeled its attempt into a top-down waste data reform called the *Sistem Informasi Pengelolaan Sampah Nasional* (SIPSN) in collaboration with various non-governmental entities to supply the necessary data. This research focuses on co-production, which refers to the activities that result in social benefits or public value, such as recycling, waste collection, and other public services [1]. We adopt the data-driven public service co-production framework as proposed by [2] and the data exchange dynamics by [3] to assess the coaction between actors. With this merging construct, this study enriches the fields by shedding light on co-production behind Open Government Data (OGD). Hence, this research is composed of two questions:

(1) *What are the barriers to waste data collection at the local level?*

(2) *How do these barriers contribute to data co-production SIPSN?*

The practice of local-level data input was chosen for the context of the case study due to the growing waste management issues within the selected area.

## 2. Methodology

Two semi-structured online interviews and snowball sampling [4] were conducted with officers from two regional-level apparatuses assigned to input and update the data from the regency. An informational conversation was conducted with a policy analyst from a ministerial body representing an institution of users of SIPSN. The questions centered on leadership, management, engagement, and the activities of governmental actors, which are crucial to understanding the co-production.

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### 3. Key Findings

Aside from requiring sound public value scorecards, this case suggests that involving more actors behind the OGD unnecessarily guarantees the intended effects. The limitation in political and legal capacity, derived from various parties, impedes value creation. However, data collection behind SIPSN allows room for genuine initiative from non-traditional stakeholders in C2C information exchange. In addition to the bottom-up approach between the local apparatus and the central government, a feedback loop is shown in G2G between users and the central government during the co-evaluation of portal use and features. The findings suggest that OGD co-production is somewhat fragmented due to the absence of interaction among certain actors at each co-production stage. This regards the small sample of interviews that might be associated with these missing links. Despite altruistic attempts from non-governmental bodies, the incentive-based program and household waste collection might have the potential for tokenism instead of genuine partnership.

### 4. Conclusion

This empirical study unfolds two findings. First, the more people involved unnecessarily, the better the outcome. This case study indicates the hindrances of co-production in collecting data for OGD. Secondly, the bottlenecks to data quality and supply at the local level prompt data-driven public initiatives, engaging many non-governmental and governmental actors at the strategic and operational phases in solving these issues. This highlights the importance of stakeholders' intervention in every co-production step to reduce fragmentation of data collection and use. Validating the result with informants and the study's elements becomes a countermeasure, despite the limitations of the semi-structured interview. This research lays the groundwork for future studies to include citizens as informants, which could augment and confirm the findings of its single case study. Furthermore, future research can specify the communication pathways between stakeholders to hone the coordination examined in this paper.

### Declaration on Generative AI

During the preparation of this work, the authors used GPT-4 and Grammarly in order to do grammar and spelling check. After using these tools, the authors reviewed and edited the content as needed and take full responsibility for the publication's content.

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