REVIEW

COVID-19 Solution in Indonesia: Public Policy Philosophy, Intellectual and Organic Policy Perspective

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ABSTRACT

This study aims to find the solution for COVID-19 from a public policy perspective. This research investigates policy using the descriptive qualitative method. The data collection was conducted through group discussions (FGD), observation, and study documentation. This study produced 11 policy recommendations to resolve the COVID-19 problem in Indonesia. The recommendations are: 1) the importance of Indonesia's natural resource potential for COVID-19 drug raw material, 2) the needs to strengthen data tabulation, intellectual policy, and organic policy implementation, 3) the necessity to use all potential policies to solve the COVID-19 problem 4) the urgency of collaboration and coordination among all elements of society, 5) the need of future risk management, 6)the urgency of pre, whilst and post COVID-19 policy mapping, 7) the obligation of harmony between regulations on health safety and security economics, the role of institutions, and the implementation of decentralization in handling COVID-19, 8) the need to establish "COVID-19 Response Policy Advisory Group", 9) the importance of the Social Innovation Platform development, 10) the urgency to concern to data, finance, logistics, public communication, community participation and strong vision, and 11) the necessity to consider the telecommunication sectors related to six proposed things.

Keywords: COVID-19, intellectual policy, organic policy, response, advisory.

Introduction

COVID-19 has devastated a number of industrial sectors throughout the world, including oil & gas, education, finance, non-food manufacturing, construction & real estate, automotive, aviation & maritime, tourism & leisure, etc. The UN Economic and Social Commission for Asia and the Pacific (ESCAP) as cited in Salengke (2020) states that COVID-19 is estimated to burden the country's finances by 0.8% of the Gross Domestic Product (GDP) of the Asia-Pacific region, or the equivalent of US $172 billion. This will happen because of weakening global demand for their export products. According to the UN Deputy Secretary General and Chair of ESCAP, Armida Salsiah Alisjahbana, Asia-Pacific countries can experience a decline in economic growth to 3.7% in 2020 and a decline of 0.6% in subsequent years (Salengke, 2020).

The data in Table 1 shows that a number of countries in Asia and Oceania were successful in bringing down the number of new cases as of June 19, 2020. For Indonesia, there were still 34 additional deaths on June 19, 2020. Japan and New Zealand had zero new cases and that means that they will enter a new phase, namely the phase of economic recovery. Indonesia on the other hand is still

Table 1: COVID-19 Data of Asia and Oceania, 19 June 2020

Country	Total Cases	New Cases	Total Deaths	New Deaths
Australia	7,409	+18	102	—
New Zealand	1,507	—	22	—
Indonesia	43,803	+1.041	2,373	34
Vietnam	349	+7	—	—
Singapore	41,615	+142	26	—
Japan	17,668	—	935	—
Thailand	3,146	+5	58	—

Source: https://www.worldometers.info/coronavirus/, 19 June 2020

unable to reduce the death rate due to COVID-19. This study seeks solutions to tackle COVID-19 in Indonesia.

## Literature Review

Current COVID-19 Conditions

The COVID-19 pandemic which per June 19, 2020 infected 8,520,761 people with a death toll reaching 454,625 people worldwide (John Hopkins University, 2020), has caused economic recession across the world. The World Bank estimates that the COVID-19 pandemic has an impact on a 2.1% decline in world GDP. The percentage decline in GDP is different in developing and developed countries, namely 2.5% and 1.9% (Maliszewska, Mattoo, & van der Mensbrugghe, 2020). Meanwhile, the IMF (2020) predicts a decline in the global economy by 3% due to this pandemic.

Furthermore, according to the World Bank (2020), the global economic recession has taken place due to changes in the percentage of GDP 2020 which is estimated to be –5% compared to 2019. This figure also places the 2020 recession as the worst economic recession in the last eight decades.

Although the World Bank (2020) predicts a GDP recovery of 4.2% in 2021, output in 2021 will not match economic output in previous years (Graph 2).


Graph 1: Percentage Change in GDP Compared to Previous Year
Source: World Bank (2020)
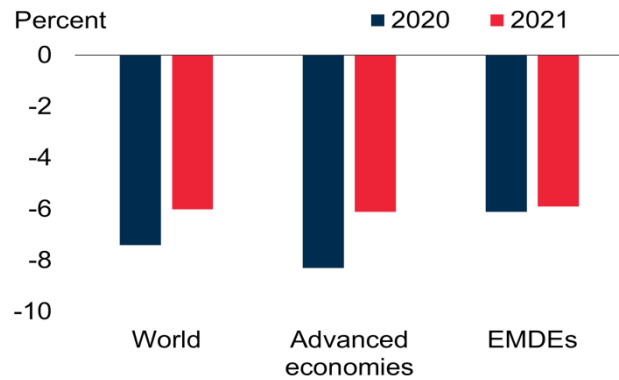
Graph 2: Projections of Economic Output Levels of 2021 Compared to 2020
Source: World Bank (2020)

This economic recession will be worse if the governments of the world do not introduce the right policies or stimulus to restore the economy. The economic downturn in the COVID-19 pandemic was caused by a combination of several factors (World Bank, 2020). First, there was a sluggishness in the export shipments of –5.9% as of April 2020 and export demand also declined, with an index value of 38.3 in April 2020 (Graph 3). Secondly, international trade experienced a slump with growth of –13.4% in 2020, lower than trade growth during the 2009 global recession (–10.4%) (Graph 4).

Third, the closure of national borders for foreigners has a drastic reduction in the number of foreign tourists. In January-April 2020, there were very large deviations compared to the average of the previous 5 years (2015–2020), and the peak occurred in April 2020, which was –96.9%. This figure shows that tourism activities are paralyzed by COVID-19 (Graph 5). Fourth, prices of commodities such as oil, coal, natural gas, rubber, platinum, silver and food have declined. The sharpest decline in prices occurred in oil commodities which reached –50.7%. The decline in oil prices occurred due to a reduction in the frequency of
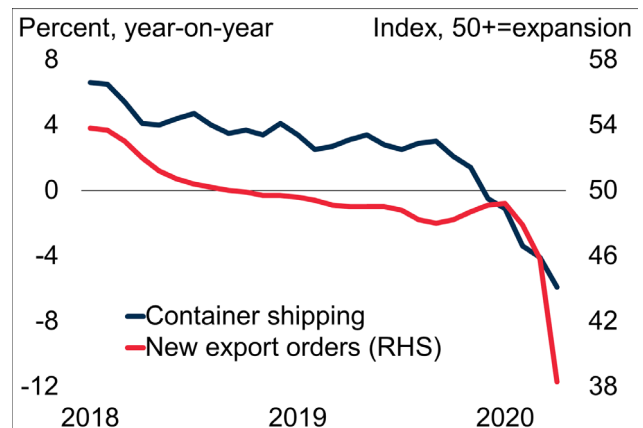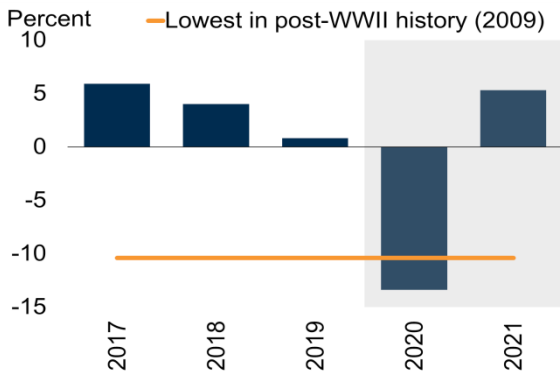

Graph 3: Container Shipping and New Export Orders
Source: World Bank (2020)

mobility due to COVID-19. Meanwhile, the price of gold commodities actually increased by 25% (Chart 6).

At the regional level, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) states that COVID-19 is estimated to burden the country's finances by 0.8% of the Gross Domestic Product (GDP) of the Asia-Pacific region, or the equivalent of US $172 billion. This happened because of weakening global

**Graph 4:** Trade Growth
Source: World Bank (2020)

demand for export products. According to the UN Deputy Secretary General and Chair of ESCAP, Armida Salsiah Alisjahbana, Asia-Pacific countries can experience a decline in economic growth to 3.7% in 2020 and a decline of 0.6% in subsequent years (Salengke, 2020).

Meanwhile, in Indonesia, COVID-19 which has infected more than 43,000 people and claimed the lives of more than 2,300 people (as of June 19, 2020) also has a systemic impact on the economy. In the 1st Quarter of 2020, the Central Bureau of Statistics of Indonesia recorded that Indonesia's economic growth is only 2.97% which is lower than the 1st Quarter of 2019, which was 5.07% (Gatra, 2020). In more detail, the Head of the Fiscal Policy Agency (BKF), Febrio Kacaribu, explained the changes in demand and supply for the economy in Indonesia due to COVID-19 as follows:

On the demand side, the consumption, investment, and government spending components experienced lower growth compared to the first Quarter of 2019. Meanwhile, the export component which is expected to increase foreign exchange reserves, only grew by 0.2%.
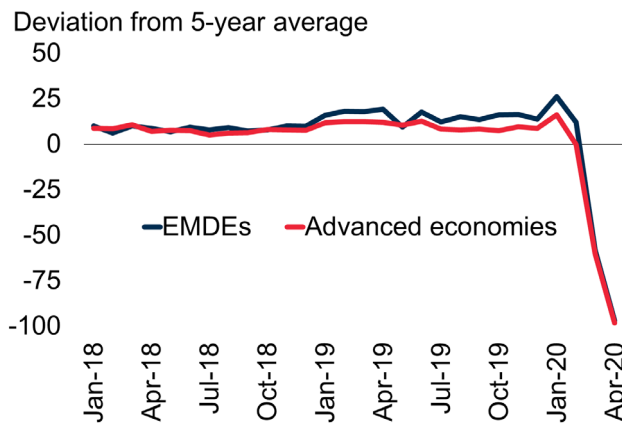
Graph 5: Monthly Tourists Arrivals as a Share of Average since 2015
Source: World Bank (2020)
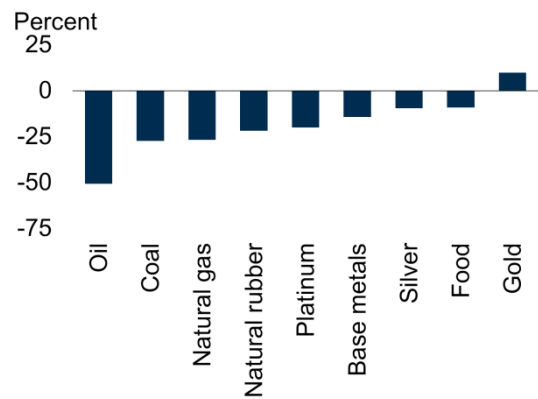
Graph 6: Commodity Prices Changes Since January 2020
Source: World Bank (2020)
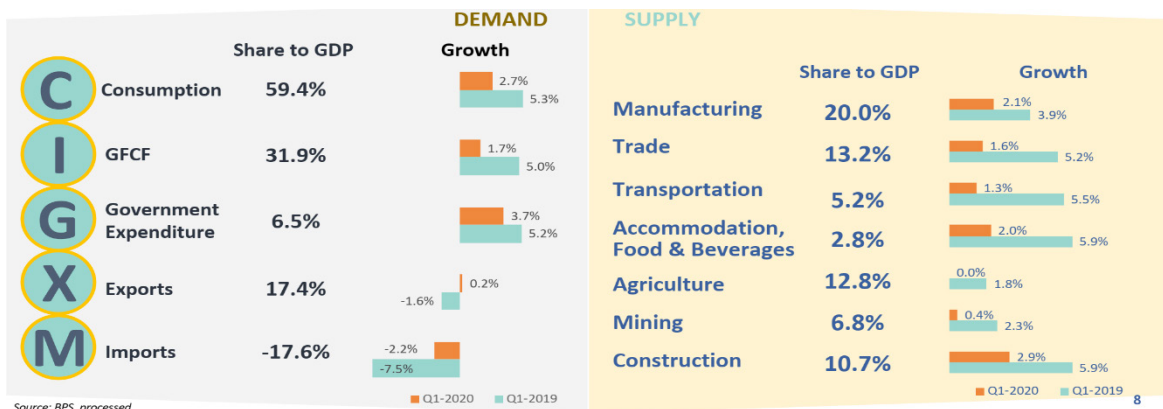
Graph 7: Impact of Covid-19 on the Indonesian Economy
Source: Kacaribu (2020)

On the supply side, in the first quarter of 2020, aspects of the manufacturing, trade, transportation, accommodation and culinary, agriculture, mining, and construction sectors experienced lower growth compared to the first quarter of 2019. Even for agriculture, the growth was negligible, amounting to 0.0%.

The sluggishness of the Indonesian economy due to COVID-19 caused 1.7 million people to lose their jobs, both in the formal and informal sectors (Imandiar, 2020). In fact, the Head of BKF, Febrio Kacaribu (2020) is worried about an increase in unemployment of 2.92 million people (severe scenario) to 5.23 million people (very severe scenario) if economic growth continues to be slow. In addition to contributing to an increase in unemployment, Covid-19 also caused an increase in poverty in Indonesia. The government predicts an increase in poverty from 9.2% (as of May 2020) to 10% –12% (Tambun, 2020).

Despite the economic downturn in all sectors, the telecommunications industry was the only sector that was able to survive during the COVID-19 pandemic. At the global level, International Data Corporation (IDC) explained that the telecommunications industry revenue only fell by 0.8%. This decline occurred because the mobility of people who contributed to roaming revenue for the telecommunications industry was reduced. But on the other hand, the application of working from home has increased telecommunications revenues in the field of fixed data services by 2.9% (IDC, 2020).

In line with IDC, a report published by Analysis Mason also states that the telecommunications sector is the most adaptive sector to COVID-19. Although revenue in this sector has decreased, the telecommunications sector will quickly recover and will receive an increase in revenue of 0.8% annually (Telecom Review, 2020). Optimism over the rapid recovery of the telecommunications sector

amidst a pandemic is reasonable because telecommunications is needed to support human activities in terms of accessing information, implementing social distancing, and working from home (IFC, 2020). Moreover, the trend of internet users in the world experienced a significant increase over the period 2005–2019. The International Telecommunication Union (ITU) noted that at the end of 2019, more than 4 billion people or 53.6% of the world's total population had accessed the internet (ITU, 2020).

Besides being useful in supporting human activities, telecommunications and information technology has dramatically changed economic activity, which has come to be known as "the new economy" (Moumtzi, Chatzidimitriou, & Koumpis, 2009). In the era of "the new economy", the digital economy has a significant influence in supporting various activities such as business transactions, technology, culture, and education (Harbhajan & Singh, 2006, as cited in Sharma, 2009). These activities cannot be separated from aspects inherent in the digital economy, namely sharing economy, big data and circular economy (Jabłoński & Jabłoński, 2020). In the end, digital economy emphasizes two important aspects, namely (1) enabling changes in services of goods and services from conventional to digital, and (2) introduction of digital-based products and services that do not require physical things (Strykowski & Cellary, 2003).

The promising prospects of implementing digital economy amid the COVID-19 pandemic can also be found in Indonesia. According to katadata.co.id, the value of e-commerce sales transactions increased by US $2.4 billion or Rp36 trillion compared to the second quarter of 2019. Another interesting fact is that the COVID-19 pandemic has made transactions in e-commerce rise to 4.8 million transactions per day, and an increase in demand by 5–10 times (Pusparisa, 2020). In addition, the results of a survey released by Redseer show that e-commerce

Global Regional Services Revenue and Year-on-Year Growth (revenues in $B)

Global Region	2019 Revenue	2020 Revenue	2020/2019 Growth
Americas	$623	$623	0.0%
Asia/Pacific	$471	$465	-1.4%
EMEA	$480	$474	-1.2%
Grand Total	**$1,574**	**$1,561**	**-0.8%**

Figure 1: Comparison of Telecommunications Industry Revenues in 2019 and 2020
Source: IDC (2020)

growth in Indonesia is positive, with an increase of 50% from year to year, and growth is increasing from US $23 billion in 2019 to US $35 billion in 2020 (Eloksari, 2020). This shows that digital economy (especially e-commerce) is not affected by COVID-19 and has positive prospects for development in Indonesia. In addition there are many potential solutions that can be recommended through the policy analysis process.

Public Policy Theory

Thomas Dye (2002: 1) defines public policy as *"whatever the government chooses to do or no to do"* (Whatever the government chooses to do or not do). From this definition it can be seen that whatever it is, what the government does and the results are seen, or the government does not do and the results are seen, that is the real meaning of public policy. According to Nugroho (2014) good public policy can be introduced because the government has

**Graph 8:** Growth of Internet Users, 2005-2019
Source: ITU (2020)

done something. However, when the government does not do something and then certain conditions occur, that is also the result of a form of public policy because what a leader does or doesn't do will affect the public or his people. Policy is always about the decision of the state or government. The aim of the policy is to change existing conditions towards better conditions. In addition, Laswell and Kaplan (1970), in Nugroho (2014: 43) define public policy as a project that is projected from ideals, values, and practices. In addition, Easton (1965) in Nugroho (2014: 43) defines public policy as the impact of government activities.

From these two definitions it can be concluded that public policy is not only a representation of the ideals and values shared by a particular group of people in a particular country or region, but also can illustrate how certain government actions produce certain outputs that affect the environment. Furthermore, Howlett and Ramesh (1995) in Nugroho (2014: 44) state that public policy as a complex phenomenon consisting of a number of decisions made by individuals or organizations. Public policies are often shaped by initial policies and are often strongly linked to other decisions that appear unrelated.

Nugroho (2014: 47) also analyzes the pragmatic strategic understanding of public policy based on Thomas Dye's definition. He believes that policy consists of two basic concepts; policy and the public. Policy is a government decision made by someone who holds both formal and informal power. The public is the general public, the people or shareholders. The public is part of a team that is highly related to specific issues. The public is also an environment where people become citizens, a space where
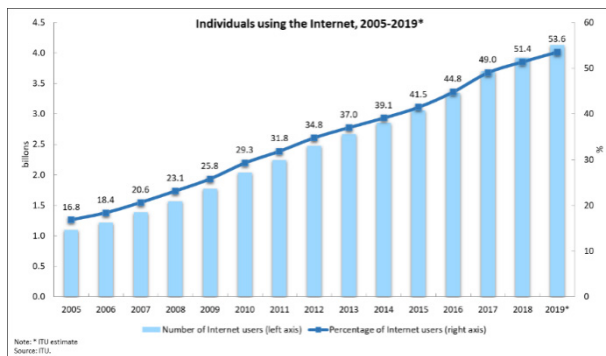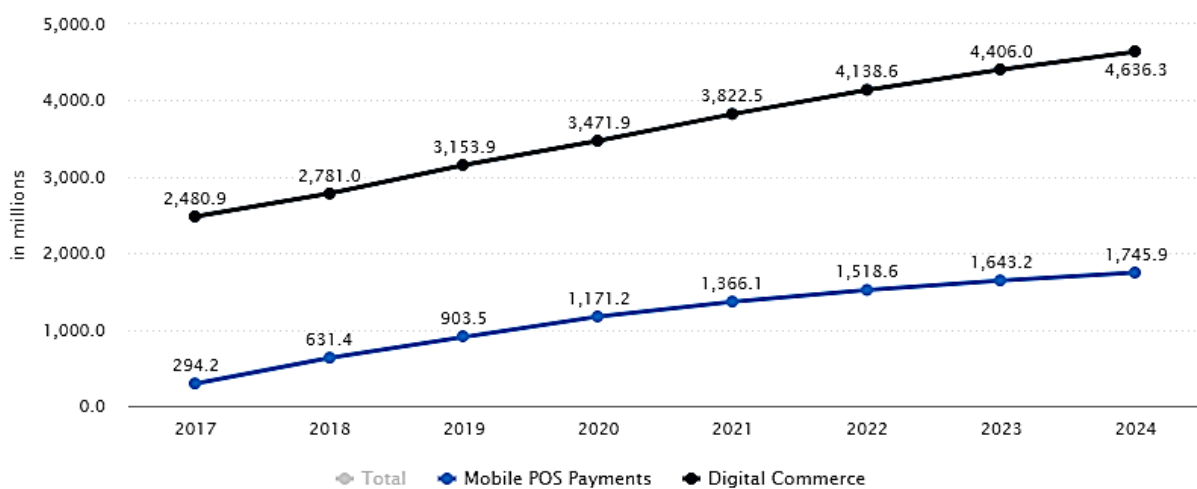
Graph 9: Projection of Mobile POS Payments and Digital Commerce Transactions
Source: Statista (Forecast Adjusted for Expected Impact of Covid19, May 2020)

citizens interact with each other and with the state. Therefore, Nugroho (2014) adds that public policy is also the decision of the nation or state regarding strategies to realize the nation's mission, and the vision of the nation's leaders. Public policy is a strategy to bring the current society into the transition towards an ideal society.

Method

This research methodologically is a policy analysis research for policy.

> "Policy research for policy is research that aims not only to assess policy but is intended to influence the formulation of further policy agendas. Policy research for policy includes (a) policy advocacy in terms of research and arguments intended to influence the policy agenda inside and outside the government, (b) information for policy, analysis intended to provide information for policy-making activities. This can be in the form of recommendations or detailed external / internal research on the quality and judgmental aspects of a policy". (Riant Nugroho in Dominata, 2016).

This research is a descriptive research using a qualitative approach. According to Ali (1997), descriptive research is research that precisely describes the characteristics of an individual, a condition, a symptom, etc., which is the object of research that can be used to solve problems by analyzing, classifying, comparing, etc. This research uses descriptive qualitative methods, the data collection techniques used were group discussions (FGD), observation, and study documentation. The Focus Group Discussion (FGD), which is also referred to as group interviewing, is essentially a qualitative research methodology. "It is based on structured, semi-structured, or unstructured interviews. It offers qualitative researchers the opportunity to interview several respondents systematically and simultaneously" (Babbie, 2011, in Boateng, 2012).

In addition, Nyumba (2018) defines that the focus group discussion is frequently used as a qualitative approach to gain an in-depth understanding of social issues. The method aims to obtain data from a purposely selected group of individuals rather than from a statistically representative sample of a broader population. Even though the application of this method in conservation research has been extensive, there is no critical assessment of the application of the technique. In addition, there are no readily available guidelines for conservation researchers

The data analysis technique in this study is connotative qualitative analysis, an analysis based on logical arguments. First, researchers collect data in the form of detailed stories from respondents, and then interpret the data using clear and significant arguments. Data in the form of detailed stories are disclosed by the authors according to the respondents' views. In addition, in terms of problems or research objectives, this study aims to find the meaning (in the form of concepts) behind the details of the respondent's story and the social setting under study. Data analysis was carried out together with data collection.

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Results and Discussion

The government's response to the COVID-19 pandemic was to use reactive and adhoc policies. When compared with Vietnam, a centralized country, where the death rate is zero, it can be seen that government commands are followed with discipline from the center to the regions. Whereas Indonesia has now changed from a centralized to a decentralized democratic state which gives a lot of authority to the regions in the construction of concurrent policies so that many policies must still be faced with a bureaucratic system that is not yet responsive enough.

Communication is very important to trace the history of the spread of COVID-19 to find the right solution for the existing problems. Communication and information technology is very important to be utilized in these conditions. In addition, the next gap that needs attention is the gap between the policies that have been formulated by the government and their implementation.

Prof. Sofian Effendi, one of the policy experts from Gajah Mada University (UGM) during the Focus Group Discussion (FGD) highlighted that in Indonesia in general there had actually been a policy that was successfully outlined in the laws and regulations, but was hampered

during the implementation process. Although according to him COVID-19 will be a good opportunity if we can use it to the fullest. Prof. Sofian noted that for example Indonesia has great potential in terms of natural resources for abundant raw materials for medicines. According to him this should be of particular concern so that it can be utilized and further investigated both for the prevention and treatment of COVID-19. While another public policy expert, Dr. Riant Nugroho (Lecturer of the Faculty of Social and Political Sciences, UI) said that in COVID-19 there is no policy to minimize risk, because there are no risk limits, this is because it relates to lives and deployments that are not reliably detected by the latest technology, therefore the dynamics are relatively borderless.

Our problem is that we are generally wrong in mapping policy approaches which makes it is difficult to make strong policies. Meanwhile, it is important that when formulating a solution to the COVID-19 case we do strengthening in terms of data, intellectual policy, and organic policy. In a condition of disaster like this, according to Dr. Nugroho, we should not say that one policy will not be used, because we cannot anticipate the worst that can happen in the future. Collaboration and coordination are very important in the eradication of COVID-19, both between the central and regional governments, as well as across groups and parties. This means that in a state of disaster we must all use the potential to seek solutions to existing problems together (Nugroho, 2020).

Furthermore, he said that risk management also becomes very important as a provision for dealing with similar cases at any point in the future. He also said that in the case of emergencies all Indonesian citizens could contribute in solving problems such as COVID-19. We can review from all available policy offers which policy choices are best. In the future, according to him, we need to do a more detailed mapping of what policies are appropriate at the time of the pre-incident, when infected, when it has spread, and when the pandemic is over. Policies are presented to be a solution, and must be introduced and implemented if they offer solutions.

Furthermore, Dr. Nugroho also recommends building harmony in legislation between health security and security economics, the role of institutions, and the decentralization of COVID-19 handling. Finally Dr. Nugroho recommends that we also need to establish an entity termed the "COVID-19 Response Policy Advisory Group" which consists of people who care to find a resolution to COVID-19 related issues, both from academia and other fields in order to appropriately handle the COVID-19 disaster. The figure below illustrates the structure of the "COVID-19 Response Policy Advisory Group":
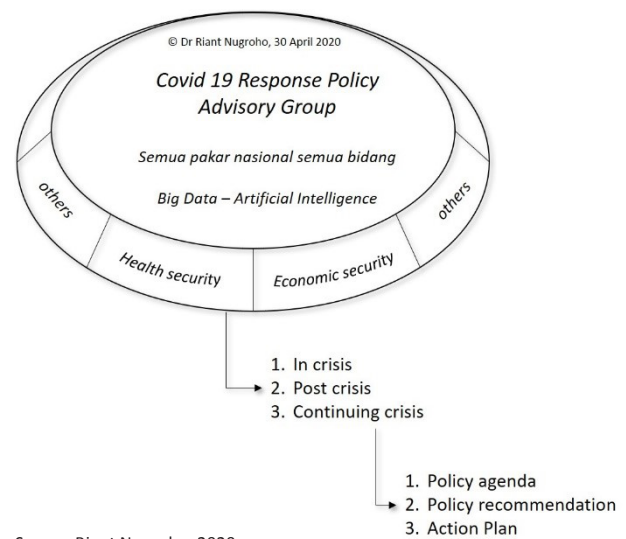
Source: Riant Nugroho, 2020

Looking at it from a different perspective, a third respondent, Marcelino Pandin, PhD (Commissioner of PT. Telekomunikasi Indonesia), stated that there are several factors that must be considered (Policy GAP) in dealing with COVID-19; *data, finance, logistics, public communication, community participation, and a strong vision.*

1) **Data**

   The telecommunications and information industry is predicted to become a generator of growth throughout the world, including Indonesia. The actual data function can be used to develop countermeasures for COVID-19, starting with predictions, and increasing the accuracy of the data is very important. Data can also be a platform to align ministries and regions, and other institutions including the general public to coordinate. Data can also be the basis of public accountability and information on whether public policies are executed properly or not, it can also be the basis of public trust, and the basis of government to become an aggregator. Data can also be the basis used to help friends in regional areas (decentralization) as evidence base policy so that interventions are carried out appropriately.

2) **Finance**

   Preparation of budget reallocation/refocusing, liquidity issues (government and private), become a big issue because if this pandemic lasts long then all economic resources will dry up. Social distancing causes people not to meet which means payment transactions will switch to the e-method of payment. Online payment has become a potential and new ways to conduct transactions.

3) **Logistics**

Logistics if not managed properly will become a critical issue. Telemedicine; consultation if there is a problem with the virtual doctor, WFH (Work From Home), etc., will also be important issues because they will become the new normal, instead of reducing work, the need for video conferences will be overwhelming. E-Education is also an issue for public policy, because in the current condition, not only are most parents unable to become educational facilitators at home, but also teachers are not prepared for e-education. E-commerce is also a public policy issue but they are very quick to seize opportunities which exists today.

4) **Public Communication**

By utilizing social media, TV, newspapers, radio to the maximum to cope with the COVID-19 pandemic, both at the time of occurrence and later recovery.

5) **Society participation**

Emotional support for victims of the COVID-19 pandemic, social solidarity, local initiatives, volunteers.

6) **Strong Vision**

What is the vision of the national leadership to carry through the disastrous situation, how to build hope, how to recover, this needs to be strengthened.

Conclusion

Policy Recommendations for Handling COVID-19 in Indonesia:

1) The Indonesian government needs to utilize the potential of Indonesia's abundant natural resources for raw materials for medicines. This is so special attention can be paid on further research both for prevention and treatment of COVID-19.

2) The dynamics of COVID-19 are relatively unlimited, so efforts to formulate solutions to the COVID-19 case are also unlimited; policy can strengthen preparedness in terms of data tabulation, intellectual policy, and organic policy implementation.

3) In a state of disaster we cannot say one of the policies will not be used, because we do not know what the worst conditions can be in the future. So all potential policies have the same opportunity for us to use as a means of solving the COVID-19 problem. Collaboration and coordination are very important in the eradication of COVID-19, both between the central and regional governments, as well as across groups and across parties. This means that in a state of disaster we must all use our potential to seek solutions to existing problems. In the case of emergencies all Indonesian citizens can contribute

to solving problems arising from COVID-19. We can review from all available policy offers which policy choices are best.

4) Risk management also becomes very important as a safeguard from similar cases if they occur in the future.

5) The government needs to do a more detailed mapping of what policies are appropriate at the time of the pre-incident, when infected, when it has spread, and when the pandemic is over. Policies are presented to be a solution, if it needs to be done and can be a solution then just do it.

6) The government needs to establish harmony in legislation between health security and security economics, the role of institutions, and the decentralization of COVID-19 handling.

7) It is necessary to build an entity termed the "COVID-19 Response Policy Advisory Group" which consists of all concerned elements of the community who are from academics and other professional fields who care to set right the handling of the COVID-19 disaster.

8) Development of the Social Innovation Platform: Looking at Covid-19 from an optimistic point of view, which can be the norm maker, the new normal determinant and the game changer. In the world today, we must be able to accept (to adopt) and respond to it well (to adapt). Indonesia within acceptable limits is actually in a disadvantaged position. Unlike stratification which is determined by technological superiority or market maturity, but rather to reason (EQ).

9) Some things that should be a concern in dealing with COVID-19:

a. Data; the telecommunications and information industry is predicted to become a generator of growth throughout the world, including Indonesia. The actual data function can be used to develop countermeasures for COVID-19, starting with predictions, and increasing the accuracy of the data is very important. Data can also be a platform to align ministries and regions and other institutions including the general public to coordinate. Data can also be the basis of public accountability and information on whether public policies are executed properly or not, also the basis of public trust, and the basis of government to become an aggregator. Data can also be the basis used to help friends in the region (decentralization) as evidence base policy so that interventions are carried out appropriately.

b. Finance; preparation of budget reallocation/refocusing, liquidity (government and private) issues, this becomes a big issue because if this pandemic lasts long then all economic resources

will become dry, physical distancing causes people not to meet which means payment transactions will switch to the e-method payment. Online payment has become a potential and new ways to conduct transactions.

    a. Logistics; for example social charity; how to get the help we want to deliver on target, not double etc. This if not managed properly will become a crucial issue. Telemedicine; consultation if there is a problem with the virtual doctor, etc. WFH (Work From Home); this will also be an important issue because it will become new normal, instead of diminishing work, the need for video conferences will be overwhelming. E-Education is also an issue for public policy, because in the current condition, not only are parents unable to become educational facilitators at home, but also teachers are not prepared for e-education. E-Commerce is also a public policy issue but they are very quick to seize opportunities which exists today.

    c. Public Communication; by utilizing social media, TV, newspapers, radio to the maximum to cope with the COVID-19 pandemic, both at the time of occurrence and later recovery.

    d. Community Participation; emotional support for victims of the COVID-19 pandemic, social solidarity, local initiatives, volunteers.

    e. Strong Vision; what is the vision of the national leadership to carry through the situation through disaster, how to build hope, how to recover, this needs to be strengthened.

11. In terms of telecommunications, the Stock-Taking Public Policy Gap that needs special attention is more or less 6 things:

    a. Data privacy vs. public safety (social scoring & tracing, and preparedness)

    b. Accelerated digitalization vs. cash and face-to-face culture

    c. Cybersecurity & community education

    d. Digital innovation & state loss audit findings

    e. Digital Gap – no/less and not affordable access to the internet

    f. Future of work - automation vs. layoffs, organizational structure

Competing Interests Statement

All authors have read and approved the manuscript and take full responsibility for its contents. No potential conflict of interest was reported by the author(s).

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