



# Institutional Reconstruction of Promoting and Maintaining the Level of Compliance with Health Protocols in Indonesia during the Pandemic

Ricardi S. Adnan<sup>1</sup> · Sonny Harry B. Harmadi<sup>2</sup> · Sudarsono Hardjosoekarto<sup>1</sup> · Nur Muhammaditya<sup>1</sup>

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## Abstract

This article aimed to observe the efforts of Indonesia and the problems faced in fighting the COVID-19 pandemic regarding the indecisive public policy and the reluctance of people from all walks of life to comply with the Health Protocols (HP) from the perspective of sociological institutionalism (Nee 2003; Nee and Oppen 2015). A two-step variant of SSM-based multi method by Muhammaditya et al. (2021) was applied by inserting (1) Textual Network Analysis by Segev (2020) at stage 1 of SSM to obtain an insightful understanding of the problem situation and to enrich the rich picture, and (2) Social Network Analysis at stage 5 of SSM to expand a skillful discussion on the reality. The research novelty was elaborated in four main empirical facts: **First**, government policies had initially faltered in dealing with the pandemic, reflected by the dissonance in the statements made by high-ranking state officials. **Second**, there was a great number of people disregarding HP and pandemic mitigation policies, particularly during annual rites, the end of year celebration, and Eid Al-Fitr. **Third**, the government encountered a dilemma in issuing policies, whether to remain encouraging economic growth, guarantee the continuity of economic activities, or end the spread of COVID-19. **Fourth**, the direct involvement of the president in handling COVID-19 had a significant impact in reducing active cases that no province was declared as alert areas in October 2021. Meanwhile, the methodological novelty reflected in broader data and analysis through SNA and TNA methods had enriched the practice of SSM in finding sharper conclusions.

**Keywords** Institutional reconstruction · Pandemic · Health protocols · Behavioral changes · Economic interests

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✉ Ricardi S. Adnan  
ricardi.s@ui.ac.id

<sup>1</sup> Department of Sociology, Faculty of Social and Political Sciences, University of Indonesia, Jakarta, Indonesia

<sup>2</sup> Department of Development Studies, Faculty of Creative Design and Digital Business, Institut Teknologi Sepuluh Nopember (ITS), Surabaya, Indonesia

## Introduction

Changes in public behavior in maintaining health during the COVID-19 pandemic had been previously studied by Remuzzi and Remuzzi (2020), Acuña-Zegarra et al. (2020), and Deforche et al. (2021). According to Rogers et al. (2020), behavioral changes from lack of physical activities as the consequence of the lockdown policy had increased health problems. These problems, in addition to the weak monitoring of the movement of people from and to certain areas, had also contributed to the failure of policy implementation (Kishore et al. 2021). Another study of behavioral changes conducted by Perrotta et al. (2021) showed that women and the elderly were more concerned with social restrictions aimed at preventing the transmission of COVID-19.

In general, this pandemic had caused a global shock in terms of public health, economy, social factors, culture, and various aspects of life (Baig et al. 2021; Gupta et al. 2021; Jewett et al. 2021). Indonesia was no exception. The shortage of health workers and hospital facilities as well as the upsurge in daily confirmed cases of over 40,000 and the average daily death toll of over 1,300 in mid-June to mid-July 2021 had caused panic at the levels of individual, group, and community (Adnan et al. 2021). Economic growth, which was stable above 5% in the period 2000–2019, suffered from a major contraction in 2020 at negative 2.07 and remained negative in the first half of 2021 (Pontoh et al. 2021; Ssenyonga 2021). Industrial and economic institutions were unable to operate normally, and some were even forced to close their businesses permanently.

During the first six months of handling the Covid-19 pandemic, Indonesia implemented a public health emergency strategy, focusing on the emergency preparation of health facilities and health workers. However, in line with the existing developments, the government changed the strategy to public health resilience, by placing the prevention of transmission as the priority in handling COVID-19 through behavior change strategies. One of the successful change strategies was public compliance with the Health Protocols (HP), which was increasing from initially 60% in September 2020 to 91% in February 2022. The efforts made since September 2020 were a massive campaign for behavioral changes as a form of social engineering by involving government agencies, the private sector, and the community.

Institutionally, the pandemic mitigation in Indonesia was unique. As specified by the Presidential Decree No 7 of 2020, the COVID-19 Response Acceleration Task Force (Gugus Tugas COVID-19) was established on March 13, 2020, to be directly responsible to the President of Indonesia. However, this task force was restructured on July 20, 2020, in agreement with the Presidential Decree No 82 of 2020 and its duties were transferred to the Committee for the COVID-19 Handling and National Economic Recovery (abbreviated as KPCPEN) led by the Coordinating Minister for the Economic Affairs. Gugus Tugas, which initially played a role in handling public health emergencies, was transformed into Satgas which focused on the public health resilience instead. Based on the research data from the COVID-19 Task Force, the level of public awareness of HP was 60%, while the remaining 30% and 10% explained the people complying with and the people disregarding HP, respectively. This small percentage of the people disregarding HP, however, was equal to a population of 80 million people with the potential for a high transmission rate. There were several reasons for the lack of concern over HP: policy discrepancies between the central government and local governments in the first four months of the outbreak, changes in names/terms (PSBB, Extended PSBB, Transitional PSBB, PPKM, Micro PPKM, Emergency PPKM, and leveled PPKM), information confusion, and the behavior and culture of the non-compliant people.

KPCPEN was a national institution whose top position in the organizational structure was occupied by the Policy Committee, with the Coordinating-Minister for Economic Affairs as the chairman and six Ministers as the deputy chairmen. The committee oversaw the Chief Executive of the Covid-19 response, led by the Minister of State-Owned Enterprises (SOEs) who also supervised the Task Force for handling the pandemic (directed by the Head of Indonesian National Board for Disaster Management (BNPB) and the Task Force for National Economic Recovery and Transformation (commanded by the Minister of Health). This fat organizational structure frequently initiated inconsistent policy statements from several Ministries in the efforts to overcome the pandemic. Even statements from the top officials could contradict one another. Therefore, institutional reconstruction at the macro and meso levels was necessary.

The HP approved as a national policy included three points: wearing masks, washing hands, and maintaining physical and social distance. Two additional points were added later, namely avoiding the crowd and limiting mobility. The implementation of these protocols, as expressed by the Confederation of Indonesian Trade Unions (KSPI), had been estimated to cause the dismissal of approximately 50 thousand workers since the beginning of 2021 (Kompas.com 2021). Based on the data from the Ministry of Manpower compiled from various provinces in Java and Bali, there were 23.72 percent of workers laid off and 24.66 percent with the potential to be laid off, constituting nearly 48 percent of the total workers. Furthermore, as reported by Kompas on August 4, 2021, Statistics Indonesia (BPS) recorded a total of 8.75 million unemployed people in February 2021. In other words, the number increased by 1.82 million compared to the same period in 2020, which was 6.93 million people. Public unrest related to the application of HP increasingly reached its peak throughout 2020 until mid-2021, when the public frequently witnessed numerous public figures and state officials violating HP by inviting the crowd or being exposed without wearing masks in television or social media. It emboldened people to also committed violation, particularly those who needed to earn a living but were hampered by HP, such as workers in the informal sector whose number amounted to more than 77 million people. Therefore, Institutional Reconstruction (IR) was necessary to improve the mentality of the people in the midst of the catastrophic economic conditions caused by the pandemic.

The relaxation of HP at the end of 2020, in addition to pandemic fatigue, had reduced the level of public awareness concerning the dangers of the pandemic, leading to a spike in new cases of Covid-19 transmission in early 2021. Approximately 1.5 million people participating in the big "homecoming" (*mudik*) ritual on Eid al-Fitr in the second and third weeks of May 2021 further weakened the discipline of the community in implementing HP despite the intensive reminder of the Covid-19 Task Force to maintain discipline. Furthermore, the state institutions tasked with enforcing HP, from various Ministries, Regional Governments, and the Indonesian National Police (Polri), were powerless to stop the mass violation of HP. As the consequence, a substantial increase in the number of cases and the development of the deadly Delta Variant were observed two to three weeks later, leading to the tremendous concern among the people of Indonesia. Various efforts had been made by the Covid-19 Task Force in terms of policies and appeals conveyed through mass media and online media as well as prevention practices in the field, but none was effective to stop the increasing rate of the transmission.

Numerous scientists had discussed the Covid-19 pandemic in Indonesia (Rachmawati et al. 2021a; Rachmawati et al. 2021b; Meckelburg 2021; Ardyan et al. 2021), but all employed the hard system method and none provided any basic concrete recommendations. A comprehensive mapping of the case using the SSM approach and method in this article

would provide valuable novelty by producing an Institutional Reconstruction (IR) pattern to anticipate future pandemic outbreaks. IR was essential to overcome extensive problems that could not be solved partially due to their sectoral nature. Regarding this article, IR was needed as a basic effort of organizing in tackling the Covid-19 pandemic.

In contrast to the combination of SSM model in previous studies and based on the notion that SSM was a pluralist approach (Mingers, 2001; Stephens et al. 2009; Muhammaditya et al. 2021) by combining the positivist paradigm in the SSM mechanism, this study developed a multi-method variant to observe the institutional reconstruction of the dynamics of pandemic prevention policies through behavioral changes observed at the institutional level to the individual level (Adnan et al. 2021).

Referring to the aforementioned description, the research question was formulated as follows: “How was the institutional reconstruction to improve and maintain obedience to HP?”. It was then elaborated on four derived questions. **First**, how were the government policies in dealing with the pandemic? **Second**, how many people disregarded HP and pandemic mitigation policies, particularly during annual rites, the end of year celebration, and Eid Al-Fitr? **Third**, could the government issue the exact policies in an effort to continue to encourage economic interests or at least ensure the continuity of economic activities amid the spread of COVID-19? **Fourth**, what was the real impact of the direct involvement of the president in the efforts to reduce COVID-19 cases until October 2021?

Briefly, this article presented literature review, SSM-based multi method to explore the institutional reconstruction, result and discussion: the stream of cultural inquiry to explore the policies on the improvement and compliance with HP, and conclusion.

## Literature Review

### Institutional Reconstruction (IR)

IR was a form of fundamental policy in an effort to organize and improve institutions, such as to revitalize the State Oceanic Administration of China (Chang and Li 2019), to reconcile various parties as a guarantee of the well development of Rwanda and Afghanistan, as well as to structure political institutions loaded with corruption and group interests (Ceva and Ferretti 2021). IR was highly relevant in this article, considering that various policies and solutions made to address the pandemic had encountered a myriad of problems.

Indonesia as an exceptionally diverse country with more than 300 ethnic groups spread over 10,000 islands as well as different social stratifications based on economy, education, and culture (Adnan 2013) required IR in an effort to address critical problems such as the Covid-19 pandemic. As previously discussed, IR was closely related to cultural issues. Therefore, it was essential to conduct the stream of cultural inquiry (CI) that could encourage and unify the measures taken by the members of different groups to reach common goals, such as the management of an organization or institution in the corporate industry in China (Xing et al. 2016), as well as to achieve social justice, particularly in education, through the understanding and appreciation of different behavior and culture (Murrell 2006; Quagliariello 2019). The efforts to realize togetherness in pluralism required a cross-cultural collaboration (Spires et al. 2018).

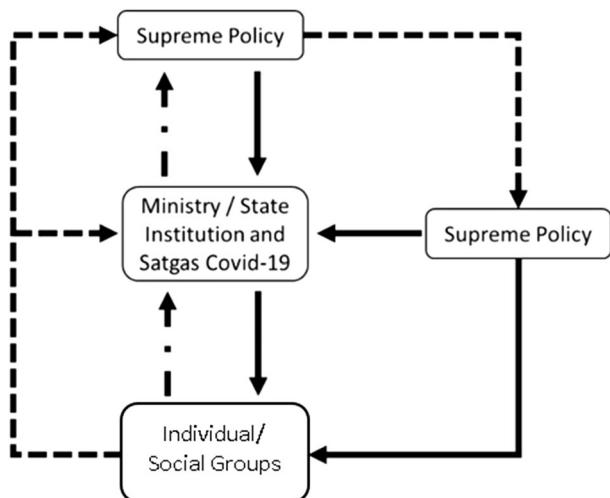
The occurring problems in the community could be depicted using the New Institutionalism in the Economics and Sociology model proposed by Nee (2003) that distinguished problems at three levels of discussion, namely macro, meso, and micro levels.

The macro level referred to an institutional environment consisting of various policies to prevent the spread of the COVID-19 pandemic, such as Government Regulations, Presidential Decrees, or other legal basis that regulated or delegated authority to relevant institutions and officials in mitigating the COVID-19 outbreak. The meso level was reflected in the activities of competent institutions in dealing with the pandemic, namely the COVID-19 Task Force as well as other ministries and institutions that were interconnected with and or influencing the actions of the Task Force organizationally and institutionally. At the micro level, institutional relations were reflected in the prevailing situation in the community, either individually or in social groups. In this research, the level of pandemic eradication was described following the three causal levels of the New Institutionalism and Economic Sociology model introduced by Nee (2003) as shown at Fig. 1.

The three levels were interconnected and influencing one another. The policies issued by the government were implemented by the Task Force and related institutions when regulating and managing community behavior in the enforcement of HP. Furthermore, the relevant organizations could provide feedback to the relevant state institutions to issue new policies. It was evident from the frequent changes in policies in the efforts to contain the transmission of COVID-19.

Individuals or groups in the community could be distinguished into those complying with the rules and those disregarding the rules (Nee 2003). The non-compliant ones could influence the compliant ones to dismiss the rules. (McManus et al. 2022; Jamison et al. 2019) Therefore, monitoring and coercion by the relevant apparatus were imperative in the enforcement of HP. Considering the substantial efforts and resources (over 700 trillion Rupiah or equivalent to two-thirds of the State Budget (APBN), full obedience to HP from all parties should be institutionalized, either in the form of well-organized rules as well as mutually agreed norms and sanctions to ensure compliant individual and community behavior.

**Fig. 1** Levels in pandemic eradication. Source: adapted from Victor Nee 2003



## SSM-Based Multi Method to Explore the Institutional Reconstruction

It was not sufficient to explore IR using merely TNA and SNA as it accentuated the quantification of a phenomenon, rendering the IR illustration unable to systemically describe the phenomenon. In fact, the existing problem lied in the human activity system of the agency/actor. Therefore, it was imperative to apply a methodology that systematically explored the thoughts, words, and actions of agencies and actors that were able to change systemically. On that basis, SSM-based multi method was required. The combination of SSM model by Checkland (1981) was applied by several researchers with the aim of enriching and deepening action research-based studies (Brocklesby 1995; Mingers 2001; Rodriguez-Ulloa and Paucar-Caceres 2005; Paucar-Caceres and Rodriguez-Ulloa 2007; Pollack 2007, 2009; Midgley et al. 2013; Small and Wainwright 2018; Shahabi et al. 2020; Papilo et al. 2021; Muhammaditya et al. 2021). Another combination of SSM model was also applied by building a conceptual model using Ontology by Maturana and conducting observations using an ethnographic method (Jerardino-Wiesenborn et al. 2020; Lamé et al. 2020). Another study also combined SSM with Focused Thinking (Françoço et al. 2021).

The fundamental reason for using SSM-based multi method was to enrich the understanding to describe the real world in a more reliable and valid manner (Mingers 2001). The efforts to build robust reliability and validity were also supported by the availability of data from the institutional level to the individual level or social interactions. The multi-method could meet the needs for research data at all three levels of analysis. In this case, SSM could be combined with the advantages of Textual Network Analysis (TNA) to analyze the main narratives of the policies on improving and maintaining the adherence to HP at the institutional level and reconstruct the dynamics of technical policies on the obedience to HP at the organizational level.

Segev (2020) showed how to use Textual Network Analysis (TNA) step by step and highlighted its advantages and application to identify the main themes appearing in the text as well as to detect its biases and frames. TNA as a method had been applied in several previous studies to detect the prevailing themes and biases in international news and social media (Segev 2020), to predict the performance of TV series (Colladon and Naldi 2019), and to use network analysis in Social Sciences (Borgatti et al. 2009).

The Social Network Analysis (SNA) method was used to analyze the network of social actors at the individual level and social interactions to describe behavioral changes during the execution of policy programs (Borgatti et al. 2014; Cardoso Castro and Espinosa 2020) of washing hands, wearing masks, and maintaining distance.

The TNA visualization (Segev 2020) described the wishes of actors at the macro and meso levels. The relationship between TNA and IR was evident in an effort to discover the content of institutional rules at the macro and meso levels to be applied in IR. Meanwhile, SNA (Borgatti et al. 2014) was practical for strengthening the understanding of how behavioral changes at the micro level were closely related to IR. The SNA analysis was applied to the behavioral changes of actors in seven provinces in July, August, and September 2021. To complete the comparison of SSM-based multi method in stage 5, this study employed the enactment of PPKM policy as a form of IR. The analysis was performed in six provinces by considering the time when HP came into force.

The combination of TNA, SNA, and the Regulation Adaptation Process in the application of SSM referred to Muhammaditya et al. (2021). Thus, understanding IR using TNA, SNA, and the Regulation Adaptation Process was notably relevant in practice. Due to the absence of literature that linked TNA and SNA with IR, this article offered

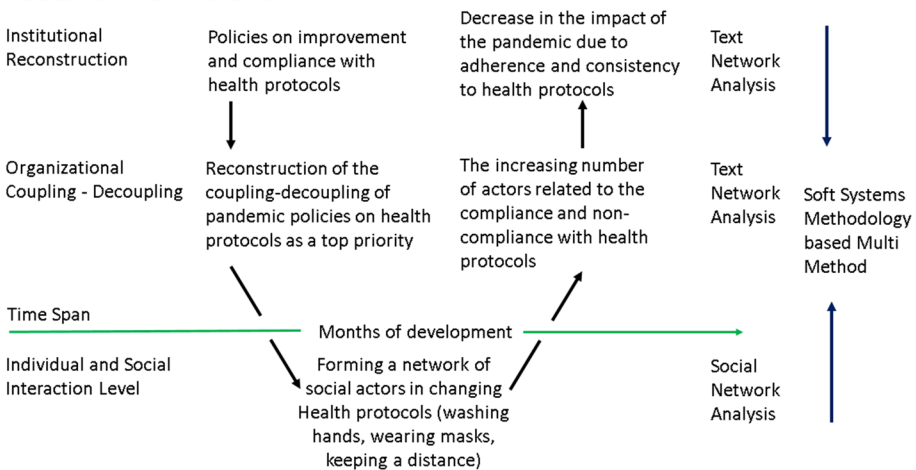
a methodological novelty in discussing the pandemic using TNA and SNA to enrich the SSM approach (Fig. 2).

IR at the macro level influenced rules at the meso level. These rules were imposed on the community at a certain period of time. Behavioral changes of the community would provide feedback on rules at both the meso and macro levels. It was considerably reasonable to analyze the rules at the macro and meso levels using TNA as the method could understand the content of the dominant word relationships in the rules. In addition, the SNA method was suitable to discover the behavioral changes of each actor. All was included in the SSM framework.

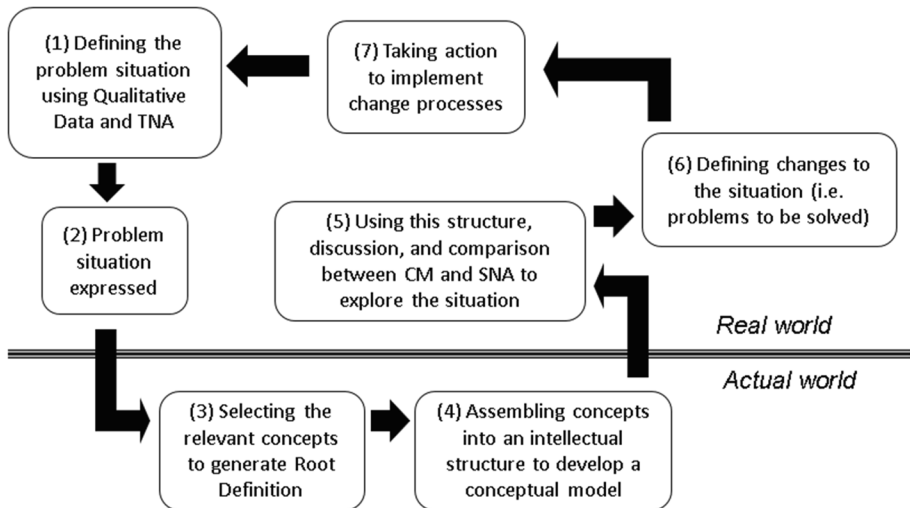
To explain the spread of COVID-19 as well as the efforts to eradicate the pandemic, the data were processed from seven sources. The first source was the results of the research in the provinces of Jakarta, Aceh, and Banten. Second, the results of the observation of the COVID-19 Task Force for Behavioral Changes in March 2021 conducted in Surabaya, Semarang, and Bandung. Third, the mass media coverage from January to the end of July 2021. Fourth, several intensive weekly discussions between the authors and various parties related to the efforts to mitigate COVID-19. Fifth, brainstorming with other members of the COVID-19 expert team from October 2020 to July 2021. Sixth, the weekly reports obtained by the COVID-19 Task Force from each region. Seventh, relevant mass media coverage since January-July 2021. The data became the main materials to be processed using Soft System Methodology (Checkland 2000; Checkland and Poulter 2006; Reynold Holwell 2010). All data were obtained and owned by the COVID-19 Task Force.

Generally, the SSM stages were carried out as follow: Stage 1 was to identify the problem situation based on the seven data sources. To strengthen the reliability and validity of the real world, this article applied the TNA method by reviewing the institutional reconstruction related to various efforts to improve public compliance with HP. The measure taken in analyzing TNA was to collect the existing institutional rules at the macro and meso levels. Each institutional rule was transformed into text data to be processed using Wordij. The processed results in the form of a network were read using Gephy. The analysis

### Research Framework



**Fig. 2** Research framework. Source: adapted from Mingers (2001); Nee 2003; Borgatti et al. (2014); Nee and Oppen (2015); Segev (2020); Muhammaditya et al. (2021)



**Fig. 3** SSM-based multi method. Source: adapted from Mingers (2001); Nee (2003); Borgatti et al. (2014); Nee and Oppen (2015); Segev (2020); Muhammaditya et al. (2021)

of modularity and average degree was carried out next. The analysis was displayed using Yivan Hoo to observe the groups in the rules, leading to IR policies at the macro and meso levels. The combination of qualitative data findings and TNA was analyzed in the form of interventions to determine the social and political dimensions to become the rich picture at Stage 2 (Checkland and Poulter 2006).

Stage 3 was to select the relevant system to generate the root definition. In Stage 4, a conceptual model was created as an epistemological model based on literature review, logical thinking, and data findings (Hardjosoekarto 2012, 2013; Hardjosoekarto et al. 2014). Stage 5 was a comparison between the conceptual model and the real world by comparing the TNA data at the institutional and organizational levels and SNA at the individual and social interaction levels. In Stages 6 and 7, the results of the comparison were defined as the appropriate strategic action steps to build the expected institutional reconstruction.

The aspect distinguishing SSM-based Multi Method in this article was the positioning of TNA at stage 1 and SNA at stage 5. At stage 1, the problematic situation obtained from the minutes and recordings was compared to the institutional rules generated at the macro and meso levels to understand the institutional reconstruction. At stage 5, the results of the conceptual model were compared with the level of behavioral changes in the community to measure the effectiveness of the implementation of IR as Fig. 3.

### Limitation of the Methods Used

One of the authors of this article was the head of the Behavioral Change Division of the Covid-19 Task Force, who had held more than 10,000 intensive meetings with various government agencies, the private sector, and community organizations throughout 2021 and produced 280 behavioral change guidebooks and the underlying rules. The results of the meetings in the form of minutes and recordings were then processed using SSM. A total of 31 rules consisting of 17 rules at the macro level, 14 rules at the meso (organizational) level, and 3 research reports were processed using TNA. In addition, the monitoring data of



the Covid-19 Task Force, which were spread across seven provinces, were used as the sample for the SNA analysis. Despite the large amount of data, this article could attach none considering that the data were the exclusive property of the Covid-19 Task Force.

## **Result and Discussion: The Stream of Cultural Inquiry to Explore the Policies on the Improvement and Compliance with HP**

### **Problem Situation Defined**

In mid-July to mid-August 2021, the pandemic in Indonesia was included in the top-five highest in the world, with an increase of 40,000 new cases every day. In simple terms, there were five aspects of the pandemic explosion caused by the negligence of policy makers and field implementers as well as the violation of HP by the community. First, HP had direct implications for economic activities that were closely related to livelihoods. (Afrianty et al. 2021). The 2020 data from BPS stated that the informal workers in Indonesia amounted to 70.49 million workers, or about 60 percent of the population. Second, a great number of people felt uncomfortable when wearing masks and discontented when doing less activities or gatherings. (Sutarto, et al 2021; Elvira, et al 2021) Third, there was even a considerable number of people who did not believe in the existence of COVID-19. Fourth, the growing political issues or global conspiracy theories in the first four months of the outbreak of the pandemic (McManus et al. 2022; Gligorić et al. 2021; Jamison et al. 2019). Fifth, observed from the aspect of policy, the government was not sufficiently persistent in convincing the public to adhere to HP, presumably influenced by several factors including: (1) various jokes made by state officials and the members of the House of Representatives (DPR) regarding the Corona virus in the period January–February 2020; (2) the lack of public confidence in the gravity of the government efforts in overcoming the pandemic as observed from policy discrepancies between the central government and regional governments in the first four months of the pandemic; (3) changes in terms of various policies on the institutionalization of HP; and (4) changes in the institutional structure from directly under the president to under the Minister.

These factors contributed to the weakening of the legitimacy of the government as the commander in chief in mitigating the pandemic. Table 1 presented public response to the attitudes and policies issued by the government.

Regardless of the pandemic mitigation policies, the perspective of the government on the predetermined work program had also colored the uproar and weakened government legitimacy. In mid-August 2020, for example, the president continued to declare moving the capital city of Indonesia from Jakarta to Penajam a priority, even though it would require approximately 46% of APBN. Explicitly, the government had not yet realized the urgency to mitigate the pandemic following six months of the spread of the COVID-19 in Indonesia. The situation escalated when several conflicting statements regarding the pandemic were issued by senior officials.

The implication of complex perspective and inconsistent policies in handling the pandemic had raised the perception that HP could be compromised with various other interests. In the tourism sector, the government still attempted to attract domestic and foreign tourists through several programs. In the industrial sector, the government continued to grant entry to workers from China. In April–June 2021, the Minister of Education had assured various parties of face-to-face schooling in July 2021. The statement of the

**Table 1** Policies on reducing the rate of COVID-19 transmission and public response to them

Policy	Government statement	Discourse
Large-Scale Social Restrictions (PSBB)	A month following the announcement of the pandemic, precisely in April 2020, the President issued a Government Regulation on Large-Scale Social Restrictions (PSBB); covering school and workplace holidays as well as restrictions on religious activities and activities in public facilities. An area might impose PSBB or not depending on the ministerial approval based on the input of a study team consisting of various experts in coordination with the COVID-19 Task Force	The Commission for Disappeared and Victims of Violence (Kontras) assessed that the complicated administrative procedures render COVID-19 mitigation sluggish. The President responded with a statement on Thursday, April 9, 2020, that regulations are formulated in such a manner to ensure not only immediate but also correct implementation of all procedures. In this sense, caution and accuracy is more prioritized
Regulation in Lieu of Law (Perpu) on COVID-19	The government issued Perpu Number 1 of 2020 regulating state financial policies and financial stability for handling the COVID-19 pandemic and/or in the context of coping with threats to the national economy and/or financial system stability in mid-March 2020	At the end of March 2020, the Perpu was sued to the Constitutional Court by the Indonesian Anti-Corruption Society (MAKI), a Political Party politician/former speaker of People's Consultative Assembly (MPR), and an activist Damai. The Perpu was considered to create impunity for officials and hinder the authority of the Audit Board (BPK) to audit the use of the budget
Tourism Stimulus	The government continued to implement the policy ratified at the end of February 2020, namely providing incentives of IDR 298.5 billion, allocated as follows: IDR 98.5 billion of special discounts to travelers from airlines and travel agents, IDR 103 billion for promotions, IDR 25 billion for tourism activities, and IDR 72 billion for media relations and influencer services	This policy was opposed by the Research Director of the Center of Reform on Economy (Core) as discounts were not efficient to attract foreign tourists. Tourist visits would naturally recover supposing the outbreak has been successfully contained
Establishment of the COVID-19 Handling and National Economic Recovery Committee (KPCPEN)	The President established the COVID-19 Handling Committee in July 2020 to replace the COVID-19 Response Acceleration Task Force	The existence of KPCPEN was criticized due to ambiguity emerged in inter-ministerial coordination. All matters regarding the handling of COVID-19 should first be reported to the Minister of SOEs as the Head of the Daily Executive Committee. Furthermore, the duties of this committee were considered imprecise due to similar composition of membership to that of the government cabinet

**Table 1** (continued)

Policy	Government statement	Discourse
PPKM Policy	<p>The government enforced the Community Activity Restrictions (PPKM) in Java and Bali from January 11 to 25, 2021, as the substitution of PSBB, aiming to limit community activities in red zone areas</p>	<p>This policy was criticized due to the tendency of the government to use different terms for COVID-19 mitigation policies. The changes in the policies were trivial, allegedly related to economic interests</p>
Pre-Employment Card	<p>The government implemented a program from the presidential campaign promises of Jokowi as a social safety net for the community affected by COVID-19</p>	<p>This was suspected to be full of irregularities since it involved a company owned by a former Presidential Special Staff as a provider of online training services</p>
Sanctions against the Violators of HP	<p>Due to the relatively low level of compliance with HP, the President ordered regional heads to formulate derivative regulations from the Presidential Instruction No 6 of 2020 concerning the Improvement of Discipline and Law Enforcement of HP in the Prevention and Control of COVID-19, stipulating sanctions against violators and actively involving TNI and Polri in the implementation</p>	<p>Sri Sultan Hamengku Buwono X as the Governor of the Special Region of Yogyakarta did not agree with the imposition of the sanctions. The Sultan assessed sanctions were not necessary, as long as the health protocols could be enforced by means of dialogue</p>

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Coordinating Minister for Human Development and Cultural Affairs concerning the decision of the government to extend Emergency PPKM until the end of the year had indicated policy confusion in the public sphere. In July 2021, the Spokesperson for the Coordinating Ministry for Maritime Affairs (appointed as the Coordinator of Emergency PPKM by the President) stated that the government had not yet decided on this matter, while the Special Advisor to the Executive Office of the President announced that the status of Emergency PPKM would be determined on July 20, 2020. Policy discrepancy was also shown vertically between the Central Government and several provinces and districts.

At the lower level, the social interaction of the community as the main actor of the violation of HP in the transmission of the pandemic was divided. The buzzers – the hardliners supporting Jokowi in the presidential election campaign – frequently associated those violating HP with their opponents, namely the politically opposing groups in the 2019 presidential election. It was a legacy of the unfinished horizontal conflict in the presidential election. In fact, the violation of HP was committed by various parties regardless of their political orientation. Furthermore, there were several cases in which top government officials invited the crowd and violated HP. However, the dichotomy legacy of electoral conflict always prevailed, thus the pandemic situation that was supposed to be the realm of public health with an impact on the economy of the community was mixed with political issues.

Then, more than 2000 hoaxes related to the pandemic were discovered to exacerbate the situation, such as patients who were declared infected with COVID-19 by hospitals to be entitled to aid funds from the government, information about the types of medicine and herbs to cure COVID-19 patients, the inconsistency of the government in managing the pandemic, and the procurement of facilities such as hospitals and equipment and specifically medicine as a project of the officials to exploit APBN.

The problematic situation regarding the aforementioned five aspects caused by the COVID-19 pandemic in Indonesia as the consequence of the negligence of various parties could be compared with the data on policy reconstruction using TNA that was divided into two levels, namely institutional and organizational, based on the internal research reports from the COVID-19 Task Force and the Policy on the Acceleration of Handling Non-Natural Disasters of the COVID-19 Pandemic. The TNA results were presented in Figs. 4, 5 and 6.

Figure 4 showed health as the main concern for the macro-level regulations, which was closely related to the stringent enforcement of HP, particularly the function of the Governor (the head of province) as a bridge of regulatory authority to the municipal level. Figure 5 showed the organizational level containing health, encouraging children and families to stay at home and implement HP. Figure 6 showed the reports on behavioral changes regarding HP, explaining the significant influence of community leaders on public compliance with HP.

Policies at the institutional level were segregated into 10 clusters. The main theme of the national policies was HP, divided into three activities, namely wearing masks, maintaining distance, and washing hands. Most of the institutional regulations contained the implementation of operational services in both the public and private sectors, public transportation, the home environment, and outdoor sports activities. The policy targets were focused on the district and municipal levels and specifically managed by regional heads whose relationship with the central government was bridged by the governor. Policies at the organizational level were segregated into 15 clusters with the main theme of children and family health as part of public health that required surveillance in the enforcement of HP in dealing with COVID-19. The TNA results from these two levels of policies were



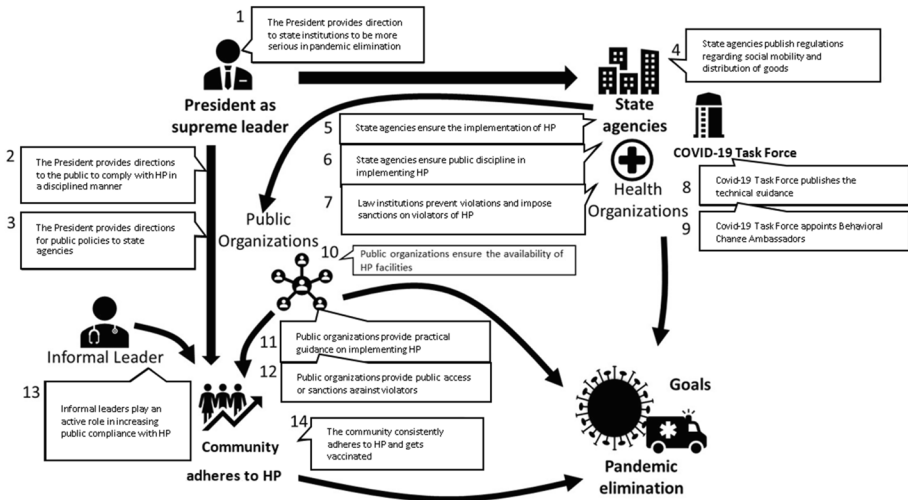


Fig. 6 TNA of Research Report. Source:adapted from Segev (2020)

complemented by the TNA of research reports, showing that social actors greatly affected the success of public compliance with HP, namely "leaders", "role models", "communities", and "organizations" through "media", "social", "television", to "scope", "family", "village", and "work" environment.

### Problem Situation Expressed

Checkland (2000) stated that a rich picture (RP) could describe complex relationships in a system of activities. By using an RP, this study was able to visually relate the social and political dimensions derived from the data from the seven data sources assisted by the TNA comparison of institutional rules and research reports. Based on the rich picture, the transformation process was to "improve the adherence to HP" that was carried out strategically and systematically by the COVID-19 Task Force. Everyone was expected to adhere to the 3Ms: wearing masks, maintaining distance, and washing hands. As for entrepreneurs, institutions, or companies, the expected transformation was to provide facilities for the realization of 3Ms, namely reducing visitor capacity, providing facilities for washing hands prior to entering a building, and not serving people who did not wear masks. The Task Force played a central role by providing practical and technical guidance in implementing the 3Ms. The Task Force held meetings and coordination with 60 universities, 58 business and professional institutions/associations, 10 private companies, eight national television stations, as well as other organizational units under the Indonesian National Armed Forces (TNI)/Indonesian National Police (Polri) and ministries of the Republic of Indonesia. The Task Force had also created 80 educational videos on how to implement HP, intended for various segments of the community.

Previously, the efforts to handle the transmission of COVID-19 were carried out by the Task Force under the direct coordination of the president. Since July 20, 2020, however, the Task Force had been delegated to KPCPEN and led by the Minister of Economy. Thus, the client of this study was the government of Indonesia and the practitioners consisted of a team of experts on behavioral changes of the COVID-19 Task Force,

the head of the behavioral change division of the COVID-19 Task Force, and academics from Universitas Indonesia. Meanwhile, the owner of this study was the authors.

The level of public compliance with HP was a constant from the sum of the pro and con groups. Both responses were also influenced by the culture and the understanding of the community regarding the existing policies as well as the demands for economic needs. How the policy was understood and interpreted by the public would lead to either support or rejection, the attitude of which was also influenced by the existing culture in the community. (Chavarría, et al. 2021) Supposing the cultural elements were "obedient" and "trust in the government", then the individual/community group would tend to support the existing program. Conversely, supposing the dominant value of an individual was personal habit or pleasure, then the individual would tend to not comply with HP. Even though in general it was a form of long-lasting behavior and habit, pandemic fatigue had a significant effect on the adherence to HP (Silmi 2021), even on the previously prevailing culture in the community. Therefore, policy interventions would also have an influence in the efforts to improve the adherence to HP or at least be able to reduce the actions or behaviors contradicting HP. The Task Force sought to build values and beliefs in the community through the application of HP in addition to building social norms to ensure the external control of the community.

The findings of TNA indicated that the policies conforming to HP as well as the function of community leaders and social institutions were the catalyst for behavioral compliance since they were considered as role models to produce the values of gratitude, patience, and endurance. These three moral values were believed to be able to withstand the pressure of pandemic fatigue as structurally visualized in the TNA cluster of social figures. The pandemic fatigue, caused by the boredom of being confined to various rules related to HP, triggered a second wave of COVID-19 (see Fig. 7). Special moments such as Christmas, New Year, Eid al-Fitr, wedding parties, and even group gatherings (either family or professional) became new clusters for the transmission of COVID-19. The statements made by the Minister commanding the Task Force, namely the Coordinating Minister who was appointed to cope with the pandemic by the president, had not succeeded in preventing the second wave.

Due to a dramatic surge in the number of cases in the previous three months, the president began to assume command in dealing with the COVID-19 outbreak at the end of July 2021. Different from previous occasions, the president kept wearing his mask while

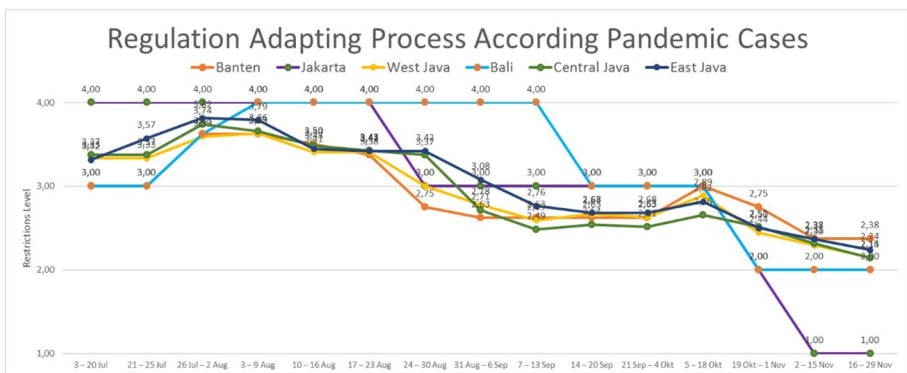


Fig. 7 Regulation adapting process

speaking to the public on TV since then. He announced the enforcement of PPKM level 4 in areas with a high rate of transmission of COVID-19, particularly in the three main provinces with the largest population in Java, namely DKI Jakarta, Central Java, and East Java.

## Root Definition

Referring to the foregoing description of the problem, the authors regarded the efforts to resolve the pandemic as a systemic situation of the country, indicating that the solution should be directed by the leader of the country as the actor with the legitimacy in the state system. It was evident from the success of Indonesia in suppressing the spread of the pandemic from over 40,000 cases per day in July 2021 to 2,000 cases per day in September 2021. This success occurred subsequent to the president himself making a public appearance as a leader in the pandemic mitigation, considering the constant arguments or refusal from various community groups when it was managed by other state officials.

Observing this condition, a Root definition (Rd) was then formulated, derived from the strategy prepared by the COVID-19 Task Force, namely "a system for overcoming the COVID-19 outbreak (P) by implementing policies at the meso and micro (Q) levels to end the pandemic (R)". The human activity system selected showed that the consistent obedience of all people of Indonesia to HP could eliminate the COVID-19 pandemic in the economic, political, social, and cultural environment despite the fatigue suffered by the community, the Government of the Republic of Indonesia, and the informal figures Table 2.

As a Customer (C) of this Transformation was the Government of Indonesia and authors were problem owners (O). More than a year following the outbreak in Indonesia, various efforts had been carried out to mitigate the pandemic preceding the two monumental social events in the country (E). The first event was Christmas and New Year while the second one was the Eid Al-Fitr that was synonymous with the tradition of the people of Indonesia to return to their hometown to gather with their family (*mudik*) (E). The increase in cases in the first event could be suppressed with the maximum efforts of all components of the nation. However, the rise in cases in the second event was not properly managed and even went out of control (W).

The COVID-19 Task Force (A) had produced 80 guidebooks for carrying out various activities in a pandemic situation for various groups. Various parties (A) had also participated in the production and distribution of thousands of flyers that invited people to adhere to HP. Socialization through television and radio media had been conducted in the form of talk shows, public service advertisements, or drama programs. The central and regional governments had collaboratively provided HP guidelines and applied strict rules in terms of the compliance with HP. To optimize the effectiveness of education on the dangers of

**Table 2** CATWOE

Customers	The Government of Indonesia
Actors	the COVID-19 Task Force, informal leaders, leaders of organizations/institutions
Transformation	Consistent public adherence to HP to eliminate the pandemic
Worldview	The economic, political, social, and cultural environment influences public behavior
Owners	authors
Environment	Fatigue of facing the COVID-19 pandemic



the COVID-19 pandemic and improve public compliance with HP (T), the COVID-19 Task Force had encouraged more than 80,000 volunteers (mostly students and college students) to contribute in providing understanding and increasing public compliance with HP.

## Conceptual Model

The positive and great efforts in mitigating the pandemic had been conducted by the COVID-19 Task Force and supported by agencies and community organizations since March 2020. However, various interests that could reduce the adherence to HP had always been the main factor in the fluctuation of daily additional cases, especially following the Eid al-Fitr and the Christmas-New Year holidays. The number of active cases reflected the daily increase following the celebration of these two major social events.

Various policies and actions by all parties had not succeeded in reducing the number of positive patients or active cases. In fact, the fluctuating trend had escalated to over 50,000 new cases per day. This alarming condition forced the president to assume direct command of the pandemic mitigation at the end of July 2021. The presence of the president as a formal leader as well as a symbol of the state was a reflection of the culture of Indonesia, namely submissive and obedient to legitimate leaders. The results were observed two weeks following the president providing directions on television every night. The transmission of COVID-19 began to decline and continued to decrease significantly with less than 2,000 new cases per day in early October 2021.

Referring to TNA of the ten provinces selected as the sample of the cases of the spread of COVID-19, it could be summarized that:

1. Institutional rules at the institutional level showed "health" as the main theme in the economic framework of the community, regulating "Operations", "Restrictions", and "Services" delegated to "City" and "District" and bridged by the authority of the "Governor".
2. Policy rules at the organizational level focused on the health of children and family as part of public health, requiring surveillance in the implementation of HP.
3. The government issued "mitigation" "policies" to handle the pandemic through the efforts to change the "behavior" of the "community" to have the "tendency" to "comply with" and "implement" the "health" "protocols". The social actors in the compliance were "figures", "role models", "communities", and "organizations" through "media", "social", and "television" to the "scope" of "family", "village", and "work" environment.

Based on the comparison of TNA with the real condition in the field, the legitimacy of the policies in the eyes of the community was reflected in the direct presence of the leadership of the institution when dealing with the pandemic. Various statements by high-ranking state officials as well as the policies enacted when the Delta variant cases exploded at the end of May 2021 did not succeed in reducing the spread of the pandemic that had exceeded more than 20,000 new cases per day. The level of obedience of the community to HP had limitations at a certain level and had not been optimal to stop the pandemic. On that basis, this article discovered a conceptual model of institutional reconstruction by optimizing the role of the president as follows:

Referring to the results of the Focus Group Discussion of the research conducted by the Covid-19 Task Force and in accordance with the results of TNA, the human activity of the president and government agencies was the main aspect to observe that affected

other human activities. Human activities were pivotal to handle the pandemic at the macro level. The role of government agencies was closely related to that of the president in issuing various relevant policies, especially concerning the readiness of Health Organizations in facilitating and anticipating cases as well as the agility of public organizations in dealing with various developments. Observed from the perspective of the community, the role of informal leaders was significantly important considering that the majority of the people of Indonesia obeyed and respected these figures. The problematic situation could be resolved immediately with the determined response of all parties.

At the macro level, the president and government agencies institutionally played a highly dominant role in issuing regulatory rules, directions, and restrictions that affected the dynamics of health and public organizations at the meso level. Meanwhile, pandemic fatigue and economic pressure at the micro level could also affect the compliance with HP, hence the importance of depicting human activities at the macro, meso, and micro levels to describe IR.

Referring to the model proposed by Nee, the presence of the president in public was a policy representation as well as a trigger for the effectiveness of institutional activities led by the COVID-19 Task Force in stopping the transmission of COVID-19. Referring to the RD compiled in stage 3, the efforts to stop the pandemic could only run optimally following the president presenting himself in front of the public not only as a symbol of the head of the state, but also as a direct leader in the process of handling the COVID-19 outbreak. To measure the aforementioned conceptual model, we also defined the three Es: efficacy, effectiveness, and efficiency. This model did not measure ethicality and elegance because this case was a national and international problem to solve.

The description of the 3 Es was shown in the following table Table 3.

### Comparison between the Conceptual Model and the Real World

The results of the conceptual model needed to be confirmed with the real world regarding the compliance of actors as reflected in behavioral changes during the policy implementation. In the previous SSM-based studies, the comparison with the real world was presented in the form of re-confirmation to the Problem Owner (Permatasari et al. 2019; Yovani 2013). In this study, however, such confirmation was not sufficient to describe the behavioral changes of actors, requesting for a network analysis of behavioral changes as accomplished by Muhammaditya et al. (2021). Therefore, the suitable method to describe behavioral changes in this research was the network of actors per se, which was reflected in SNA.

The activities in the aforementioned model referred to Nee based on the data in the field following Institutional Reconstruction as shown in Table 4. Organizational coupling-decoupling, and the level of Social and Individual Interaction. Most of the activities at the

**Table 3** 3Es

Efficacy	The system compiled can overcome the pandemic
Effectivity	The system is designed to be simple and easy to implement
Efficiency	Low-cost structured system

**Table 4** Comparison of formal questions

	Activities in the model	Available	Who	Good/bad?	Alternatives
1	The President provides directions to government agencies to stop the pandemic	yes	President	Good	The President as a supreme policy
2	The President provides directions to the public to comply with HP	yes	President	Good	It is better to have the pandemic mitigation directed by the president earlier
3	The President provides directions for public policies related to the pandemic situation	yes	President	Good	The role of supreme leader is significantly strong in stopping the spread of the pandemic
4	State agencies issue regulations regarding the mobility of people and goods	yes	Ministries/agencies and local government	Good	Consistent application in a pandemic situation is needed
5	State agencies ensure that there has been progress	yes	Ministries and institutions as well as the COVID-19 Task Force	Good	A more detailed report is needed
6	State agencies ensure that the process has been consistently implemented	Yes, partially	Ministries and institutions as well as the COVID-19 Task Force	Relatively good	The government imposes sanctions on officials who are negligent in enforcing HP
7	Law Enforcement Agencies carry out the function of preventing violations and enforcing sanctions on violators of the procedures	Yes, partially	Head of agency	Relatively Good	The government imposes sanctions on institutions and their leaders who fail to enforce the procedures
8	The COVID-19 Task Force publishes and disseminates various technical guidelines	yes	The COVID-19 Task Force	good	It is necessary to prepare HP socialization documents for similar cases in the future
9	The COVID-19 Task Force appoints Behavioral Change Ambassadors	yes	The COVID-19 Task Force	good	The role of the agency in socializing HP is pivotal
10	Public organizations ensure the availability of facilities and infrastructure that support HP	yes	Organization leader	good	It is necessary to remind the organization to remain consistent in the availability of facilities and infrastructure that support HP
11	Public organizations provide practical guidance on HP	yes	Organization leader	good	The guide is made in more detail to anticipate special moments such as queues at train stations or vaccine queues
12	Public organizations provide public access or sanctions against violators	Yes, partially	Organization leader	Relatively good	The government imposes sanctions on public organizations and organization leaders who fail to enforce HP

**Table 4** (continued)

Activities in the model	Available	Who	Good/bad?	Alternatives
13 Community leaders actively play a role in enforcing compliance with health procedures and vaccinations	Yes, partially	Informal leader	Relatively good	A combination of structural and cultural approaches is needed to ensure the willingness of community leaders to become pioneers in enforcing compliance with procedures
14 The community consistently adheres to HP and gets vaccinations	Yes, partially	Public	Relatively good	The community is expected to increase their awareness in implementing HP

macro level were “good” and could be applied in handling similar disasters. Two activities were “relatively good”, indicating the need for further attention and improvements for future disasters. At the meso level, there were four “good” activities to maintain and one “relatively good” activity to consider and improve, namely by strengthening the consistency and determination of Public Organizations in implementing the rules. Two activities at the micro level were categorized as “relatively good”, implying the role of community leaders and public compliance with formal applicable rules.

### **SNA of Field Notes Provided by Behavioral Change Ambassadors**

Referring to institutional reconstruction by Nee (2003), the efforts of policy institutionalization had an impact on the dynamics of behavioral changes in complying with HP. Policies at the macro level that were operational at the meso level could be said to be successful at the individual and social group levels. The success of policy implementation in this study was confirmed using the SNA data from seven provinces which were monitored through field notes of change agents. Generally, behavioral changes were in line with the policy on implementing HP that led to obedience despite the dynamics in its implementation (Table 5).

Based on the areas selected as the sample, the level of adherence to HP was reflected in the significant indicators of obedient and strongly obedient. However, there were high dynamics of shifting in obedience during the three months of observation in the cities/districts and locations of observation (markets, houses, public roads). It reflected the relatively high dynamics of the community as social activities continued to transpire despite various restrictions related to the efforts to stop the transmission of the pandemic.

Basically, all provinces in the sample had a relatively similar level of obedience, as presented in Table 5. The level of compliance of Bali was strong in July, but declined in August and September. The level of obedience of Banten was consistent in July, August, and September. The similar consistency was also shown by DKI Jakarta, West Java, Central Java, and East Java. The level of obedience of West Sumatra increased to strongly obedient in August and September compared to July. Therefore, the provinces with the prominent level of compliance in July and August are Bali and West Sumatra, respectively, while no provinces were deemed to have the strongest adherence to HP in September. It indicated that the rules at the macro and meso levels had an effect on increasing the compliance with HP.

"Based on Table 5, Bali obtained a level of compliance of “strongly obedient” in July (A1), though it decreased in August (A2) and September (A3). The level of obedience of Banten was consistent in July (B1), August (B2), and September (B3) at “obedient”. The similar consistency was also shown by DKI Jakarta in July (C1), August (C2), and September (C3); West Java in July (D1), August (D2), and September (D3); Central Java in July (E1), August (E2), and September (E3); and East Java in July (F1), August (F2) and September (F3). Meanwhile, the level of obedience of West Sumatra increased to “strongly obedient” in August (G2) and September (G3) compared to July (G1)."

### **Policy Adaptation Following the Behavioral Changes**

The main policy enacted by the government to cope with the second wave of the pandemic was to apply a leveled alert status for each province and district/city. Level 4 was the strictest while level 1 allowed normal community activities but heeded the implementation of

Table 5 SNA

Province	July 2021	August 2021	September 2021
Bali	<p>Strongly Obeying keeping a distance Strongly obedient washing hands Obeying wearing a mask Strongly obedient wearing a mask Obeying washing hands Obeying keeping a distance</p>	<p>No Obeying keeping a distance Not obedient wearing a mask No Obeying washing hands Public Road Obeying wearing a mask Obeying keeping a distance Less obedient wearing a mask Less Obeying keeping a distance Less Obeying washing hands Strongly obedient wearing a mask Home Market Strongly obedient washing hands Strongly Obeying keeping a distance</p>	<p>Less obedient wearing a mask Less obedient keeping a distance Less obedient washing hands Denpasar City Market Strongly Obeying wearing a mask Strongly obedient washing hands Obeying wearing a mask Obeying keeping a distance</p>
	A1	A2	A3
	Banten	<p>Less obedient wearing a mask Less obedient washing hands Less obedient keeping a distance Others Strongly obedient washing hands Strongly obedient wearing a mask Obeying wearing a mask Obeying washing hands Obeying keeping a distance</p>	<p>Less obedient wearing a mask Less obedient keeping a distance Less obedient washing hands Public Road South Tangerang City Obeying wearing a mask Obeying washing hands Obeying keeping a distance Others Strongly obedient wearing a mask Strongly Obeying washing hands Strongly obedient keeping a distance</p>
B1	B2	B3	
DKI Jakarta	<p>Obeying keeping a distance Obeying washing hands Obeying wearing a mask Others Public Road Strongly obedient wearing a mask Strongly obedient washing hands Strongly Obeying keeping a distance</p>	<p>Strongly Obeying keeping a distance Strongly obedient washing hands Strongly obedient wearing a mask East Jakarta Obeying washing hands Obeying keeping a distance Obeying wearing a mask Others Home Less obedient wearing a mask Less obedient washing hands Less obedient keeping a distance</p>	<p>Less obedient wearing a mask Less obedient washing hands Less obedient keeping a distance East Jakarta Strongly Obeying keeping a distance Strongly obedient washing hands Strongly obedient wearing a mask Obeying keeping a distance Obeying washing hands Obeying wearing a mask</p>
C1	C2	C3	
West Java	<p>Obeying keeping a distance Obeying washing hands Obeying wearing a mask Others Public Road Strongly obedient wearing a mask Strongly obedient washing hands Strongly Obeying keeping a distance</p>	<p>Less Obeying keeping a distance Less Obeying washing hands Less obedient wearing a mask Public Road Home Strongly obedient wearing a mask Strongly obedient washing hands Strongly Obeying keeping a distance Others Obeying wearing a mask Obeying washing hands Obeying keeping a distance</p>	<p>Less Obeying washing hands Less obedient wearing a mask Less Obeying keeping a distance Home Strongly Obeying wearing a mask Strongly obedient washing hands Strongly obedient keeping a distance Obeying washing hands Obeying keeping a distance Obeying wearing a mask</p>
D1	D2	D3	

HP. This change in level reflected the effectiveness of policy implementation in each region to end the pandemic.

The SNA data in seven provinces were simultaneously in line with post-behavioral change policies in the form of restrictions divided into four levels, namely low-level restrictions at level 1, moderate restrictions at level 2, high-level restrictions at level 3, and considerably high-level restrictions at level 4. The policy shift was presented in Fig. 7, in which the six provinces applied restrictions at level 4 in early July. Gradually, a small number of provinces applied level 3 in August and mostly applied level 3 in September. In October and November, they applied restrictions at level 2 and 1.

Observed from Fig. 7, Jakarta as the capital city of Indonesia had a consistent and high pandemic rate but better policies and resources for tackling the pandemic compared to other five provinces. Meanwhile, despite its previous obedience achievement of a moderate level, Bali had declined to the most critical level (level 4). As shown in Table 5, the level of obedience in Bali declined in August 2021, resulting in a longer period of PPKM level 4 compared to Jakarta.

Table 5 (continued)

<p>Central Java</p>		
<p>East Java</p>		
<p>West Sumatera</p>		
<p>G1</p>	<p>G2</p>	<p>G3</p>

**Comparison of Multi-Method**

The comparison of multi method for each activity in the model and the possible alternatives referred to the policy adaptation and the model by Nee, as mapped in Table 6.

**Recommended Action**

Considering the gradual rise in positive cases from late October to early December 2021, the efforts to overcome the pandemic, particularly in the second wave, were proven to be successful. Therefore, it was imperative to prevent a third wave from happening, namely by maintaining the discipline of all parties in obeying HP.

To resolve similar future pandemic cases, it was necessary to understand the problematic situation and acquire a more precise solution using SSM-based multi method, namely by mapping the roles and functions of the president, relevant institutions and organizations, and the general community. The president should be present and play an important role at the beginning of the pandemic by providing policy directions as well as the examples of behavioral changes. The relevant institutions and organizations should coordinate and issue policies in accordance with the policy directions issued by the president in the context of dealing with the pandemic by dismissing sectoral considerations or interests. Meanwhile,

**Table 6** Comparison of multi methods

Activities in the model	Alternatives	SNA Table 6	Policy adaptation (Fig. 7)	Victor Nee model Figure 2
1 The President provides directions to government agencies to stop the pandemic	The President as a supreme policy	Changes in compliance are observed from the distribution of the network of actors in 7 provinces	The level of compliance is evident from the decrease in cases	The discipline of government agencies in enforcing HP is increasing
2 The President provides directions to the public to comply with the HP	It is better to have the pandemic mitigation directed by the president earlier	Changes in compliance are observed from the distribution of the network of actors in 7 provinces	The level of compliance is evident from the significant low number of violations	The level of compliance is evident from the significant low number of violations
3 The President provides directions for public policies related to the pandemic situation	The role of supreme leader is significantly strong in stopping the spread of the pandemic	Improvement in compliance at houses, public roads, markets, and places of worship is evident from the distribution of the network of actors in 7 provinces	The level of compliance is evident from the decrease in differences in arguments concerning HP in various aspects in the mass media and social media are declined	The differences in arguments concerning the consistent application of HP in various aspects in the mass media and social media are declined
4 State agencies issue regulations regarding the mobility of people and goods	Consistent application in a pandemic situation is needed	Mobility of people and goods is represented by increased compliance in markets and public roads as evident from the distribution of the network of actors in 7 provinces	The discipline in implementing HP is increasing	The discipline in implementing HP is increasing
5 State agencies ensure that there has been progress	A more detailed report is needed	Changes in compliance are observed from the distribution of the network of actors in 7 provinces	The discipline in implementing HP is increasing	The discipline in implementing HP is increasing
6 State agencies ensure that the process has been consistently implemented	The government imposes sanctions on officials who are negligent in enforcing HP	Changes in compliance are observed from the distribution of the network of actors in 7 provinces	The discipline in implementing HP is increasing	The discipline in implementing HP is increasing
7 Law Enforcement Agencies carry out the function of preventing and enforcing sanctions to violators of the procedures	The government imposes sanctions on institutions and their leaders who fail to enforce the procedures	The enforcement of sanctions is indicated by the increase in compliance observed from the distribution of the network of actors in 7 provinces	The discipline in implementing HP is increasing	The discipline in implementing HP is increasing
8 The COVID-19 Task Force publishes and disseminates various technical guidelines	It is necessary to prepare HP socialization documents for similar cases in the future	Understanding of the program is indicated by increased compliance observed from the distribution of the network of actors in 7 provinces	The discipline in implementing HP is increasing	The discipline in implementing HP is increasing



**Table 6** (continued)

Activities in the model	Alternatives	SNA Table 6	Policy adaptation (Fig. 7)	Victor Nee model Figure 2
9 The COVID-19 Task Force appoints Behavioral Change Ambassadors	The role of the agency in socializing HP is pivotal	Behavior change ambassadors are effectively portrayed as actors capturing behavior change	It encourages increased discipline in the implementation of HP	It encourages increased discipline in the implementation of HP
10 Public organizations ensure the availability of facilities and infrastructure that support HP	It is necessary to remind the organization to remain consistent in the availability of infrastructure and facilities that support HP	There is no comparison of public organizations in SNA	Public organizations implement procedures to prevent the spread of a pandemic and enforce discipline in implementing HP	Public organizations implement procedures to prevent the spread of a pandemic and enforce discipline in implementing HP
11 Public organizations provide practical guidance on HP	The guide is made in more detail to anticipate special moments such as queues at train stations or vaccine queues	There is no comparison of public organizations in SNA	Various practical guides are displayed offline and online	Various practical guides are displayed offline and online
12 Public organizations provide public access or sanctions against violators	The government imposes sanctions on public organizations and organization leaders who fail to enforce HP	There is no comparison of public organizations in SNA	HP is strictly enforced	HP is strictly enforced
13 Community leaders actively play a role in enforcing compliance with health procedures and vaccinations	A combination of structural and cultural approaches is needed to ensure the willingness of community leaders to become pioneers	There is no comparison of public organizations in SNA	Community leaders are increasingly showing commitment in encouraging people to implement HP	Community leaders are increasingly showing commitment in encouraging people to implement HP
14 The community consistently adheres to HP and gets vaccinations	The community is expected to increase their awareness in implementing HP	The active role of the community in compliance as observed from the distribution of the network of actors in 7 provinces	The community is enthusiastic about getting vaccinated and implementing HP	The community is enthusiastic about getting vaccinated and implementing HP

the diverse public needed to pay attention to and heeded the directions provided by the president and informal leaders as well as the technical guidelines issued by related institutions/organizations to immediately overcome the pandemic.

## Conclusion

This research provided illustrations of how an institutional practice in facing COVID-19 was reconstructed. By adopting the causal model of institutionalism in economic sociology by Nee (2003), this study attempted to answer four research questions. **First**, government policies had faltered in dealing with the pandemic, particularly at the beginning of the announcement of positive cases in Indonesia. The dissonance of statements by high-ranking state officials regarding the anticipation and mitigation of the pandemic triggered policy initiatives from local governments that were apparently not approved by the central government.

**Second**, there was a great number of people disregarding HP and pandemic mitigation policies, particularly during annual rites, the end of year celebration, and Eid Al-Fitr. In the end of 2020, the violation of HP had intensified in several areas. In addition, the tradition of returning to hometown during March–April 2021 had increased the growth of pandemic cases.

**Third**, the government faced a dilemma in issuing policies, whether to remain encouraging economic growth, guarantee the continuity of economic activities, or end the spread of COVID-19. **Fourth**, the direct involvement of the president in handling the spread of COVID-19 was a legitimate representation that was the key to the obedience of people from all walks of life to HP. The president leading the efforts to stop the transmission of COVID-19, in addition to appearing in the mass media since the end of July 2021, had a significant impact in reducing cases. As the result, no province was declared as alert areas in October 2021.

This research methodologically developed the latest variant of SSM-based Multi Method based on complexity and simultaneously attempted to generate strong data. In contrast to the multi-method variant by Muhammaditya et al. (2021), the description of the problematic institutional rules using TNA in stage 1 and the comparison with SNA and policy adaptation in stage 5 provided evidence that the implementation of new institutional policies was influenced by strong leadership.

**Data Availability** The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

## Declarations

**Conflict of Interest** We have no conflict of interest in the data and provide an objective analysis of this paper, and we present the data as is. This paper does not exploit humans and animals. Each of the authors contributed to this part of the article.

**Employment**

The publication of this article will not have a negative impact on a person's career or the existence of any organization.

**Financial Interests**

The publication of this article will not have a negative impact on the financial interests of the individuals or groups cited or published in the paper.

## Non-financial Interests

The publication of this article will not have an impact on non-financial aspects in the form of discrimination against race, ethnicity, religion, or social groups.

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