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Vol.2 Issue 1

# KIPA



# Public Policy Review

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01

SPECIAL  
COMMENTARY

009 The Future of Inclusive State amid a Multitude of Crises  
*Kyoung-Ryung Seong*





**Original Article**

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# The Future of Inclusive State amid a Multitude of Crises

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**Kyoung-Ryung Seong**

Former Chairperson of the National Research Council for Economics, Humanities and Social Sciences, South Korea

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## I. Spread of the COVID-19 Crisis and the Return of the State

The world is experiencing unprecedented pain crises due to the coronavirus (COVID-19) pandemic. The new epidemic, whose first outbreak was reported in China on December 1, 2019, rapidly spread to 216 countries owing to the extensive network of transportation systems in the hyper-globalization era. Given the highly transmissible nature of the virus, the world began to place extreme restrictions on the movement and contact of people, thrusting the world's economies into a sudden freeze. The rapid spread of the epidemic led to a sharp scaling back of economies, employment, and trade all at the same time, in turn triggering an economic dilemma of a trade-off between public health and the economy, where focus on epidemic prevention can lead to devastating consequences for economies and employment, while the efforts to restore the economy and save employment can put epidemic prevention at risk.

In the meantime, the world has witnessed the most significant growth of government power since the Second World War. The “powerless state” made a quick come back from its retreat (the “retreat of the state”) after being outpaced by market economies and international organizations in the midst

of globalization that followed the collapse of communism in 1989. The nation state has made a return (the “return of the state”) as the primary actor for crisis management, recognized as the savior for taking emergency measures against the pandemic, restoring the economy, and offering support to businesses and workers.

South Korea (hereafter Korea) came under the international spotlight for actions taken to counter the COVID-19 pandemic and the economic crisis. The country was applauded abroad for its successful scientific response to COVID-19, all the while maintaining its democracy and its great success in economic crisis management. In an interview with *Dong-A Ilbo Daily*, well-renowned American journalist Thomas Friedman noted that “Looking at the COVID-19 situation, Korea has set a model for how a nation can respond to this overwhelming crisis in a democratic way. There are examples of successful epidemic prevention using authoritarian means, but there is no better example of such a success under democratic principles. This may be a great gift that Korea is giving to the world.” (Lee, 2020).

What makes Korea's response to the COVID-19 pandemic so special? The answer can be found in the “innovative and inclusive state” vision of the President Moon Jae-in administration. In managing the public health

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emergency, the administration quickly made COVID-19 tests and therapeutics available for all at affordable costs without discrimination or exclusion. It maintained an open and inclusive policy for foreigners entering the country. The successful response was enabled by a series of outstanding innovative activities that were realized in a short period and could reasonably be called “an explosion of innovations,” including contact tracing using digital technology, testing at designated screening clinics and drive-through clinic centers, operation of community treatment centers, and special immigration procedures. The government also injected multiple packages of economic measures to support businesses and workers hit hard by the pandemic.

It can be assessed that Korea has successfully responded to the COVID-19 crisis based on a clear vision for an innovative and inclusive state, which was adopted to replace the outdated growth paradigm from the developmental state era. Moreover, it would be safe to say that the country’s progressive emergency and crisis management response was driven by competent leaders and efficient working of the (central) government to realize such a vision, a reliable health insurance system, and active public engagement.

However, despite Korea’s successful response to the pandemic so far, it is yet too early to say

what the future of an innovative and inclusive state embraced by the Moon administration will produce, given the following three reasons. First, Korea’s innovative and inclusive state, which is comprised of a robust social safety net for all, creative and cooperative competence of the people, and an innovative economy, is at a nascent maturity level. Second, it is highly likely that the pandemic crisis and its enormous impacts on public health, the economy and society at large, may be prolonged. Third, and more fundamentally, the vision of an inclusive state is likely to suffer a setback both at home and abroad as the global economic crisis (low growth, job loss, and increased income gaps), political crisis (weakening democracy and rising populism), and crisis in the world order (weakening of U.S.-led liberal world order and the emergence of realist-based world order), already present before the COVID-19 outbreak but further exacerbated by the pandemic, have added up to rising populism and nationalism, and renewed protectionism and neo-mercantilist support for national prosperity and military power, both at the national level and in the world.

Paradoxically, one could say that the innovative and inclusive state vision of the Moon administration was born out of its time because the nascent, practical stage it is going through is mired in adverse conditions.

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Others may argue that the unfavorable conditions of our times and the world warrant an innovative and inclusive state. Should the Korean society adhere to a policy of growth and security of the development age, i.e., stuck in the paradigm of national prosperity and military power, and not transition to an inclusive state, the values of human rights, democracy, high quality of life, creative and cooperative culture, innovative economy, peace on the Korean peninsula, sustainable development, world peace, and global public interest would not be realizable.

Based on these considerations, this paper looks at the inclusive state potential Korea has demonstrated in its responses to the COVID-19 crisis and the progress of the economic crisis, political crisis, and crisis in the world order facing the inclusive state model both at home and abroad. Finally, based on the findings, it proposes ways for the Korean government and society to address these critical crises.

## **II. Potential and Directions for Inclusive State**

### **1. Potential for Inclusive State**

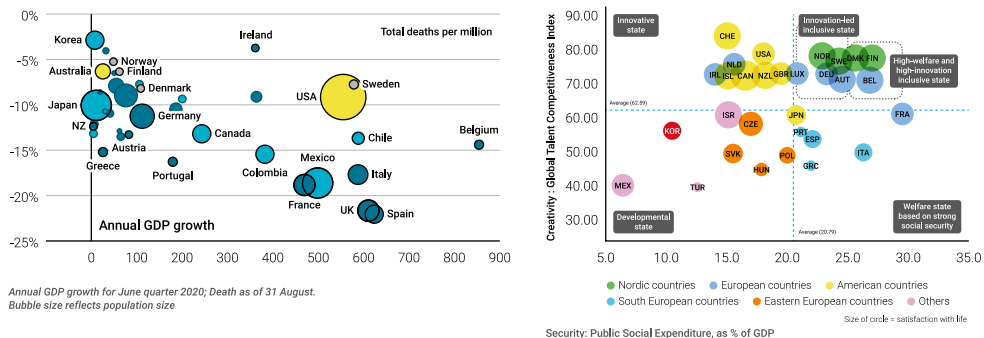
The COVID-19 pandemic created a condition comparable to a nationwide exam where countries are tested on their state

competence. Interestingly, countries with different geographical and political conditions and varying levels of economic development are performing quite differently on the exam.

Here is what we found so far in this state competence test. The left diagram in Figure 1 below shows the economic decline (annual GDP growth for June quarter 2020) versus COVID-19 deaths (total deaths per million) of OECD nations. Korea is at the top end of the scale in both aspects. Also, as shown on the right diagram, the inclusive state group with Norway, Finland, Denmark, and Germany, which scored high in inclusiveness and creativity (innovation) indicators, is found to be faring relatively well compared to the social security-based welfare state group focused on developmental state, innovative state, and social security state. However, in the inclusive state group, Belgium, Sweden, and France performed relatively poorly, which can be attributed to their early perception of COVID-19 risks and the resulting response (Sweden adopting a herd immunity concept), lack of cooperation between the central and regional governments under a federal system (Belgium), and neo-liberalist policy that led to excessive cuts in health expenditures and readiness impacts (France).

It is not a coincidence that, except for Belgium, Sweden, and France, countries in the inclusive state group came out with

Figure 1. Economic decline v COVID-19 deaths (Left) and Classification of states by type (Right)



Source: (Left) Jericho (2020), (Right) Seong (2020b)

good performance. More than anything, the countries have a reliable social safety net and an outstanding medical system, along with good leadership and crisis management capability.

It can be said that Korea, whose inclusive state initiative is still in the nascent stage compared to these countries, has more similarities with China, Taiwan, Vietnam, Japan, and other East Asian nations with a centralized government. However, though it suffered a slightly bigger economic shock

than did communist China and Vietnam, Korea fared much better in the sense that it is an open and inclusive democratic system. Moreover, compared to the democratic state of Japan, Korea also recorded a better economic performance.<sup>1</sup> In addition, given Korea's success in pandemic prevention and economic recovery under a democratic system, it can rightfully be said that it was the best-performing nation in 2020. In sum, Korea is a unique type of state that features both the characteristics of an East Asian centralized

1 For the years 2020 and 2021, IMF's World Economic Outlook Report (April 2020) projected growth rates of -4.0% and 3.5% for Taiwan, -5.2% and 3.0% for Japan, and -1.2% and 3.4% for Korea. However, based on estimation by Academia Sinica dated December 16, 2020, the effective growth rate of Taiwan was 2.71% in 2020, and the projected rate for 2021 4.24% (Tzu-yu & Hsu, 2020). This shows that Taiwan's successful response to the pandemic helped considerably raise the economic growth rate for 2020 and 2021. Thus, it should be noted that the content of this paper, which is based on IMF's April 2020 report, is incomplete as it looked at reports in the early stages of the COVID-19 pandemic.

state and of an inclusive European state, and as such, it has successfully responded to the public health and economic crises caused by COVID-19.

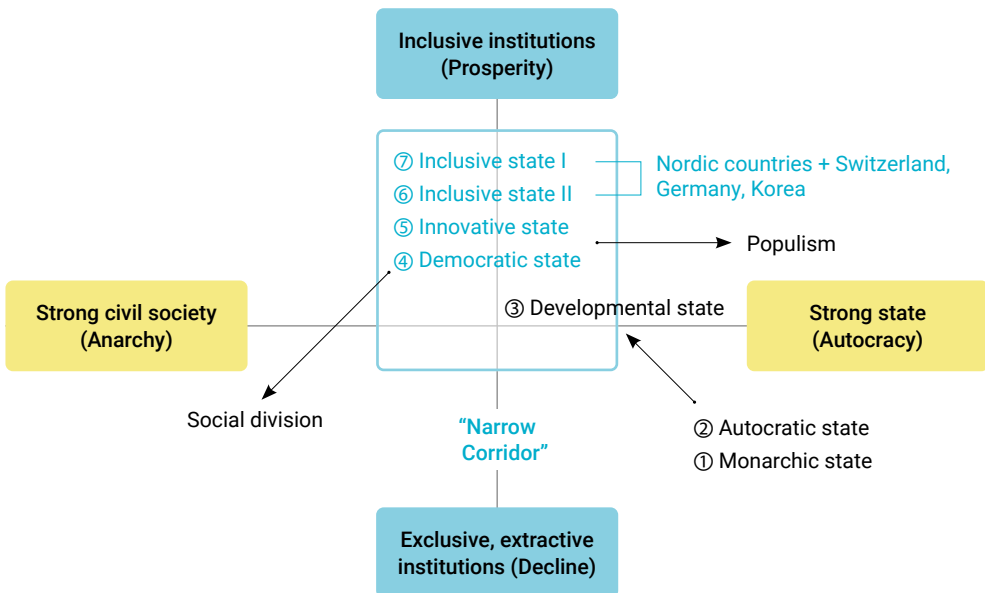
## 2. Directions for Inclusive State

Then, in which direction should an inclusive state go? Figure 2 below helps answer this question. The diagram captures the key findings of Daron Acemoglu and James Robinson's two books, *Why Nations Fail* (Acemoglu et al., 2012) and *The Narrow Corridor* (Acemoglu & Robinson, 2019). In the books respectively, the authors argue that a state's economic prosperity and fate

are determined based on its extractive or inclusive political and economic institutions, and liberty and democracy thrive in a narrow corridor where there is the right balance between a strong state and a strong civil society (Seong, 2020b).

First, the far right side of the horizontal axis depicts a society suppressed by an autocratic state, where liberty and democracy cannot thrive due to a lack of civic power that checks state power. On the other hand, on the far left side of the horizontal axis, the existence of multiple strong forces divides the society, constantly creating conflicts and chaos, and thus, making liberty and

Figure 2. Conditions of democracy and conditions of economic and social prosperity



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democracy fundamentally impossible. The Narrow Corridor concludes that liberty and democracy originate from a delicate balance of power between state and society (Acemoglu & Robinson, 2019). Meanwhile, looking at the vertical axis, the bottom depicts political and economic institutions that are exclusive and extractive, as in the examples of monarchy and serfdom, while the top shows political and economic institutions that are highly inclusive, allowing citizens to participate in the country's governing and economic affairs (economic and social inclusion), like in a democracy or welfare state (promoting distribution and welfare).

Based on the above considerations, Figure 2 reveals that history has evolved in a direction where there is the right balance between a strong state and a strong civil society, and where the political and economic institutions transitioned from exclusive and extractive institutions to inclusive ones. Furthermore, throughout such an evolution, the types of state have also evolved from monarchies, autocracies, and developmental states, to democracies and then to innovative states, welfare states, and inclusive states.<sup>2</sup>

Thus, Korea's inclusive state, which is still in nascent stages, should move in two directions. First, it should firmly preserve the conditions for liberty and democracy by maintaining the right balance of "the narrow corridor." Second, based on these conditions, it should continue to develop an innovative economy by drawing out the best of people's competence in creativity and collaboration while realizing optimal levels of social security as the economic conditions allow, ensuring security in life for all. However, even in this case, considering the competitive nature and variability of the world economy, it seems more appropriate to focus on a model of innovation-led inclusive state (I), which places relatively more emphasis on promoting creativity and collaboration among people rather than on a high-innovation and high-welfare inclusive state (II) that maximizes innovativeness and social security.

Looking at the development of democracies and inclusive states from an opposite angle, it is possible to see what forces or powers put democracies or inclusive states at risk. Any attempt by a political or social force to break away from the narrow corridor, either

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2 The Inclusive State I model is one "driven by innovation," aiming to balance a dynamic innovation economy with social guarantees by focusing more on expanding the creative and cooperative capacities of the population than on just increasing welfare expenditures. The Inclusive State II model takes a step further and strives to be "welfare-heavy and innovation-driven," with more investments made in welfare to promote social guarantees for the population → to put more emphasis on social security together with strong innovative economy.

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to empower the state or, on the contrary, to maximize the power of certain forces of the society, will shake the foundation of democracy. An attempt to make an inclusive political or economic system exclusive would move an inclusive state backward.

Unfortunately, the general global trend is leaning more towards weaker democracies and exclusive states than more robust democracies and inclusive states. The world is faced with persistently low growth and job loss, growing tide of inequality reaching uncontrollable levels, conflicts between classes, regions, and races, and a rise in nationalism and populism.

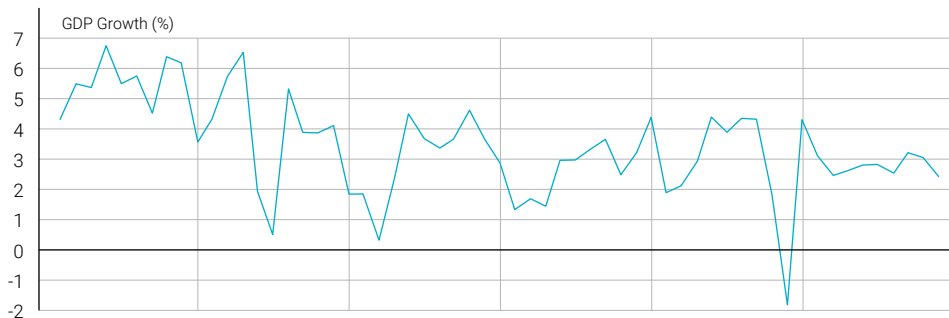
Given that the COVID-19 crisis can further exacerbate low growth, job loss, widening inequality, and the rise in social conflicts and populism around the world, it is anticipated that maintaining and nurturing democracy and an inclusive state is arduous.

Notably, as Korea is going through the early development stages of an inclusive society, the country is currently surrounded by “enemies of inclusive state” on all sides. The following section examines the structure and occurrence of three crises that weaken the foundation and policy of an inclusive state; the economic crisis, the political crisis (declining democracy and rising populism), and the crisis in the world order.

### III. Deepening Global Economic Crisis

Signs of a global economic crisis appear in the form of an extended downward growth trend, automation and job loss, sharply widening inequality, distributive conflict, and rising civil unrest.

Figure 3. World GDP Growth Rate 1961-2020



Source: World Bank (2020)



## 1. Falling Global Growth

Figure 3 depicts the fluctuations of the world economic growth rate from 1961 to recent years. The world economy, which had grown between 6% and 7% in the 1960s, recently fell to the mid 2% range. The OECD member countries have fared even worse than the world average. According to OECD statistics (Boone, 2020), the average growth rate of OECD member countries has fallen to the low 1% range since the 2008 financial crisis. In the year 2020, the first COVID-19 year, the rate is expected to fall to a super low level of minus 9.3%.

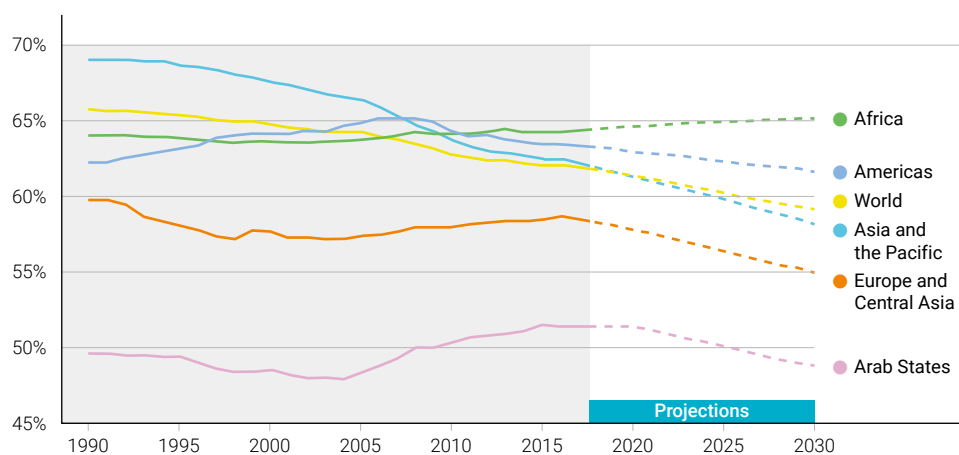
## 2. Robotics, Automation, and Job Loss

Against this backdrop, the labor force

participation rate is falling continuously, compounded by job loss and worsening job quality (more platform labor and temporary jobs) as a result of the growing usage of industrial robots.

Figure 4 shows that the world's average labor force participation rate has continued to decline since 1990, despite a gradual increase in Africa, Europe, Central Asia, and the Arab region between 1990 and 2015. From 2015 to 2030, long-term prospects are likely to fall by a great margin in all areas of the world except Africa. Such a long-term downward trend in the labor force participation rate can be attributed to an aging workforce (labor force retirement) and longer education. However, the trend can also be explained by a fall in

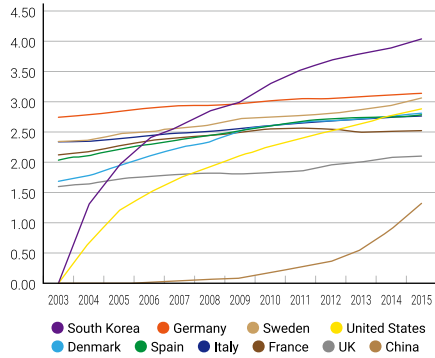
Figure 4. Falling labor force participation rates



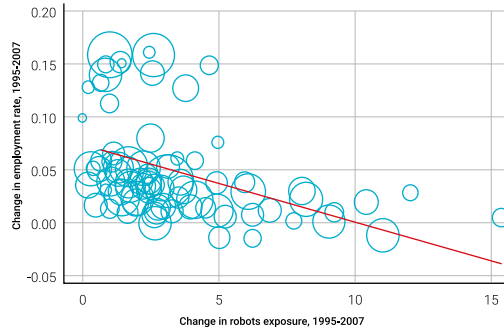
Source: International Labour Organization (2018)

Figure 5. Increase in industrial robots

Operational stock of robots per 1,000 employees in HICs, by country, 2004-2015



Change in exposure to robots and in employment rate-Total economy (change in percentage points)



Source: (Left) Hallward-Driemeier and Nayyar (2020), (Right) Chiacchio et al. (2018)

total employment numbers resulting from increased usage of industrial robots, AI, and various other automation technologies.

Automation-driven job loss such as to robots and AI diminishes job availability for people. Such a phenomenon is easily verified by the number of new robots introduced in the manufacturing sector and the resulting number of jobs lost. The left graph in Figure 5 shows that, for ten years since the early 2000s, the number of industrial robots increased considerably in most advanced countries, of which Korea has seen the steepest increase.<sup>3</sup>

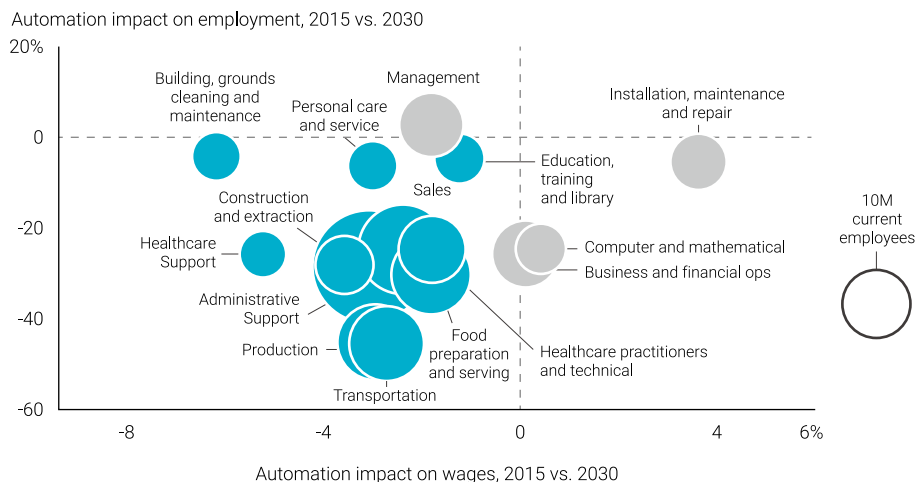
The image on the right illustrates that job loss was most evident in sectors with the highest exposure to industrial robots (combined with falling wage levels).

The problem is that automation entails not only job loss but also wage cuts. As shown in Figure 6, approximately 80% of the workforce will be affected in the coming decades by some level of wage stagnation, displacement, or a combination of the two (Harris et al., 2018). It is expected that significant adverse effects will be felt in almost every sector and business category, including administrative

<sup>3</sup> The start of the robotics industry in Korea is traced back to the early 1980s. In June 1984, the Incheon Research Institute of Daewoo Heavy Industries was the first to localize NOVA-10, a multi-purpose robot for welding and control device in Korea. In the late 1980s, LG Electric (now LS Electric) and some other conglomerate companies began producing industrial robots in earnest. In the early 2000s, the industry saw rapid growth under the Roh administration when intelligence robots were included in the top ten next-generation growth engine industries (Lee & Sin, 2019).

Figure 6. Future impacts of automation on wage suppression and job loss

**Automation will affect 80% of workers through wage suppression and job loss**



Source: Harris et al. (2018)

support, sales, restaurant industry, production, transportation, construction, medical care, medical support, building management, education and training, and personal services.

### 3. Widening Inequality

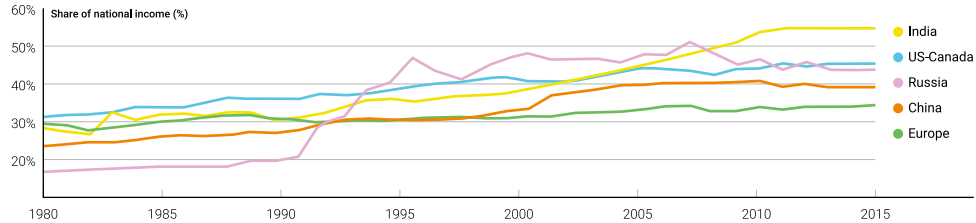
The impacts of robotics and automation on wage suppression and job loss will, in turn, result in widening technology-driven inequality. In addition to the technology factor, various other factors come into play when it comes to the widening inequality gap, namely globalization, education, and institutional factors such as taxation and inheritance. Since the 1980s, which marked the start of rapid ICT technology development, technology was

the major driver of growing inequality (Seong, 2013). Prior to this period, the growing inequality in income and wealth was primarily driven by the steel, shipbuilding, automobile, energy, petrochemical industries of the industrialization era. However, after the mid-1980s, the economic landscape shifted towards advanced ICT businesses such as IT, digital, Internet, and platform businesses, which emerged as new drivers of innovative growth and inequality. Nevertheless, the determinant factors of inequality at the individual level are still education and inheritance (Alvaredo et al., 2018).

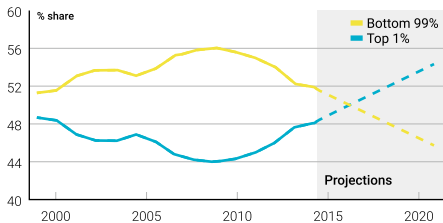
Figure 7 shows that, in the post-1990s, a combination of technology and many other

Figure 7. Rising inequality in income and wealth

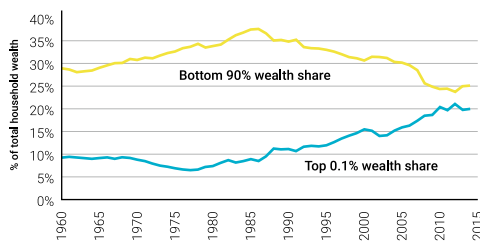
Top 10% income share across the world, 1980-2016: Rising inequality almost everywhere, but at different speeds



Share of global wealth 2010-2014 trend projections



Wealth shares of bottom 90% and top 0.1% families



The figure depicts the share of total household wealth owned by bottom 90% and the top 0.1% obtained by capitalizing income tax returns (Saez and Zucman 2016). The unit of analysis is the family.

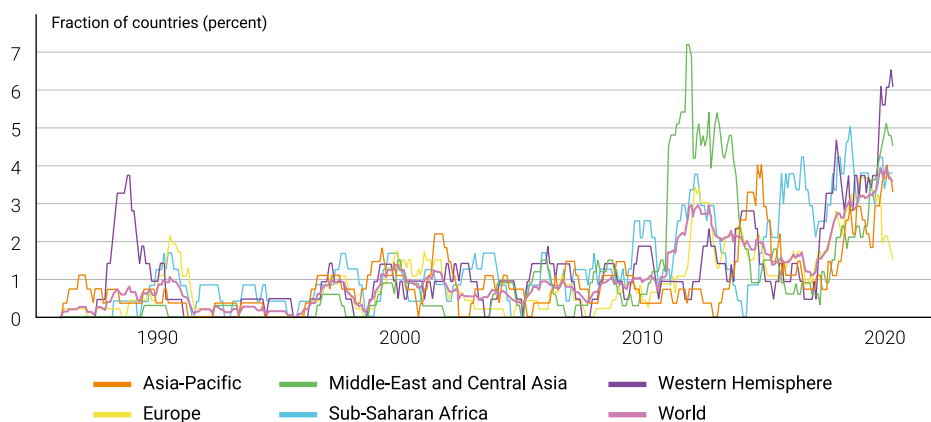
Source: (Top) Alvaredo et.al. (2018), (Bottom) Hardoon (2015)

factors contributed to tremendous growth in income and wealth inequality. First, the graph at the top indicates rising inequality in India, U.S., Canada, Russia, China, and European countries, in the past thirty years. The two bottom graphs show that the 1 to 99 divide in wealth distribution is becoming more pronounced. In other words, the wealth of the world's top 1%, which has risen consistently since 2010, surpassed the wealth of the lower 99% in 2016 and onwards.

#### 4. Rising Social Unrest

The long-term worldwide trend of declining growth, technology-driven job loss, and the widening inequality in income and wealth will ultimately and unavoidably trigger various forms of conflicts among groups in society. Figure 8 shows the trend in social conflicts and unrest in 130 countries from 1980 until recent years. For approximately thirty years, from the 1980s to 2010, the level of social conflict and unrest had remained at low levels overall. However, during the ten years since

Figure 8. Trends in social unrest by region (12-month average)



Source: Barrett et al. (2020)

2010, the world was hit by great waves of conflicts where the period is known as an era of “Great Turbulence.”

The Great Turbulence era of the 2010s is characterized mainly by 1) a series of pro-democracy uprisings started with the Arab Spring, triggered by movements in Tunisia in 2010 and large-scale attempts at returning to authoritarian rule, 2) the contractionary policies in Europe in the aftermath of the 2008 global financial crisis and public resistance, 3) the Syrian refugee crisis, triggered by the Syrian civil war and Europe’s extensive pushback of Syrian migrants, and 4) the rapid spread of the populist movement in the late 1990s, witnessed in various parts of the world, and movements to counter it.

What is important to note is that various

conflicts have fueled an extensive spread of social unrest and that the degree is amplifying. Moreover, while there is growing resistance against surviving autocratic regimes in many parts of the world, public dissatisfaction with the performance of existing and new democratic states has also increased, stimulating the widespread “decline of democracy.” Also noteworthy is that a diverse group of populist forces in the world are taking advantage of this phenomenon or engaged in activities to stimulate it. In short, the world economic crisis—low growth, automation and job loss, and widening inequality—is fueling widespread social conflict and unrest, which in turn is giving rise to a political crisis in the forms of declining democracies and rising populism.

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Ultimately, in these causal chains of events, a weakening drive towards inclusive states is witnessed at a time when inclusive institutions and policies are critically needed in order to deal with low growth, job loss, and increasing inequality. On the other hand, a stronger push for exclusive states is seen in many places in the world. On top of the multifaceted economic crisis, the worldwide spread of the COVID-19 pandemic is worsening the political situation on all fronts. This is the nature of the complex challenges facing all human societies today.

#### **IV. Global Political Crisis and Rising Populism**

In the midst of an ongoing economic crisis marked by low growth, job loss, declining job quality, and widening inequality, democratic systems are likely to turn into hotbeds for populism should they fail to represent disadvantaged groups properly. The existing parties' failure to represent the interests of disadvantaged groups for a long time would lead the public to attribute their hopelessly protracted economic and social

agony to excessive globalization and regional integration, lethargic democracy, slow policy execution, corrupt elite groups, immigrants that taking away jobs and welfare benefits, and criminals, and calling for strong and prompt political solutions.

In response to such public reaction, the world has, over the last few decades, seen the emergence of various forms of populist parties that claim to represent the interests of "pure people." These parties have criticized existing political parties and corrupt elites for colluding with big businesses and interest groups based on the misguided stance of openness and international cooperation and making the situation worse. Based on broad public support, these parties have become ruling parties or third or second-place parties, emerging as alternatives to existing political parties (International IDEA, 2019).

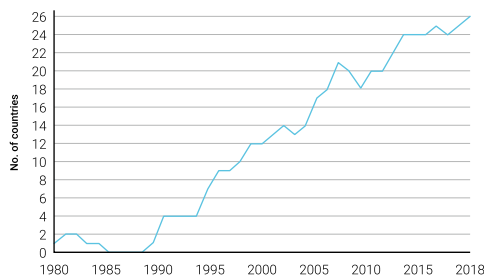
Figure 9 shows how the number of populist governments has grown in the world in the last few decades and the types of populism that have prevailed over time. First, the graph on the left shows that from 1980 to 2019, the number of populist governments in power has grown from one to 26 (International IDEA, 2020).<sup>4</sup> Notably, in 2002 and 2008, the number

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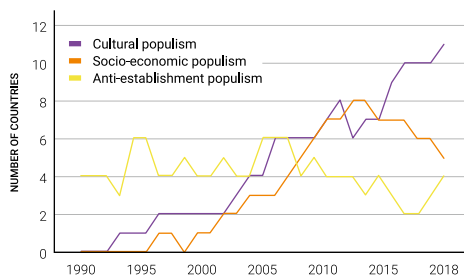
<sup>4</sup> According to a Timbro study (2019) on 33 European countries, the approval rating for populist political parties was only 10% in 1980, but rose to 23% in 2018. Likewise, populist political parties accounted for only 5% of all European Parliament seats in 1980, but by 2018 accounted for 25% of the seats.

Figure 9. Growing Populist Governments (Left) and Types of Populism in Power (Right)

Number of populist governments in power 1980-2019



Types of Populism in Power, 1990-2018



Source: (Left) International IDEA (2020), (Right) Kyle and Gultchin (2018)

of populist governments passed an inflection point when it fell but only to pick up again.

The graph on the right identifies three types of populism—cultural populism, socio-economic populism, and anti-establishment populism<sup>5</sup>—in power from 1990 to 2018 and finds that different types of populism prevailed over time.<sup>6</sup> Throughout the period analyzed, the type of populism that was kept to a relatively small number (four or less) is the anti-establishment populism; on the other hand, the number of cultural populism and socio-economic populism proliferated after 2005. Of the three types, the one that prevailed

after 2013 is cultural populism, which is the cause for alarm. Of all types of populism, cultural populist governments are more likely to display tendencies of strong racism, nationalism, anti-immigration sentiments, exclusivity, and non-inclusiveness.

Populist political forces come to power within democratic institutions and procedures, but once they are in power, they tend to harm democracy. More than anything, they see democracy as a system prone to collusion between corrupt elite groups and strong interest groups to the disadvantage of the general public. In general, their attempt

5 The scope of socio-economic populism includes leftist and rightist populism. Leftist emphasizes welfare and redistribution, and rightist emphasizes economic growth, tax cuts, welfare cuts, and de-reregulation. In the real world context, it is likely that socio-economic populism come combined with cultural populism that emphasizes ethnic and cultural identities, anti-immigration policy, and protectionism. Compared to these two forms of populism, the anti-establishment populism is focused on countering privileged and corrupt elite groups (Kyle & Gultchin, 2018).

6 Kyle and Gultchin (2018) used rather stricter criteria and estimated that there are about 20 populist governments in power in 2018.

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at resolving this issue is to concentrate power on the populist leader. Thus, populist governments have tended to rely on strong leadership to drive policies, often at the cost of democratic institutions and procedures and even pluralism. In that process, the basic rights of the people are undermined, and activities of political parties and public participation are greatly contracted.

## **V. Reorganization of the World Order**

Over the past century, the world order has gone through the decline of British hegemony, the Second World War and the appearance of the Cold War, the collapse of the old communist bloc, and the rise of U.S. hegemony. Against this backdrop, China's rapid emergence as a global power and the possibility of waning the U.S.'s sole hegemonic position have become the biggest issue in both academics and real politics.

How will the world order unfold in the foreseeable future? There are likely two perspectives: the first view is a realist-based world order by Professor Mearsheimer (2019), and the second is the liberal (or institutionalized) internationalism by Professor Ikenberry (2018).

According to Professor Mearsheimer,

owing to the rapid emergence of China, the liberal hegemony pursued by the U.S. failed after 1990, and so did the unipolar liberal international order. Based on this view, he foresees the emergence of a realist-based world order that can take one of two forms: the first is a thin order, in which international institutions will have minimal effect on state behavior in both the economic and military realms; the second is two thick bounded orders, one led by China and the other by the United States. Based on where common interests meet, nations will form an alliance or coalition under one of these two bounded orders to cooperate closely with each other on security, trade, and other international issues.

Within these two orders, the two thick bounded orders will always come first, and the thin orders will remain secondary to the thick orders. Moreover, because the two thick bounded orders each exclusively pursue the common interests of the respective economic and military bloc, they are always at risk of competition, confrontation, and even war. Given these considerations, the divisive thick orders led by the U.S. and China will likely contribute to advancing the interests of the two superpowers in the short term, but, in the longer term, they are unstable with the risk of small or large collisions.

Professor Ikenberry maintains a U.S.-led order, but his view is in stark contrast with that



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of Professor Mearsheimer. He emphasizes that the liberal (or institutionalized) international order developed by the U.S. and other liberal democratic nations promotes the values of openness, liberalism, and democracy and pursues common interests in the economic and military realms. He also argues that this common cooperative order has evolved out of the world wars, the Great Depression, the Cold War confrontation, the financial crises, and various other crises.

Based on this view, Ikenberry argues that an integrated world order that fosters cooperation and peace can be organized if the liberal international order is reformed in such a way that the progressive U.S. domestic policies of the period before, during, and after the Great Depression are adopted—inclusive economic growth, improved distribution, and social safety net—while internationally the changes in an increasingly multipolar world power structure are accommodated to give more nations the opportunity to engage and cooperate. Then, the hegemonic competition between the U.S. and China could move towards a path of peace and co-prosperity, and open the way for a broader coalition of states willing to cooperate within a reformed liberal international order.

Amid increasing hegemonic competition between the U.S. and China, it is unclear what new order will emerge and what fundamental

changes the world is facing. What is clear, though, is that it would be practically impossible for a state whose top priority is survival to achieve peace and co-prosperity as long as it remains convinced that it cannot trust a state that poses a potential threat to its survival. Based on the values and principles of freedom, democracy, and inclusiveness, nations must continue to cooperate actively with other nations that operate under different values and rules and build an inclusive world order in which they can co-exist together. Only then can the world move towards a path of co-prosperity by setting a common goal that can be achieved together.

## **VI. Conclusion: Developing an Inclusive State**

### **1. Four Enemies of the Inclusive State**

The inclusive state model, which is the best of existing state models ever developed by mankind, involves a dynamic innovation economy in support of (or that can be realized through) an optimal social safety net and opportunities to enhance the competence of the public. Seen from this perspective, the ongoing three global crises—economic crisis, political crisis, and crisis in the world order—carry several risks that undermine the full growth and continuous development of the

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inclusive states.

First, the economic crisis of low growth, job loss, worsening job quality, and widening inequality triggered by globalization and technological advances have been more exclusive than inclusive in terms of growth, distribution, and employment. The crisis has led to more and various forms of economic and social conflicts and unrest throughout the world. We see growing discontent with democracy in various parts of the world, as well as the emergence of populist parties advocating protectionism and excluding socially vulnerable groups and immigrant groups in many countries. In the meantime, the rapid economic rise of China with its adoption of an offensive diplomatic and military strategy and the U.S. counter-strategy of deterrence have deepened the hegemonic competition between them. In addition, the U.S.-led unipolar, open liberal world order in place since the collapse of the communist bloc is expected to give way to a more restrictive policy of openness and two thick bounded orders. If this should be the new dominant world order, we are likely to see a mixture of selective inclusion and confrontation in this order.

In addition to the above-stated three enemies that threaten the realization of inclusive states, the COVID-19 pandemic that spread from early 2020 has emerged as

the fourth enemy. The novel coronavirus has such a high transmission and infection rate that it only took a couple of months before it spread from China to all other parts of the world. Moreover, the world's simultaneous efforts to stop movement and contact in 2020 during a time when medication and vaccines were not available triggered an unprecedented economic crisis that paralyzed entire economies of the world for months. This situation may linger on for a considerable period of time even after medication and vaccines become available in 2021.

The prolonged pandemic situation has made the economic and social crises, the first enemy of the inclusive state, more prevalent. Also, considering that the third wave of the pandemic has developed in mid-October 2020, the COVID-19 situation will intensify the crises and significantly undermine the development of an inclusive state.

As time passes, there will be an outburst of public discontent with the way democratic governments have, in general, responded helplessly to the COVID-19 situation, resulting in more dominance for populist political parties. Thus, the current time is calling for the world to cooperate extensively to fight against the common enemy of COVID-19. However, it is increasingly likely that the hegemonic competition and conflict between the U.S. and China, which continue

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to worsen by the day and reach levels beyond recovery, will hamper the pandemic response and further challenge the development of inclusive states.

In sum, the world is faced with the most complex risks since the Second World War, and much like the calm before the storm, it could face a great depression or a great war. In this sense, the world is standing at a crossroads that will determine the course of democracy, a market economy, open and liberal world order, and other institutional arrangements created by mankind, the political and social foundation for sustainable development, and even the existence and development of inclusive states.

## **2. Korea's Choices for Developing its Inclusive State**

At this critical juncture, what is there that we can do? This paper proposes two recommendations. The first is to preserve the foundation of freedom and democracy while efficiently addressing the economic and social risks associated with a shrinking economy, job loss, and growing inequality. Particularly, the state should be a common good that seeks maximum inclusion and co-existence within given conditions rather than an instrument of exclusion and extraction. This is the fundamental condition of an inclusive state. In the face of the challenging three crises and the

COVID-19 pandemic risks described above, if the state pursues policies that are tailored only to those who have (businesses and the middle/upper class), does not address the employment issues facing the majority of the population who have not, and fails to secure a stable minimum standard of living for vulnerable social groups who have lost their jobs for unavoidable reasons, it is not only giving up on the basic responsibility as a state but also risks leaving unprotected citizens to fall prey to populism. Thus, in all circumstances, the state should do its utmost for the jobs and livelihood of economically and socially disadvantaged groups of people and move towards realizing an inclusive state that brings the best out of the public's competence.

Second, given the face-off between a realist-based two thick bounded orders and reformative liberal internationalism amid deepening hegemonic competition between the U.S. and China, the inclusive state of Korea should actively contribute to advancing the reformative liberal internationalism order. A world reorganized under bipolar thick bounded orders with weakening U.S. and China hegemonic competition would see a decline in liberalism, openness, and multilateralism, while the intensifying security and trade conflicts between the two bounded orders would put the entire world at greater risk and entail significant losses. Moreover,

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if such an order should become firmly established, Korea would likely be forced by the U.S. and China to take either side in security, diplomacy, trade, and international competition. This may lead to the inter-Korean confrontation being repeated and the peace on the Korean Peninsula becomes an ever-distant goal.

Based on these considerations, it can be concluded that the only alternative for Korea is to support a reformative liberal internationalist order. However, one cannot decidedly say which of the two directions—realist-based two thick bounded orders and reformative liberal internationalism—the world will take. A considerable degree of variability comes into play depending on what choices are made, i.e., values pursued by leading political forces in key nations, strategic coalitions built at home and abroad, and efforts made to achieve these goals.

Based on this assumption, the inclusive state of Korea should establish a tentatively named “World Coalition of Inclusive States” in solidarity with states that have an inclusive, open, and democratic stance, so that the world does not retreat to realist-based thick bounded orders, but instead turns to a reformative liberal internationalist order (Seong, 2020b). Should Korea act on its own on the political and economic stage dominated by superpowers, it would either

become subordinate to their demands or find itself in a passive position; should it build international solidarity with nations that have shared values of democracy and inclusive system, it could stay away from the pressure of the U.S. and China, and lead them towards a path of cooperation and peace. Whatever the case may be, it should be clearly understood that it would be perilous for Korea to isolate itself or to take sides with either of the two superpowers.

The values and stance that Korea should maintain in order to overcome the domestic economic, social and political crises, and avoid the risk of returning to realism in the midst of a restructuring of the world order are philosophies of democracy and an inclusive state. Democracy is a universal political ideology and an institution that guarantees that all constituents of society are equal, and inclusiveness is the power to ensure that people pursue co-prosperity and peace together by recognizing others as equals. Achieving the goals of co-prosperity and peace through the power of democracy and inclusiveness requires innovations of all sorts. With the combination of democracy, inclusiveness, and innovation, Korea and the world will easily overcome the three crises, the COVID-19 pandemic situation that seems so invincible, and the resulting economic and social shock.

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# 02

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# Public Governance Innovation in Response to COVID-19 Pandemic for Building Back Better

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**Abstract**

The coronavirus disease (COVID-19) pandemic has unmasked a plethora of challenges the global community faces, ranging from escalating public health emergencies to socio-economic disparity and ineffective public governance. Despite the unparalleled devastating impact of the pandemic on humanity, the crisis has provided an opportunity for governments to reflect on the kind of governance systems required for effective and efficient response systems to build back better and to prepare for future pandemics. Digital government innovation and information and communication technology (ICTs), in particular, have emerged as novel tools and solutions for crisis management and strengthening government capacities to ensure access to inclusive public service delivery. Meanwhile, it is also imperative to acknowledge the obstacles of digital governance, such as the widening digital gap, concerns about data security, and public anxiety regarding its ramifications on public privacy and individual freedom. This paper provides a comprehensive review by examining the impact of digital and public governance innovation in response to the pandemic across nations worldwide. Finally, it seeks to establish grounds for an effective public governance framework based on the proposed succinct policy recommendations.

**Keywords:** Public governance, governance innovation, COVID-19, building back better

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## I. Introduction

The coronavirus disease (COVID-19) pandemic has become a grave public health emergency, severely jeopardizing progress towards the 2030 Agenda for Sustainable Development. It is also a governance crisis that has thwarted governments worldwide with daunting responsibilities as they plan, design, implement, and enforce new processes to help prevent the spread of the disease. The COVID-19 pandemic has created a devastating spillover effect worldwide, ranging from growing inequalities, a spike in gender-based and domestic violence during lockdowns, to declining levels of trust in government (Office of the United Nations High Commissioner for Human Rights [OHCHR], 2020; Spence & Brady, 2020; UN Women, 2020). By the end of January 2020, the World Health Organization (WHO) formally declared the COVID-19 pandemic as a Public Health Emergency of International Concern (PHEIC). As the statistics of casualties and infections rapidly change, it is quite challenging to quantify the pandemic's destructive impact worldwide (Shaw et al., 2020).

As of 24 April 2021, the global COVID-19

pandemic had exceeded over 145 million confirmed cases, including over 3 million deaths. Similarly, as of 21 April 2021, over 899 million vaccine doses had been administered globally as a measure to combat the havoc caused by the pandemic.<sup>1</sup> The COVID-19 crisis has had a highly heterogeneous regional and local impact, which has significant implications for crisis management and policy responses (Allain-Dupré et al., 2020). Beyond the health and human tragedy, it is widely known that the COVID-19 pandemic has triggered the most acute economic crisis since World War II. Experts predict that many economies will not recover their 2019 output levels until 2022 at the earliest (Allain-Dupré et al., 2020; Organisation for Economic Co-operation and Development [OECD], 2020a).

Although the pandemic has affected nations worldwide, it has afflicted some regions more severely and others more disproportionately. As the spread of COVID-19 is inconsistent, policy responses are similarly uneven (OECD, 2020b). The COVID-19 crisis has situated governments in a state of extreme uncertainty where they must make difficult trade-offs on health, economic, and social challenges exacerbated by the pandemic (Allain-Dupré et al., 2020).

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<sup>1</sup> World Health Organization. *WHO Coronavirus (COVID-19) Dashboard*. <https://covid19.who.int/>

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The surge in COVID-19 cases is straining even the most advanced and well-resourced health systems as signs of vulnerabilities in their social, political, and economic systems are exposed by the pandemic (Azcona et al., 2020).

The pandemic presents immense and unforeseen challenges for governments and humankind globally. Studies show that the poor and vulnerable populations have suffered significant consequences regarding their health and mortality due to the public health crisis and its indirect impact on social, economic, and political systems (OECD, 2020b). More importantly, the COVID-19 crisis sparked a wave of strict governance reforms that were unprecedented in terms of scope, disruption, and intrusiveness in peacetime. The pandemic has also unveiled the contingent, fragile nature of global governance institutions and the limitations of power and authority in managing large-scale crises. A disturbing implication is that such threats need to be imminent and tangible to generate a meaningful governance response (Levy, 2021).

The COVID-19 pandemic, which is an unprecedented global health crisis, has challenged the current systems of public governance, both global governance and national governance. While the purported “advanced” societies have exposed their

vulnerabilities and ineptitude to manage this crisis so far, a few countries have demonstrated better responses to the pandemic (Choi, 2020). Notwithstanding the unparalleled challenges and disastrous nature of the pandemic, the crisis has also provided an opportunity for governments to reflect on the kind of governance systems and public institutions that need to be in place for our societies to be able to build resilience and withstand similar shocks in the future. Thus, the critical role of effective and innovative public governance systems and institutions that serve the public equitably and are more responsive to the needs of everyone are required to help ensure efficient, transparent, accountable, and innovative public service delivery, especially in times of crisis.

Now more than ever, the pandemic has proven the indispensable role of innovative public governance to effectively respond to the COVID-19 crisis and for preparing for future pandemics and other health emergencies. To this end, the paper seeks to highlight the significant role of innovative public governance in response to the COVID-19 pandemic for building back better. While acknowledging that governance, citizen participation, diffusion, and spread of innovative and emerging technologies vary from country to country (Shaw et al., 2020), this paper also aims to examine and share a

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number of emerging lessons and experiences on innovations in public governance and how this has been leveraged in the COVID-19 response. Suggestions on how these efforts can be made more effective, innovative, and efficient are proposed.

## 1. Governance

The current COVID-19 pandemic has strongly indicated that governance capacities at various levels of government fall short of delivering adequate responses to complex global emergencies. Existing governance systems and institutional arrangements are critical determining factors for an effective public health emergency response. The institutional responses that governments across the globe have taken or failed to take in emergencies are central to addressing public health crises, including COVID-19 (United Cities and Local Governance, 2020). Public governance is central to addressing public health emergencies, including the COVID-19 crisis, and governance should invariably be risk-informed to deliver the desired results and impact.

The UN Committee of Experts on Public Administration of the Department of Economic and Social Affairs (DESA) proposed 11 principles of effective governance. It considers different governance structures, national realities, capacities, and development

levels, and respects national policies and priorities. As was endorsed by the UN Economic and Social Council (ECOSOC), these principles are developed to help interested countries build their own effective, accountable, and inclusive institutions at all levels (Division for Public Institutions and Digital Government, 2021).

Given that governance, in contrast to the conventional definition of government, centers around the participation of different and multiple stakeholders, the importance of stakeholder engagement in policy decision-making and implementation processes cannot be overemphasized. Without a common definition agreed upon by scholars, the concept of governance is far from precise and varies across the existing literature. According to the new governance approaches, governance focuses on the engagement of public and private stakeholders through deliberate practices. Governance also covers the interactions among multi-stakeholders to extend the engagement of different stakeholders in decision-making processes (Glass & Newig, 2019). Pierre and Peters (2005) have suggested five models of governance in Table 1, where public, private, or both are engaged.

Thus, governance refers to the actions, processes, traditions, and institutions used to exercise authority and make and implement

Table 1. Five Models of Governance

<b>Étatiste</b>	<ul style="list-style-type: none"> <li>• This model is against governance without government.</li> <li>• It considers the role of government as a principal actor for all aspects of governance.</li> </ul>
<b>Liberal-democratic</b>	<ul style="list-style-type: none"> <li>• This model accepts the role of government as a principal actor in governance.</li> <li>• Government has the opportunity to choose the level of democratic involvement of social actors.</li> </ul>
<b>State-centric</b>	<ul style="list-style-type: none"> <li>• The state/government remains at the center of the process but becomes relatively more flexible with social actors.</li> <li>• The role of the state is bound to partners than previous models.</li> </ul>
<b>The Dutch governance school</b>	<ul style="list-style-type: none"> <li>• The role of social networks in governance is emphasized.</li> <li>• The role of the state is minimized in the process.</li> </ul>
<b>Governance without government</b>	<ul style="list-style-type: none"> <li>• This model expands the role of private actors.</li> <li>• With the absence of the state's role in governing, this model accords the least significance to political institutions.</li> <li>• This argues that governance is conceptualized as being "bigger than government."</li> </ul>

Source: Adapted and modified from Pierre and Peters (2005)

collective decisions (Florin & Bürkler, 2017; Renn, 2008; UN Office for Disaster Risk Reduction [UNDRR], 2019). On the other hand, risk governance is defined as “the totality of actors, rules, conventions, processes and mechanisms concerned with how relevant risk information is collected, analyzed and communicated and management decisions are taken” (International Risk Governance Council, 2018; UNDRR, 2019, p. 54). Similarly, risk governance employs the principles of governance for the identification, appraisal, management, and communication of all kinds of risks. Risk governance considers all the

important actors involved, including their rules, conventions, and processes. Therefore, it is concerned with the methodology of collecting, analyzing, understanding, and communicating relevant risk information and how management decisions are executed and communicated (Florin & Bürkler, 2017, p. 5).

## 2. Governance Innovation

The COVID-19 crisis has greatly accelerated some pre-existing trends, particularly with government innovation and digitalization. The pandemic has shaken the world, setting in motion waves of change

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with a wide range of possible trajectories (Allain-Dupré et al., 2020; OECD, 2020c). The COVID-19 crisis has shown vividly and abruptly that an epidemic can also disrupt society and paralyze the world economy. Evidently, in this challenging situation for public policymakers and business leaders, government innovation and digital technologies are considered invaluable assets, both for combating the pandemic and reopening society in the medium to long term (Poullet, 2020).

Government innovation broadly refers to the process of implementing new policies and approaches to address government challenges and improve public services and engagement with citizens. Digital government and frontier technologies present rapidly evolving prospects for building resilience across developed and developing countries, as digital technologies have the potential to strengthen resilience and reduce vulnerability. Governments are increasingly leveraging frontier technologies to ensure resilience, reduce disasters, and respond to public health emergencies.

Public health emergencies necessitate quick, agile, and innovative governance responses to build back better after disasters. The swift pace at which the COVID-19 pandemic has unraveled, especially in the early days of the pandemic, has rapidly accelerated the

decision-making process among governments. Effective and innovative governance requires governments and organizations to define their strategic orientations, including their role and objectives, and coordinate with other government entities to deliver on their mission (OECD, 2020b). Never has a pandemic spread across a world so abundant in technologies and data. While not all countries had the opportunity for adequate countermeasures to the pandemic from the start, government innovation and digital technology have been universally leveraged to accelerate scientific research, limit the spread of the pandemic, and now facilitate the reopening of businesses and rebuilding of better infrastructure (Poullet, 2020).

Amidst the economic mayhem caused by the pandemic, government innovation, especially through digital technologies, has emerged as a critical element of environmental, economic, and social resilience. By allowing businesses and governments to continue operating during lockdowns, digital technologies enabled faster economic responses to the emergency. Evidence is emerging on how the COVID-19 crisis triggered significant changes in the adoption and use of digital technologies and other innovative strategies by people, businesses, and governments (OECD, 2020b). Several innovative technologies have been used

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in different countries to identify affected people, check their mobility, reduce the risk of contamination, and develop proactive recovery strategies and actions. Information and communication technology (ICTs), mobile phone technologies including artificial intelligence (AI), big data, and 5G technologies have been used in combination with other emerging technologies, such as drones, automated vehicles, and robotics, in response to the pandemic (Shaw et al., 2020).

More importantly, digital technology, together with AI and big data, has emerged as a new solution in the ensuing battle against the COVID-19 pandemic. With support from national governments, these technology applications serve as an alert system to enable rapid contact tracing and distribute relevant information to the public. Beyond the use of digital government in mitigating and containing COVID-19, digital government technologies are able to complement and, in some cases, amplify the traditional approach to global health program implementation (Owusu, 2020).

### **3. Public Health Emergencies and the COVID-19 Pandemic**

Throughout history, the outbreak of public health emergencies and the spread of infectious diseases have caused the death of millions, sickened billions, and cost trillions

of dollars of global economic output. As the world currently struggles to tackle the novel coronavirus, it is forced to reckon that even developed countries require revitalized and better-coordinated innovative governance and health systems (Bernes et al., 2020). Due to the multi-faceted nature and unprecedented scale of the COVID-19 crisis, there is a greater degree of uncertainty in comparison to past crises (Allain-Dupré et al., 2020).

On 30 January 2020, COVID-19, the novel pneumonia-like disease caused by the severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), was formally declared a critical PHEIC by the WHO. Approximately six weeks later, the WHO determined this outbreak to be a global pandemic (Owusu, 2020). During the initial stages of the outbreak, specific strategies were universally employed to control the spread of the deadly virus. These strategies included quarantining sick people, contact tracing, and social distancing. However, each country faced unique healthcare capacities, risks, threats, political and socio-economic challenges with different healthcare systems, and varied infrastructure capacities (Yoo et al., 2020).

The coronavirus epidemic is noted as humanity's most significant war of the century against the virus. The costs of World War II and other epidemics in the world have already been enormous in terms of human



Table 2. Role of Government in the Crisis Management Phases

Phases	Details	Advantage
<b>Pre-crisis:</b> Identify emergency options	<ul style="list-style-type: none"> <li>• Involving proactive planning with stakeholders.</li> <li>• Building a connection with crisis team members from related agencies.</li> </ul>	Prevention of a conflict from arising or getting out of hand when an emergency takes place.
<b>Initial Phase:</b> Maintain current contact information	<ul style="list-style-type: none"> <li>• Recognizing information from the public, the media, and other organizations.</li> <li>• Considering types of crises from each category and comes up with scenarios.</li> <li>• Sharing the up-to-date information with public.</li> </ul>	Strengthen the action Preparation for the emergency contacts
<b>Maintenance Phase:</b> Identify crisis scenario	<ul style="list-style-type: none"> <li>• Helping the public to gain accurate understanding.</li> <li>• Examining the problems from response efforts.</li> <li>• Generating support for response and recovery plans.</li> </ul>	Expansion of the scope of effective response in times of different crisis.
<b>Evaluation Phase:</b> Develop to evaluate response to crisis	<ul style="list-style-type: none"> <li>• Documenting and communicating the lessons learned from the emergencies.</li> <li>• Determining action plans to improve communications strategies.</li> <li>• Developing views to approach potential crisis from different perspectives.</li> </ul>	Endorsement of different communication channels Improved preparedness.

health, wealth, and welfare. As COVID-19 encompasses a broad spectrum of animal and human viruses, the outbreak of COVID-19 across the world has completely disrupted the political, social, economic, religious, and financial structures of the world (Verma et al., 2021). During a public health crisis, government openness is essential in ensuring that affected communities can access information about the full extent of the crisis, measures to manage it, and instructions to

respond to the crisis. In every stage of the COVID-19 pandemic, including containment, mitigation, and recovery, trust in government and public institutions is vital for governments to respond rapidly and secure citizen support and compliance. The WHO has issued a step-by-step guide as a control measure (Connolly, 2005). It is critical to comprehend why efficient and creative governance is vital for preventing the rapid spread of health emergencies. To ensure that actions are

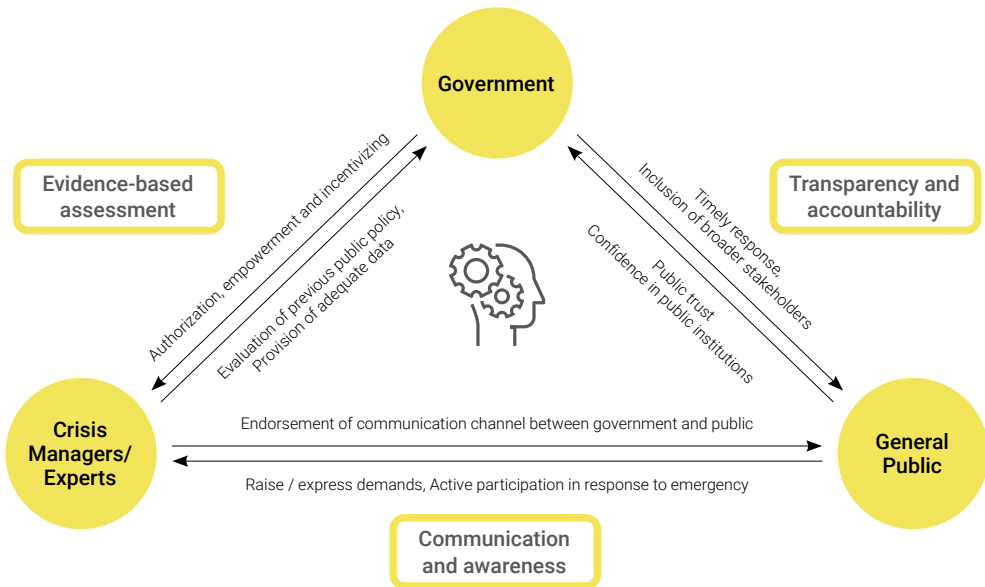
effectively executed, Table 2 summarizes the role of governments throughout the crisis response and management stages (Centers for Disease Control and Prevention, 2005).<sup>2</sup>

## II. Public Governance Innovation for COVID-19 Response

Public governance innovation has proven instrumental in curbing the spread of the contagion and ensuring public safety. The

integration of innovative technology, effective, transparent, inclusive, and accountable governance has been stressed as essential in promoting public safety (Ramalingam & Prabhu, 2020). The interaction and effective stakeholder engagement between governments, crisis managers/experts, and the general public to produce desired results in emergencies such as the COVID-19 pandemic is imperative. Figure 1 illustrates how partnerships and engagement among these key stakeholders have helped develop

Figure 1. Framework on Engagement in the COVID-19 Response



Source: Author's illustration (2021)

2 Korea Disease Control and Prevention Agency. <http://www.kdca.go.kr/contents.es?mid=a20602070000>

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appropriate strategies based on the Republic of Korea's national response to COVID-19. This framework showing a triangular cooperation between governments and other key stakeholders has helped promote evidence-based assessment, transparency and accountability, and communication and awareness in fighting the pandemic.

### ***Evidence-based Assessment***

The concept of evidence-based policy is generated by informing the policy process, rather than affecting the eventual goals of the policy. It is based on the premise that policy decisions should be better informed by available evidence and include rational analysis (Sutcliffe, 2005). Considering that there are different types of evidence for the policy process, the illustration in Figure 1 suggests that interactions among expert knowledge (crisis managers), stakeholder consultations (inclusion of the general public), and policy evaluation of government agencies can be a systematic process of gathering evidence. At the health policy formulation level, the achievement of short-term objectives overrides the need for strategic vision and focuses on health outcomes for the following reasons. First, health equity is not high on the

policy agenda. Second, the mechanisms to monitor the transparency of decisions are not well developed. Third, the policy decision is often hinged on personal preferences and not evidence-based. Fourth, the policy, planning, health information, and surveillance units are weak. Fifth, there are often delays in the release and utilization of funds. Lastly, there may be a failure in accountability systems to focus on procedures instead of performance (Siddiqi et al., 2009). The assessment of the evidence should be well documented, analyzed, and disseminated to ensure its credibility, quality, and relevance. According to the UN,<sup>3</sup> evidence-based policy aims to make effective and successful policy decisions based on reliable data and statistics.

### ***Transparency and Accountability***

The accountability of public governance refers to trust, a core component upon which the legitimacy and sustainability of political systems are built (Blind, 2007). Given that trust is established through continued communication and sustained transparency, it cannot be taken for granted. Such nature of the trust-establishing process makes governmental agencies more prone to perceive players that respond to general interests as

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3 UN Department of Economic and Social Affairs. <https://www.un.org/development/desa/capacity-development/what-we-do/areas-of-work/evidence-based-policy/>

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strategic planners than providers of goods and services. Young and Quinn (2002) highlight a diverse range of relationships within the community that formulate stakeholder engagement, including government agencies, policy advisers, and a wide range of non-governmental or community groups and individuals. At the center of this community is the relevant government agency or agencies designated to handle the problem or issue in question (Bäckstrand, 2006). By ensuring legitimate, transparent, and accountable networks, the framework can be defined as voluntary cooperation and participation from the public, private, and civil sectors.

### ***Communication and Awareness Creation***

The communication of risk-related information has become available not only to experts and city planners, but also to the public. Identifying and prioritizing stakeholders is critical to effective communication to help promote a reasonable dialogue. Soliciting opinions and disseminating information about the risks that stakeholders are associated with is an important process. As noted by Covello et al. (2012), this process establishes public confidence in the ability of any organization to deal with risk. They highlight that effective risk communication provides timely, accurate, objective, consistent, and complete risk information. While the general

objective of effective risk communication is to build, strengthen, or repair trust, its specific objectives vary from situation to situation. In some settings, the purpose is to disseminate information on actions to take before, during, and after an emergency. One of the significant goals of risk communication programs is to reconcile the legitimate intention of the communicator to get a message across different perceptions that each person associates with the risk agent (Renn, 2008).

## **1. Innovative Practices in Governance Innovation for COVID-19 Response**

Among the most critical and effective strategies deployed in the fight against COVID-19 are rapid contact tracing and notification of potentially infected persons. For instance, several countries have implemented mobile software applications (“apps”) to alert persons exposed to the coronavirus. The expected advantages of these new technologies over traditional contact tracing methods include speed, specificity, and mass reach. Beyond its use for mitigating and containing COVID-19, digital technology can complement or even augment the traditional approach to global health program implementation (Owusu, 2020). Government innovation through digital government and frontier technologies is helping countries to protect people in times of disasters and other

Table 3. Application of Government Innovation and Digital Technology in COVID-19 Response

Response Mechanism	Functions	Featured Digital Technology	Countries	Usefulness
<b>Information Sharing</b>	Vital for governments to provide accurate, useful and up-to-date information to people, particularly in times of crisis as COVID-19 pandemic.	SMS, WhatsApp, Website, App, Chatbot, Social Media, Drone, Multiple Channels, Tawakolna (COVID-19 KSA-Saudi Arabia).	Brazil, China, Colombia, France, Kuwait, Mauritius, Singapore, Oman, Republic of Korea, Saudi Arabia.	Raises public awareness, provides up-to-date and real time information on the COVID-19 pandemic.
<b>Monitoring COVID-19</b>	Vital to monitor the spread, to measure its impact, and to recommend necessary precautions.	Social Media Platforms, Email, SMS, electronic data warehouse system (DHIS2), NITA-U portal, database, eAlerts App, online survey, dashboard, maps, Web Map Applications, GIS database, open data, data visualization, website.	Afghanistan, Bulgaria, Cuba, France, Seychelles, Slovakia, Spain, Uganda.	Visualization with maps supported by an integrated database is conducive to monitoring the spread of COVID-19, measuring its impact, and recommending necessary precautions. Remote patient monitoring may also take place using digital resources.
<b>E-Participation</b>	E-participation initiatives have helped foster a sense of community and shared responsibility in times of COVID-19.	Website, App, Social Media.	Colombia, France, North Macedonia, Saudi Arabia, Serbia, Singapore, Switzerland etc.	Provides opportunities for effective citizens' participation and engagement.
<b>E-Health</b>	COVID-19 pandemic has accelerated the deployment of innovative e-health solutions by governments.	Artificial intelligence (AI), Chatbot, Website, App, Virtual doctor, SMS, NCOVI App, telehealth regulation, e-Prescription and eSick, FluGoWhere Platform, IMAP for COVID screening centres and health facilities, GPS.	Croatia, Denmark, Estonia, Kyrgyzstan, Malaysia, Malta, Republic of Korea, Vietnam, Portugal, Indonesia, Monaco, Qatar, Saudi Arabia, United Arab Emirates, Brazil, Kyrgyzstan.	Helps citizens access a variety of health-related information and provides access to innovative health services. Allows citizens to check their own status of health in times of global health emergency. App Users can search for various facility details, location or proximity from their current location or any other location. By using an application, citizens can gain transparent information about available ICU beds and other necessary medical supplies and facilities.

Response Mechanism	Functions	Featured Digital Technology	Countries	Usefulness
<b>Contact Tracing</b>	Digital technologies have helped governments and citizens to be informed about infected cases and trace contacts of infected people to test for the virus.	App (QR-based), Chatbot, AI, Call center, database, Online survey, Portal, mobile devices, Bluetooth, based tracker.	Austria, Bhutan, Brazil, Denmark, India, Singapore, Republic of Korea, Bulgaria, Czech Republic, Denmark, Indonesia, Kyrgyzstan, Malaysia, Poland, Kazakhstan, Singapore, UAE, Turkey, Ukraine.	Identifies exposed individuals for testing and quarantine, tracks viral spread.
<b>Partnerships</b>	Partnerships with multi-stakeholders have been crucial for governments to effectively manage the COVID-19 crisis.	Website, 3D printing, Social Media, Database, App, Job portal.	Austria, Colombia, Estonia, Japan, Mauritius, Singapore, Philippines etc.	Promotes multi-stakeholder, whole-of-society engagements, and international collaboration.
<b>Social Distancing and Virus Tracking</b>	Tracks disease activity in real time.	Data dashboards, App, Robots, AI, Website, thermal scanner, Drones, migration maps, machine learning, real-time data from smartphones, social media campaigns.	China, Fiji, Singapore, Sweden, USA, Cuba, Indonesia, Qatar, Republic of Korea, United Arab Emirates.	Allows visual depiction of spread, directs border restrictions, guides resource allocation, informs forecasts.
<b>Screening for Infections</b>	Screens individuals and populations for disease.	AI, digital thermometers, mobile phone applications, thermal cameras, web-based toolkits, e-health system for outbreak management and analysis, AI-driven thermal scanner, call center.	China, Iceland, Singapore, Republic of Korea, Fiji, Singapore, Zimbabwe etc.	Provides information on disease prevalence and pathology, identifies individuals for testing, contact tracing and isolation.
<b>Quarantine and Self-isolation</b>	Identifies and tracks infected individuals and implements quarantine.	AI, cameras and digital recorders, global positioning systems, mobile phone Apps, quick response codes.	Australia, China, Iceland, Republic of Korea etc.	Isolates infections, restricts travel.
<b>Clinical Management</b>	Diagnoses infected individuals, monitors clinical status, predicts clinical outcomes, provides capacity for telemedicine services and virtual care.	Artificial intelligence for diagnostics, machine learning, virtual care or telemedicine platform.	Australia, Canada, China, Ireland, USA etc.	Assists with clinical decision-making, diagnostics, and risk prediction, enables efficient service delivery, facilitates patient-centred, remote care, facilitates infection control.

Source: Whitelaw et al. (2020), United Nations (2020)

public health emergencies such as COVID-19. For instance, innovative technology has played a vital role in promoting transparency, trust, and accountability in sharing information with the public. Innovative technologies have been adopted in different countries to identify affected people, check their mobility, reduce the risk of contamination, and develop proactive recovery strategies and actions (Shaw et al., 2020). Table 3 highlights how countries embraced and integrated digital technologies for COVID-19 pandemic preparedness, planning, surveillance, contact tracing, testing, quarantine, and health care.

## 2. Common Elements of Successful COVID-19 Countermeasures

While various countries have different forms of governance, three commonalities have been identified as the key success factors in responding to the COVID-19 pandemic. Figure 2 highlights the following factors: innovative governance, innovative technology, and citizen behavior (Shaw et al., 2020). An analysis of these commonalities provides critical lessons on how effective, robust, inclusive, accountable, and innovative governance combined with innovative technology and civic activism drives efficient measures to prevent and mitigate the disastrous impact of COVID-19.

Figure 2. Common Elements of Successful COVID-19 Countermeasures



Source: Author's illustration based on Shaw et al. (2020)

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### ***Governance***

Effective, strong, inclusive, transparent, accountable, and innovative governance has been identified as key drivers in the success chalked by most countries in terms of COVID-19 countermeasures. For instance, in China, the central government placed strict measures to curtail the promotion of fake news and panic from the early stage. The provincial governments also helped the most affected areas with essential supplies and resources. In the Republic of Korea, the government sought to foster transparency by sharing all relevant information with the public. Disclosing information to the public allowed citizens to follow government guidelines to contain COVID-19 more actively (Shaw et al., 2020).

### ***Innovative Technology***

In many countries, innovative technology played a crucial role in driving changes in promoting transparency in sharing information with the public. Several innovative technologies, including AI, big data, and 5G, have been used in various countries to help identify affected persons, check their mobility, reduce the risk of contamination, and develop proactive recovery strategies and actions. Some innovative ideas included walk-in testing booths and drive-thru testing booths. These

innovative efforts encouraged massive testing of COVID-19, which allowed the Korean government to take appropriate measures to contain massive outbreaks of COVID-19 in their early stages (Shaw et al., 2020). Both advanced and developing countries have leveraged digital technologies in the fight against the pandemic.

### ***Citizen Behavior***

Countries such as Singapore, New Zealand, and Vietnam, including the Republic of Korea's response to the COVID-19 pandemic, have mainly been lauded for elements of civic engagement due to citizens' active engagement in public health safety regulations such as regular hand washing. In corporate offices, public places, and facilities where a significant number of people come in and go, hand sanitizers were prepared for people to use freely and frequently. Citizens also wore face masks when going out to prevent the spread of the infection. Several religious bodies also abstained from promoting large gatherings by conducting online religious services. Also, experts as well attribute success in the COVID-19 fight in some countries to "collaborative governance" (Choi, 2020). According to Ansell and Gash (2007), "collaborative governance" denotes a mode of governance that "brings multiple stakeholders together in common forums



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with public agencies to engage in consensus-oriented decision making” (Ansell & Gash, 2007, p. 543).

### **III. Challenges and Opportunities in Leveraging Public Governance Innovation for COVID-19 Response**

Despite the evident benefits of emerging public governance innovation and digital government platforms in responding to the pandemic, it is not without challenges. Some challenges in the context of public governance innovation include the following:

#### ***Weak Public Governance Systems, Policies, and Institutional Mechanism***

Many countries and societies have weak or non-existent policies and institutional mechanisms. Such predicament hinders them from adopting and leveraging digital government tools to respond to disasters. When COVID-19 first hit, some countries were better prepared than others because they had the resources and means to shift their economic activities towards online platforms. In addition, the COVID-19 shock has added urgency to policies to accelerate the digitalization of public and private sector activities. Establishing and

improving government policies, institutional mechanisms, and regulatory frameworks related to digital government infrastructure and technology and connectivity can strengthen a country’s preparedness, resilience to shocks, and public health emergencies such as the COVID-19 pandemic (OECD, 2021). Amid the challenges outlined above, experts also argue that COVID-19 poses both risks and opportunities for transformative governance. While systematic coordination and implementation of countermeasures are needed, the COVID-19 pandemic may open new possibilities for higher trust in state authorities and political leadership to weather the current crisis (Willi et al., 2020).

#### ***Concerns about Individual Privacy and Surveillance***

Although the effectiveness of digital government and innovative technology for monitoring the spread and response to COVID-19 has been widely acknowledged, there are concerns over the ramifications of emerging surveillance technology on individual freedom and privacy (Dodds et al., 2020; Kampmark, 2020). Specific countermeasures to the pandemic, such as lockdowns, quarantines, social distancing, and border closures have raised concerns that they may increase the prevalence of surveillance regimes aided by smart border technologies

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(Dodds et al., 2020). Some of these concerns have to deal with balancing privacy and public health safety, as scholars argue that technological tools being used for COVID-19 control may result in the emergence of surveillance states (Kampmark, 2020). Digital public governance for crisis management must encompass the core values and principles of governance to assuage public anxiety about the ramifications of digital governance on individual freedom and privacy. Digital government tools must therefore embody ethical functions and societal benefits that promote privacy, transparency, trust, and accountability.

#### ***Widening Digital Divide and Gap***

While digital government and innovative technologies provide profound benefits for responding to COVID-19, there is a widening digital gap and divide regarding access to digital government tools and the use of online platforms. As least developed countries (LDCs) are usually the most vulnerable to human and economic repercussions of the pandemic, they are also the least digitally prepared. When the schools are closed, the lack of internet access at home further hinders the possibilities of the students to connect. Insufficient ICT tools and quality broadband services hamper the ability to use teleconferencing tools (UN Conference on

Trade and Development [UNCTAD], 2020). According to the OECD's recent study, the use of online platforms tends to be stronger in countries with a higher level of technological and economic development (Pisu et al., 2021). Affluent countries and regions of the world tend to have access to and adopt more robust communication networks and digital government tools for disaster response.

#### **IV. Conclusion and Policy Recommendations**

The COVID-19 pandemic has revealed stark global inequities, fragilities, and unsustainable policies that predate the pandemic and have exacerbated its impact. The crisis is a glaring reminder of the need to cooperate across borders, sectors, and generations. How the global community responds to the pandemic will determine the course of recovery and its devotion to achieving the 2030 Agenda for Sustainable Development. It will also establish the vision for managing other pressing global issues varying from the climate disaster to pandemics, inequalities, modern forms of violence, and swift changes in technology and our populations. In this context, this paper proposes the following recommendations to effectively respond to the COVID-19

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pandemic to build back better.

***Promoting Strong, Effective, Inclusive,  
Transparent and Risk-informed Governance***

Weak and ineffective institutions, conflicts, insecurity, and limited access to justice remain significant threats to sustainable development. The COVID-19 pandemic has highlighted these issues, including delays in government operations and delivery of vital services, such as essential services, law enforcement, and a functional justice system. Managing disasters and public health emergencies cannot be efficient or effective without strong, effective, inclusive, efficient governance, and empowered institutions, which requires effective leadership and political commitment. Governments are urged to be transparent, responsive, accountable, and ensure that emergency measures are proportionate, necessary, and non-discriminatory. Risk-informed governance, risk assessment, risk communication, and risk management should be at the core of the current response to COVID-19 and preparation for future pandemics.

***Building Trust in Government and Protecting  
Citizens Privacy***

Overall, there is an urgent demand for effective and innovative governance strategies to build capacities and enhance the private

sector and civil society's contribution to public service delivery. Considering that citizens are no longer passive consumers of government services, but rather an effective part of solutions to address the emerging issues (Bertucci et al., 2006), introducing innovations in governance should be encouraged. During a public health crisis, government openness is fundamental to ensuring that affected communities can access information about the full extent of the crisis and the response mechanism. In all stages of the COVID-19 pandemic response, trust in government and public institutions is imperative for governments' ability to respond and secure citizen support and compliance rapidly. Lessons from countries, including the Republic of Korea's responses to the COVID-19 pandemic, illustrate that the high level of trust between the government, the main public actors and institutions, and citizens have been a crucial dimension of the fight against the pandemic (Klingebiel & Tørres, 2020). Disclosing information to the public allows citizens to follow government guidelines to contain COVID-19 more actively. Civic cooperation and protecting citizen privacy coupled with evidence-based strategies have also led to the successful implementation of COVID-19 countermeasures (Shaw et al., 2020).

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### ***Adopting Whole-of-Society and Whole-of-Government Approaches***

To address the COVID-19 crisis more effectively, governments need to adopt and pursue whole-of-society and whole-of-government approaches. The government must build partnerships and cooperate with civil society organizations, the private sector, research institutions, and academia as a means of inclusively engaging all stakeholders to address all the challenges posed by the pandemic. Mobilizing whole-of-society efforts is necessary for a more effective, efficient, and inclusive COVID-19 response. Governments need to build public trust through a whole-of-society approach and promote a transparent, accountable, flexible, and accessible society (Kauzya, 2020). In addition, a whole-of-government approach that calls for the effective coordination of government agencies, institutions, and departments is critical to ensure success. Inter-agency and institutional coordination at the national level and harmonization must become priorities at the local and global levels. Eliminating institutional overlaps, encouraging emergency preparedness, and empowering citizens is very important to effectively respond to crises such as COVID-19.

### ***Building Capacities to Leverage Digital Government***

Digital government and frontier technologies have significantly contributed to protecting people in times of health emergencies such as COVID-19 through early warning, early detection, rapid diagnosis, telehealth, and delivery of innovative services, among others. While the growing use of data and digital platforms offers tremendous opportunities, it is not without its challenges. LDCs remain the most at risk to the human and economic aftereffects of the pandemic, and they lag the most in digital readiness. There are significant gaps and challenges in policy areas, including ICT infrastructure, payment solutions, skills, and legal frameworks, to fully overcome and enable people and businesses to fully engage in the digital economy (UNCTAD, 2020). The COVID-19 pandemic requires governments and citizens to become more knowledgeable, innovative, well-resourced, capable, compelling, creative, agile, integrated, and inclusive, while leveraging digital technologies to protect society. The government should be more localized, trusted, transparent, accountable, risk-informed, digital, innovative, and pioneering.

Against this backdrop, much emphasis should be placed on bridging existing and emerging digital divides so that more countries can benefit from digitalization. If this issue

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is not adequately addressed, the chasm between under-connected and hyper-digitized countries will widen, exacerbating existing inequalities. For the present challenges of the pandemic and other global challenges, the world will require a coordinated multilateral response to deal with the challenges of digitalization (UNCTAD, 2020). Therefore, it is imperative to mobilize the necessary human and financial resources and capital to enhance and build capacities to effectively leverage government innovation and digital

technologies in responding to public health emergencies, including COVID-19. Finally, it is important to reiterate that addressing public health emergencies such as COVID-19 requires innovative public governance, which hinges on effective leadership, commitment, multilevel governance through effective national to local government and policy coordination, partnerships, and other multi-sectoral approaches elaborated above to build back better.

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# The Role of Local Governance and Innovative Local Partnerships in Response to COVID-19

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**Abstract**

The coronavirus disease 2019 (COVID-19) pandemic has triggered an unprecedented crisis and aggravated social inequalities, reversing decades of poverty eradication success and jeopardizing the prospect of attaining the 2030 Agenda for Sustainable Development. The role of local governance with local governments at its core in policy development and localization of sustainable development goals is essential in addressing the challenges of COVID-19. Forging innovative partnerships, especially at local levels, with local communities, civil society organizations, and the private sector is critical for an effective response to COVID-19. Governments alone cannot address the huge challenges of COVID-19; therefore, a whole-of-society approach to engaging all stakeholders is required.

**Keywords:** COVID-19, local governance, local government, partnership

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## I. Introduction

The coronavirus disease 2019 (COVID-19) pandemic has triggered an unprecedented crisis and aggravated social inequalities, reversing decades of poverty eradication success and jeopardizing the prospect of attaining the 2030 Agenda for Sustainable Development. Despite combating the COVID-19 pandemic at the frontline, local authorities in many countries are not equipped with the necessary knowledge, skills, resources, and capacities to respond adequately to these multifaceted challenges. These challenges call for revisiting local governance frameworks in response to COVID-19. To better address the challenges of COVID-19, all countries are urged to enhance effective local governance and forge innovative partnerships in their response systems.

The role of local governance, with local government at its core of policy development, and localization of sustainable development goals (SDGs), is essential in addressing the challenges of COVID-19. Local governments, especially city governments, should engage local communities, civil society organizations (CSOs), the private sectors, and citizens to develop strategies and innovative solutions to COVID-19 in the local contexts. Local governments need to collaborate with all

local stakeholders to ensure essential public services and deliver emergency assistance are available to vulnerable groups. To institute better governance, local governments need to enhance their knowledge and skills to ensure institutional effectiveness and foster stakeholder engagement. Moreover, local governments often lack the information, capacity, and resources to address the significant challenges of COVID-19.

The unprecedented crisis of COVID-19 has also fundamentally transformed the paradigm of partnerships between local governments and businesses, and other related stakeholders. Local businesses are not simply waiting for local authorities to call for collaboration to address the myriad challenges. Rather, local stakeholders have been very interactive with local authorities, and many modes of innovative local technical or financial partnership have emerged, especially in cities, to support local authorities in deploying innovative solutions to address the COVID-19 pandemic. Moreover, many city governments have been sharing their success stories and innovative solutions through their city partnership platforms.

This research seeks to share different strategies and policies for strengthening local governance and building innovative local partnerships.

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## II. Strengthening Local Governance for COVID-19

Local governance refers to “the whole range of interactions between players at the sub-national level, ranging from local governments, to private sector, civil society, and community-based organizations” (United Nations Development Programme [UNDP], 2016). Formal national, sub-national and local government policies and informal connections and relationships between different levels of government and local stakeholders (e.g., local government, civil society, the private sector, communities, marginalized and vulnerable groups, traditional or religious institutions) shape local governance (United Nations Children’s Fund [UNICEF], 2019). It is also a right and capacity of a local community that is exercised directly, following defined legislative procedures, by members of local authorities that are not part of the state government system (Civil Society Local Energy Efficiency Network, 2016). At the local level, it is the combined set of institutions, systems, and processes by which local governments communicate with and provide services to local communities, and citizens express their desires and needs, arbitrate their differences,

and exercise their rights and obligations (UNDP, 2004). It is a way of making and implementing local decisions that include prioritizing and delivering public services. Improving local governance is an important tool for ensuring economic, environmental, and social sustainability.

Local governments and international organizations are becoming increasingly interested in defining common principles to guide local governance reform (United Cities and Local Governments [UCLG] & World Bank, 2009). “The Guidelines on Decentralization and the Strengthening of Local Authorities,” approved by the United Nations Human Settlement Programme (UN-HABITAT), incorporates the notions of local governance and defines the principles that govern the mandate of locally elected authorities and the powers and obligations of local authorities, based on the principle of subsidiarity.<sup>1</sup> Table 1 provides a general overview of the local governance principles based on the guideline.

These universal principles for local governance should serve as a significant anchor and a point of reference in the fight against COVID-19 at the local level.

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1 <http://www.undp.org/content/dam/aplaws/publication/en/publications/democratic-governance/dg-publications-for-website/a-users-guide-to-measuring-local-governance/LG%20Guide.pdf>

Table 1. General Principles of Local Governance

Principles	Description
<b>Decentralization</b>	Decentralization necessitates vigorous investments in capacity-building and structural transformation, and should be linked to the strengthening of local governments.
<b>Inclusiveness</b>	Inclusive participation and citizen empowerment shall be an overarching principle in local decision-making, adoption, and follow-up.
<b>Partnership</b>	Local governments must consider the various constituencies within civil society and work to ensure that everyone is interested in the progressive transformation of their cities and neighborhoods.
<b>Non-discriminatory</b>	The non-discrimination principle should apply to all stakeholders and the collaboration among all levels of governments and other stakeholders.
<b>Participation of citizens</b>	Citizens' representation in the administration of local authority affairs should be strengthened by involvement at all levels of the legislative process, whenever possible.
<b>Participatory democracy</b>	Local governments should implement alternative accountability methods, such as community councils, e-democracy, participatory budgeting, civil projects, and referendums to strengthen civil involvement.
<b>Transparency and openness</b>	Public records and information should be maintained and publicly available to improve local governments' performance, and empower citizens to exercise their full rights and participate in local decision-making.
<b>Incremental action</b>	Local governments need to strengthen their capacity to execute the functions allocated to them.
<b>Legislative action</b>	Local governments should be recognized as constitutionally independent sub-national bodies with a productive capacity to contribute to national planning and growth in national law and, if possible, in the constitution.
<b>Empowerment</b>	Local authorities should be free to exercise their rights, including those delegated to them by central or provincial governments, under the limitations set by legislation. These powers should be absolute and exclusive, and they should not be compromised, restricted, or hampered by any other jurisdiction unless otherwise given by statute.
<b>Supervision and oversight</b>	Local government oversight can be conducted only in compliance with the protocols and cases specified in the constitution or by statute.
<b>Capacities and human resources of local authorities</b>	The national and regional governments should assist local governments in developing their transparent and accountable fiscal, technological, and managerial capabilities.
<b>Financial resources of local authorities</b>	Local governments' financial services should be proportionate to their duties and obligations to achieve financial security and self-sufficiency.

Source: UN-HABITAT (2007)

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## 1. Importance of Local Governance during COVID-19

After the World Health Organization (WHO) declared the COVID-19 outbreak as a “Global Pandemic” in March 2020, most restrictions and policy implementations were organized and activated at a global, regional, national, and local level. Despite a full year after the pandemic declaration by the WHO, COVID-19 has yet to be eradicated and is still actively harming the global community. Globally, as of 25 April 2021, there have been 146,054,107 confirmed cases of COVID-19, including 3,092,410 deaths, as reported to the WHO.<sup>2</sup> According to the WHO, a total of 899,936,102 vaccine doses have been administered as of 21 April 2021.<sup>3</sup> However, there seems to be an increased demand for greater local governance partnerships to strengthen the response to COVID-19. As such, local governments need to play a central role in conjunction with multi-stakeholders in combating the pandemic and attaining the SDGs by 2030.

Despite numerous efforts and practices, fundamental challenges in coordinating the response to COVID-19 continue to exist in many countries. Stein et al. (2020) highlight three challenges that need to be addressed

in this regard: i) most COVID-19 responses have not been integrated, resulting in negative results; ii) responses appear to show gaps in the treatment and outcomes of disadvantaged populations; and iii) the need to build evidence for an organized and systematic approach, as well as to advise and guide policy and practice. Other challenges include the lack of established policies in response to a developing crisis (Dutta & Fischer, 2021), and widespread food and livelihood insecurity due to disruption in economic activities and the adoption of state emergencies to address the crisis and maintain public wellbeing (World Bank Group, 2020). Local governance is a critical component in responding to these challenges of COVID-19.

Effective local governance is essential for inclusive and sustainable growth at the local level. It is critical for improving people’s quality of life, reducing disparity in all forms across society, and improving people’s relationships with government institutions. Furthermore, it is an important tool for ensuring stability, economic growth, administrative effectiveness, social inclusion, and environmental sustainability. Dutta and Fischer (2020) emphasize three key rationales through which local governance plays a critical

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2 WHO (11 April 2021). COVID-19 dashboard. <https://covid19.who.int/>

3 Ibid.



Table 2. Examples of Local Governance Initiatives Supporting Vertical and Horizontal Social Cohesion

Social Cohesion	Initiatives
Vertical social cohesion	Strengthen local administrative data
	Support local (real-time) monitoring systems
	Strengthen community participation in local governance, including the participation of marginalized and vulnerable groups
	Strengthen transparency, social accountability, and grievance and complaints mechanisms
	Strengthen local planning and budgeting processes
	Support local government resource mobilization
	Support horizontal and vertical coordination among local actors
Horizontal social cohesion	Strengthen local service delivery
	Support disaggregation of local administrative data
	Support the involvement of traditionally excluded groups (e.g., youth, women, minority/ ethnic groups, forcibly displaced communities) in local decision-making processes
	Support equitable local resource allocation
	Support dialogue and coordination among local governments
Engage with informal local governance actors (traditional, religious, or community leaders) and facilitate their involvement in formal local governance processes	

Source: UNICEF (2019)

role in combating COVID-19. First, local governments are more connected to citizens and better equipped to manage context-specific local situations (Manor, 1999). Second, local governments are more likely to be open to the public's immediate needs because they are rooted within the communities they

represent. Third, local authorities are often seen as having more legitimacy than other external actors when performing various state regulatory functions. Local governments can represent citizens' values and desires and their sense of identity (Fischer, 2012; Witsoe, 2016). These three characteristics—

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local governments' willingness to negotiate context-specific local circumstances, public responsiveness, and perceived authority to carry out state functions—are all likely to play a role in the ongoing COVID-19 crisis (Dutta & Fischer, 2020). Local governance has always been essential to citizens' well-being, but never more so than now, during the COVID-19 pandemic.

Local governance initiatives can support overcoming the COVID-19 pandemic at two identified impact levels: strengthened vertical social cohesion and horizontal social cohesion (UNICEF, 2019). Table 2 provides some examples of local governance initiatives that support vertical and horizontal social cohesion.

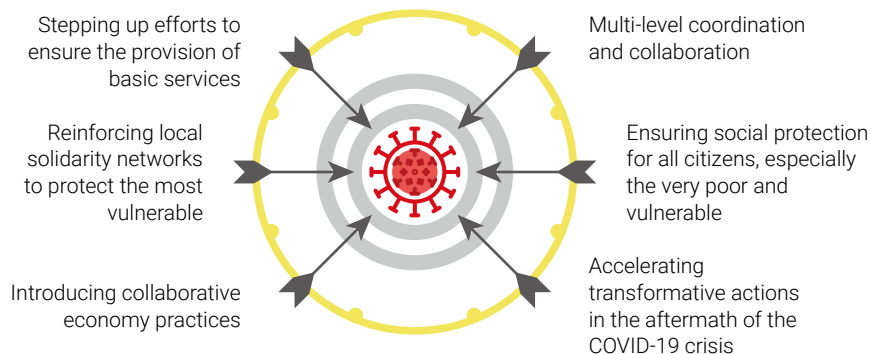
## **2. Role of Local Government in Combating COVID-19**

When a disaster strikes, the consequences are felt most strongly at the local level. COVID-19 is no exception, with local authorities at the forefront of the fight against the effects of the pandemic's spread. The local government's disaster preparedness, service delivery, infrastructure, human resources, and intergovernmental cooperation remain critical to the COVID-19 response and mitigation. Therefore, local governments are best positioned to consistently lead and innovate in response to COVID-19. As COVID-19

spreads continuously, wreaking havoc on local communities, local governments play a critical role in ensuring stability and due process through local public service provisions, especially for the most vulnerable communities. As a critical mechanism for implementing national policies, local governments rely on bottom-up, creative, and technical local governance approaches to maintain their unique proximity to residents and local service delivery. Figure 1 shows the role of local governments in combating COVID-19.

Providing basic services, especially for the most vulnerable groups, is critical not only for containing the COVID-19 pandemic's spread but also to ensure that no one is left behind during the pandemic or in its aftermath. Mexico City's local government has introduced steps to address mobility problems during the crisis, including protecting citizens and operators (by preserving hygiene and ensuring social distancing); maintaining the frequency of essential services as much as possible; flattening the demand curve; and ensuring regular connectivity (UCLG, 2020). Furthermore, local governments are making strategic changes during the COVID-19 pandemic to ensure the maximum benefits of scarce resources. In San Jose, Costa Rica, the local government has launched a protocol for COVID-19 preparedness and specific

Figure 1. Role of Local Governments in Combating COVID-19



responses in informal settlements to improve the provision of basic services (such as water, energy, and connectivity).<sup>4</sup>

Local governments are essential actors in reinforcing local solidarity networks and promoting community cohesion by engaging civil societies and other stakeholders to build community resilience. Local governments can introduce collaborative economy practices into their communities to promote solidarity, greater participation, and inclusive involvement (UCLG, 2020). More than 80 American and European cities are now

participating in this type of sharing economy.<sup>5</sup> Similar experiments are gaining momentum in Africa, such as in Abidjan, Côte d'Ivoire, where the local government has already developed a one-stop shop for a social and sharing economy.<sup>6</sup>

In collaboration with the Global Social Economic Forum, local governments have been promoting a social economy to achieve greater inclusion for local economic development.<sup>7</sup> For example, the local government of Cordoba in Spain has adopted a protocol for a social and solidarity economy as “a fundamental

4 Eugenia C. Aguirre Raftacco. “Informe sobre la localización de los ODS en los gobiernos locales de Costa Rica (San José: Unión Nacional de los Gobiernos Locales de Costa Rica, 2020)”. The report was elaborated with the support of UCLG

5 See: <https://www.shareable.net/community-maps/>.

6 See: <http://www.gsef-net.org/>. One Earth, “Local Governments and the Sharing Economy,” ed. Rosemary Cooper and Vanessa Timmer (Vancouver; One Earth, 2015); ILO, “Localizing the Decent Work Agenda through South-South and City-to-City Cooperation,” South-South and Triangular Cooperation (Geneva: International Labour Organization, 2015).

7 See: <http://www.gsef-net.org/>.

Table 3. Strengthening the Capacities of Local Governments

<b>Ensure collaboration across all levels of governments</b>	Local solutions should be based on inclusive, participatory, and multi-level governance and cooperation between all levels of government. This framework should institutionalize to ensure consistent interaction with all people, especially marginalized and disadvantaged communities.
<b>Enhance the budgetary capacity of local governments by reform initiatives and allocated funds in stimulus packages</b>	Stimulus financial packages and budget changes to improve municipal and state councils' ability to provide vital public resources while also raising and controlling their budgets (e.g., by imposing local taxes, fines, and fees) should be implemented, but also should consider the need to avoid putting undue financial strain on vulnerable and marginalized groups.
<b>Promote accountability and transparency</b>	Evidence-based governance processes for COVID-19 policy enforcement should be implemented at all levels of government, allowing for direct input from communities.
<b>Ensure communication campaigns reach all local communities</b>	Effective and consistent interactive communication initiatives should be prioritized to increase public trust in the COVID-19 response and recovery activities at all levels of government. This should include a reassessment of literacy, language, and access to technology barriers.
<b>Support local governments in avoiding disruptions of essential public services</b>	Sufficient financial resources and revenue-raising capacity need to be ensured to sustain critical public services (e.g., water, sanitation, transport, education, electricity).
<b>Eliminate institutional overlaps</b>	There should be a clear and transparent division of functions between the central and local governments. Additionally, a division between various social sectors and local governments needs to be established.
<b>Encourage emergency preparedness</b>	Although several nations have developed national contingency plans, the pandemic demonstrates that local governments also need robust emergency response mechanisms capable of identifying distressed pockets and responding to threats as they occur. Local governments must generate enough funding on their own or rely on seamless central payments to mobilize funds quickly.
<b>Enhance integration</b>	Local governments need platforms for cross-coordination and communication to rapidly deploy people and resources where they are most needed.
<b>Empower citizens</b>	Citizen participation mechanisms can be mobilized to work with local agencies.

Source: United Nations (2020)

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vector for social cohesion, a more equitable distribution of wealth, and the protection of the values of sustainability, equality, equity and participation” (Ayuntamiento de Córdoba, 2018).

The role of the local government in multi-level coordination and collaboration (based on the principle of solidarity) with other governments and local stakeholders is essential to engage and promote more accountable strategies for emergency governance. In coordination with the central government, the local government should design inclusive social protection for poverty reduction, sustainable development promotion, and support of social inclusion, social cohesion, democracy, and just and peaceful societies. If adequately empowered, local governments can intensify their efforts and contribute to a social reconstruction that meets the needs of citizens. Table 3 presents the solutions and policies recommended by the United Nations to strengthen the capacities of local governments.

### **3. Managing Health Emergency at the Local Level**

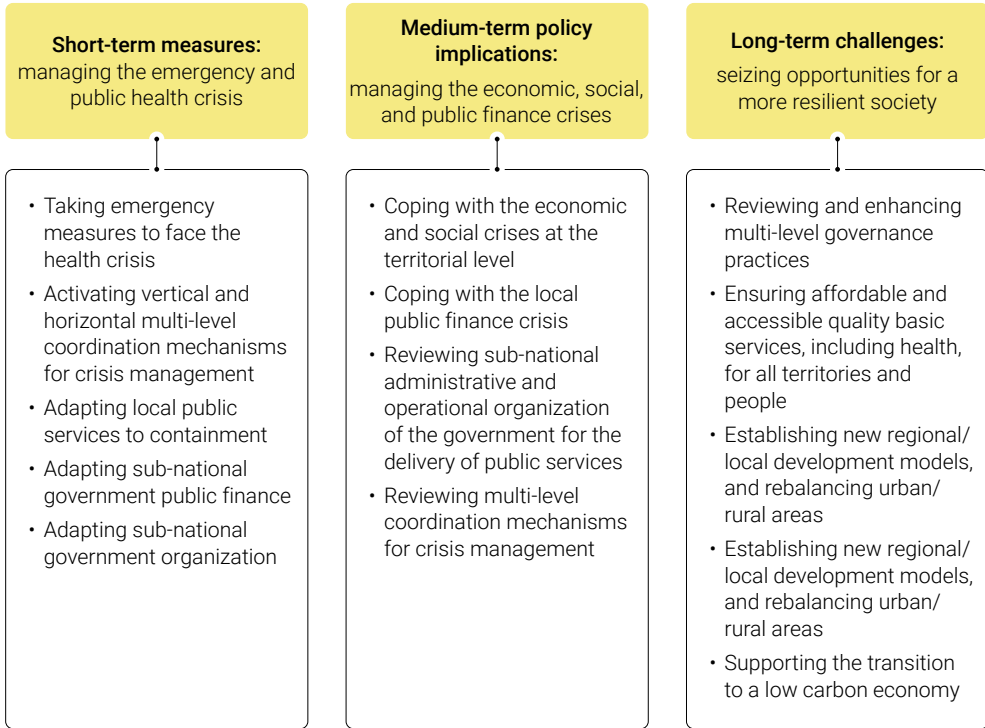
The COVID-19 pandemic has short, medium, and long-term consequences for the local government’s functioning (Allain-Dupré et al., 2020). While the short-term priorities are to manage the emergency and public

health crisis, the medium-term priorities are to manage the fiscal, social, and public finance crises, and the long-term priorities are to promote a resilient society and economy considering the current pandemic (Allain-Dupré et al, 2020) (Figure 2).

An effective and efficient preparedness framework is critical for an effective COVID-19 response at the local level. The Strategic Preparedness and Response Plan (WHO, 2020c), the Strategy Update (WHO, 2020a), and Critical Preparedness, Readiness and Response Actions (WHO, 2020b) provide key considerations and actions that national and local governments need to take to deal with COVID-19. To have a successful public health initiative, it must be implementable and planned in a way that encourages compliance. In this regard, the WHO (2020d) recommends local governments the following emergency response:

- Adopt a whole-of-government, whole-of-society, and coordinated multi-governance approach.
- Promote coordination and coherence at all levels of governance.
- Identify existing hazards and vulnerabilities that may need to be managed alongside COVID-19.
- Identify and equitably protect vulnerable groups and potential partners who can reach out to them.

Figure 2. Managing COVID-19 at the Local Level in the Short, Medium, and Long Term



Source: OECD (2020)

- Consider the various social and cultural contexts, such as health problems and local norms and attitudes, affecting local uptake and efficacy of public health initiatives.
- Consider the dependency on the informal sector or economy for livelihood, particularly for the poorer segments of the society.
- Consider the most suitable means of information communication, such as digital devices.
- Ensure the continued provision of essential services.
- Ascertain that current health services are equipped to deal with health crises such as COVID-19.
- Ensure affordable housing, reduce the risk of being homeless, and plan for demographic subgroup outmigration and mobility.
- Ensure that enough attention is given to

safeguarding mental health.

- Ensure that the preparedness measures are evidence-based.

There are several key focus areas for local governments to prevent the spread of COVID-19 and improve their resilience and preparedness for future pandemics.<sup>8</sup> The WHO (2020c) recommends the following:

- Coordinated local strategies in planning and preparing for effective responses to health threats and impacts
- Risk and emergency crisis communication and community involvement that encourages adherence to measures
- Approaches to public health interventions that are contextually relevant, especially those related to social distancing, water, sanitation and hygiene, and respiratory etiquette
- Access to COVID-19 healthcare facilities and the continuation of critical services
- Use of digital technologies to maintain the provision of basic services and livelihood opportunities
- Effective use of flexible, multi-functional, and adaptable public spaces during the crisis
- Promotion of social resilience

Urgent steps taken by local governments

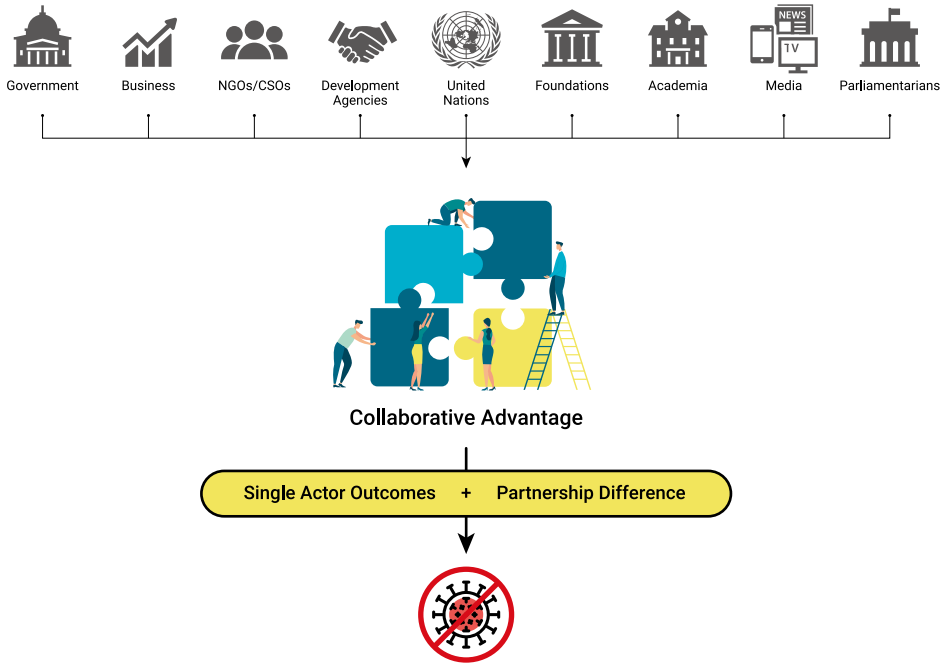
to overcome the COVID-19 pandemic would pave the way for long-term capacity building for future health emergencies. Local governments should also document, understand, exchange, and adapt their COVID-19 experiences, including taking constructive measures to gather information and lobby for the funding of long-term capacity. To do so, local governments should be open to innovative partnerships in response to COVID-19.

### III. Innovative Local Partnership in Response to COVID-19

Partnerships with the private sector, CSOs, academia, non-governmental organizations (NGOs), and public sector organizations have been crucial for governments to manage the COVID-19 crisis effectively. Governments alone cannot address the huge challenges of COVID-19, and a whole-of-society approach to engaging all stakeholders is required. Adopting a multi-stakeholder approach is particularly important during the current time to support governments in overcoming crucial socioeconomic challenges brought on by the pandemic.

<sup>8</sup> See: WHO (2020) Strengthening Preparedness for COVID-19 in Cities and Urban Settings for examples <https://www.who.int/publications/i/item/strengthening-preparedness-for-covid-19-in-cities-and-urban-settings>

Figure 3. Value-add of an Innovative Partnership as a Whole



Source: Adopted from Stibbe and Prescott (2020)

Forging innovative partnerships, especially at local levels, with local stakeholders such as communities, the private sector, and CSOs is essential for an effective response to COVID-19. The unprecedented crisis of COVID-19 has fundamentally transformed the paradigm of the partnership between local governments and other stakeholders. Local businesses are no longer simply waiting for a call by the local authorities to collaborate on addressing myriad challenges. Instead, local stakeholders have interacted with local

authorities; consequently, many modes of innovative local technical or financial partnerships have emerged, especially in cities, to support local authorities in deploying innovative solutions to address the COVID-19 crisis. Moreover, many city governments have been sharing their success stories and innovative solutions through their city partnership platforms.

The essence of each stakeholder’s “core business” results in very different interests, beliefs, and qualities (Stibbe & Prescott, 2020).



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In addition to these general characteristics, each stakeholder brings a unique set of resources, competencies, and goals to create a shared mission and value-add to an innovative partnership (Stibbe & Prescott, 2020). Figure 3 shows how innovative partnerships create value in response to COVID-19.

Given the time and complexities inherent in partnering, the main motivation for collaborating with multi-stakeholders is that through the combination of expertise, the delivery of positive outcomes will be greater than those conducted individually. To ensure the sustainability of a partnership during the COVID-19 pandemic and beyond, all stakeholders must rely on the value-add of the partnership (Figure 3).

The collaborative advantage creates new value together, allowing multiple stakeholders to deliver more than the sum of their inputs (Stibbe & Prescott, 2020). A Partnership Difference is an additional benefit delivered by a partnership over single actor approaches as a collaborative advantage (Stibbe & Prescott, 2020).

## 1. Building Blocks of Innovative

### Local Partnership in Response to COVID-19

For innovative partnerships to deliver as effectively as possible, the following four key building blocks need to be developed and continuously maintained: (i) fundamentals,

(ii) partnership relationship, (iii) structuring and set-up, and (iv) management and leadership (Stibbe & Prescott, 2020).

Innovative partnerships must create significant value, and the right partners on the table must be included to be successful. Partnerships are driven by the complex and ever-changing relationships among the partners. Strong, trust-based relationships can overcome the inevitable challenges of partnering, help partners go the extra mile, and deliver extraordinary results. Every partnership has its unique structure and set-up, i.e., the governance, management, operational, and reporting arrangements needed to deliver effectively. Managing partnerships goes well beyond traditional management, requiring the ability to manage the contributions of multiple organizations without line management control, the relationship between partners. It also requires different forms of leadership to ensure successful partnerships. Table 4 presents the elements of building blocks of innovative partnership.

## 2. Innovative Cases of Local Partnership in Response to COVID-19

Several innovative local partnerships are emerging in response to COVID-19. The following are some innovative cases from around the world.

Table 4. Building Blocks of Innovative Partnerships

<b>Fundamentals</b>	<ul style="list-style-type: none"> <li>• Significant added value in comparison with the resources required</li> <li>• Inclusion of all key stakeholders holding essential resources</li> <li>• Compelling shared overarching vision, with sufficient alignment of interests to deliver a net benefit to all partners</li> <li>• Sufficient compatibility of values concerning the closeness of collaboration</li> <li>• Sufficient empowerment and enablement of the partners such that they are able to contribute to the partnership</li> <li>• Senior-level commitment, and a partnering mindset and skill set among the representatives</li> </ul>
<b>Partnership Relationship</b>	<ul style="list-style-type: none"> <li>• Trust and transparency</li> <li>• Power balance and equity</li> <li>• Mutual benefit</li> <li>• Accountability and commitment</li> </ul>
<b>Structuring and Set-up</b>	<ul style="list-style-type: none"> <li>• Legal/fiduciary arrangement</li> <li>• Governance, management, and operational structures</li> <li>• Partnership documentation</li> <li>• Theory of change</li> <li>• Funding and resourcing</li> </ul>
<b>Management and Leadership</b>	<ul style="list-style-type: none"> <li>• Leadership</li> <li>• Results-oriented project management</li> <li>• Risk reduction and troubleshooting</li> <li>• Monitoring, review, and iteration</li> <li>• Communication</li> <li>• Learning and knowledge sharing</li> <li>• Relationship management</li> </ul>

Source: Stibbe and Prescott (2020)

**Local partnership with UN Agencies<sup>9</sup>**

- United Nations Population Fund (UNFPA) Benin and Sèmè City have collaborated to form a Task Force to combat COVID-19 and its economic influence in Benin. This programme seeks to provide local ways to ensure women’s healthcare

and strengthen young entrepreneurs’ economic capacity.

- In alternative development programs, United Nations Office on Drugs and Crime (UNODC) assists small rural farmers in Afghanistan, who are at risk of planting illegal crops. UNODC distributed

<sup>9</sup> For more innovative cases see: [https://www.un.org/sites/un2.un.org/files/2020-06\\_-\\_unin\\_quarterly\\_innovation\\_update\\_-\\_second\\_covid-19\\_special\\_edition.pdf](https://www.un.org/sites/un2.un.org/files/2020-06_-_unin_quarterly_innovation_update_-_second_covid-19_special_edition.pdf)

educational brochures on COVID-19 and hygiene items to 2,800 people during the seasonal delivery of crops.

- International Training Centre of the International Labour Organization (ITC-ILO) unveiled a free course to assist small and medium-sized businesses in implementing plans to combat the negative impact of the COVID-19 pandemic.
- The United Nations in Sri Lanka has launched a social movement known as #HumansofHopeSL to spread stories of strength, unity, and optimism. Sri Lankans post healing and stigma-fighting posts on Facebook, Twitter, and Instagram, reaching over five million followers.

### ***Partnership with NGOs/CSOs***

CSOs play a critical role in the fight against the COVID-19 pandemic. International NGOs collaborate with local CSOs, and national and local governments to constantly support their partners during this crisis.

- The Cambodian Youth Council collaborated with local authorities to organize public awareness activities in three communes created especially to assist returned

migrants.<sup>10</sup>

- Integrity Action is transforming its programs and delivering feedback and resources to bring group integrity-building and interaction programs online in collaboration with its local partners.<sup>11</sup>

### ***Public-Private Partnership***

The COVID-19 crisis has enhanced governments' dependence on the private sector. The technological sector's ingenuity has resulted in its incorporation into public-private partnerships.

- The Israeli technology industry has assisted the government in patient monitoring, contamination prevention, and medical staff safety.<sup>12</sup>
- In India, the government launched the "AarogyaSetu," a contact tracing app, through a private-public partnership with the technology industry. This app allows users to assess their own risk of COVID-19 infection.<sup>13</sup>
- In the Philippines, Cebu's governor collaborated with Cebuano IT experts and developed a community tracking app for COVID-19 contact tracing to track

<sup>10</sup> See: <https://www.efc.be/blog-post/strengthening-local-partnerships-to-mitigate-the-impacts-of-covid-19-on-vulnerable-populations/>

<sup>11</sup> See: <https://www.bond.org.uk/news/2020/04/5-ways-ngos-are-working-with-local-partners-to-respond-to-covid-19>

<sup>12</sup> See: <https://blogs.prio.org/2020/10/public-private-partnerships-during-covid-19-time-to-ask-some-questions/>

<sup>13</sup> See: *Ibid.*

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and monitor COVID-19 cases in Central Visayas.<sup>14</sup>

#### **IV. Multi-level Governance in Responding to COVID-19**

National governments are primarily responsible for responding to COVID-19. They must ensure that institutional arrangements are in place to respond to the crisis successfully. However, even highly developed horizontal integration mechanisms at the national level will not be enough to respond to an emergency crisis. Multi-level governance should be in place to share a country's response. The pandemic's asymmetric effect and distribution of responsibilities across levels of government necessitate a high degree of multi-level governance (Allain-Dupré et al., 2020). Multi-level governance arrangements for responding to the COVID-19 crisis should:

- promote local ownership, community involvement, local leadership, and joint decision making at the local level;
- use local resources and skills and maximize opportunities for crisis

management;

- involve local, national, and global partnerships between governments, communities, and businesses to solve problems;
- rely on flexible approaches to respond to changing circumstances at the local, national and international levels; and
- empower disadvantaged people and marginalized communities and geographical regions to empower them to participate fully in the recovery plan (Ziekow & Bethel, 2017).

Multi-level governance could help local governments handle new outbreaks of the virus or other crises while still recovering from the crisis and achieving greater resilience. The COVID-19 crisis highlights the critical need for a systematic response to crises and their aftermath, as well as the dangers of uncoordinated and/or heavily bureaucratic approaches to crisis management. Whole-of-government and whole-of-society coordination are necessary to manage the pandemic successfully. Effective central-level leadership, especially in developing policy and guidance to promote coordinated responses and a clear assignment of roles and

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14 See: <https://publicadministration.un.org/egovkb/Portals/egovkb/Documents/un/2020-Survey/UNDESA%20Compendium%20of%20Digital%20Government%20Initiatives%20in%20Response%20to%20the%20COVID-19%20Pandemic.pdf>

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responsibilities, and local governments well-capable of acting in a manner consistent with meeting the immediate needs and long-term priorities of their territories, are all factors that contribute to an effective response.

Coordinating the preparation and implementation of emergency preparedness requires vigorous coordination mechanisms that include whole-of-government and whole-of-society participation (WHO, 2016). Coordination among multi-stakeholders is essential for every aspect of the process and enables community, local, national, cross-border, and international actors to work toward common objectives under a collaborative planning process (WHO, 2016). The central government plays a critical role in multi-level governance with the function of policy-setting and decision making (e.g., establishing Command Centers), operational coordination (e.g., oversight of action plans, mobilization, financing, and interagency coordination), information gathering, and monitoring and evaluation (e.g., dashboards and monitoring routines), external communication (e.g., press briefings and media campaigns), and empowering local governments (Kunicova, 2020).

## V. Conclusion

The COVID-19 pandemic is putting our societies under an unprecedented strain, exposing several flaws in our existing public governance framework and having a significant effect on the prospect of achieving the SDGs. The COVID-19 pandemic has placed local governments on the frontlines of a crisis, requiring them to provide essential services and strengthen local solidarity networks to protect the most vulnerable. Local governments need to strengthen their local governance structures, focusing their responses on putting people and human rights at the center of their efforts, with a special emphasis on protecting the most vulnerable communities.

Local governments play a critical role in diminishing the spread of COVID-19 by keeping their communities functioning by delivering basic services with the principle of “leaving no one behind.” Multi-level coordination and collaboration with multi-stakeholders are necessary to decentralize responses in the local context. Local governments should be aware of local governance, leadership, service delivery, and emergency relief resources in response to COVID-19.

Strengthening the capacities of local governments requires ensuring collaboration

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and coordination under the principle of whole-of-government and whole-of-society approaches; eliminating institutional overlaps; promoting accountability and transparency; encouraging emergency preparedness; enhancing integration; empowering citizens; and enhancing resilience.

As local governments continue to work in response to the COVID-19 pandemic tirelessly, it is critical to recognize that, whether before or during a crisis, digital tools must act as enablers to achieve the goals of competent local authorities, i.e., safeguarding citizens' health, promoting social

cohesion, and protecting human rights. Local governments are taking ambitious strides forward and collaborating to ensure that the emerging digital technologies not only tackle COVID-19 but also close the digital divide. Forging innovative partnerships, especially at local levels, with local communities, the private sector, and CSOs, is critical for an effective response to COVID-19. Lastly, to efficiently manage and address the COVID-19 pandemic, a multi-level governance strategy is needed, with local government functioning within a national framework, and coherence between the different levels of governance.

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# Post-COVID Korean Carbon Market and Implications from the EU Emissions Trading System

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**Abstract**

With heightened interest in environmental regulations, the Korea Emissions Trading Scheme (KETS) embarked on its third phase, unfortunately, with a surplus of carbon permits and a declining trend in allowances price. This paper examines two major recovery strategies, namely, backloading and market stability reserve, of the post-2008 surplus market in the European Union Emissions Trading System (EU ETS), followed by implications for Phase 3 of the KETS. The comparative analysis suggests that while careful speculation on how the EU ETS coped with its post-2008 surplus market is pivotal, the possibility of overlapping or inconsistent regulations raises a red flag to the primary purpose of making the carbon market resilient.

**Keywords:** Green New Deal, environmental regulation, carbon market, Emissions Trading Scheme, surplus allowances

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## I. Introduction

Amid the COVID-19 pandemic in 2020, the Korean government announced the Green New Deal (K-GND) as a part of its master plan for the Korean New Deal (KND). K-GND is envisaged to achieve economic recovery and job creation through green approaches, plotting pre-emptive action plans for building a post-COVID-19 resilient economy, where the degree of low-carbonisation and eco-compatibility is expected to determine the country's economic competitiveness (Chowdhury, 2021). Consigning the carbon-reliant economy to history, the K-GND plans to introduce a low-carbon economy and build a carbon-neutral or net-zero society through just transition. Additionally, within the process of developing green industries, the government anticipates fostering new services and creating high-quality jobs.

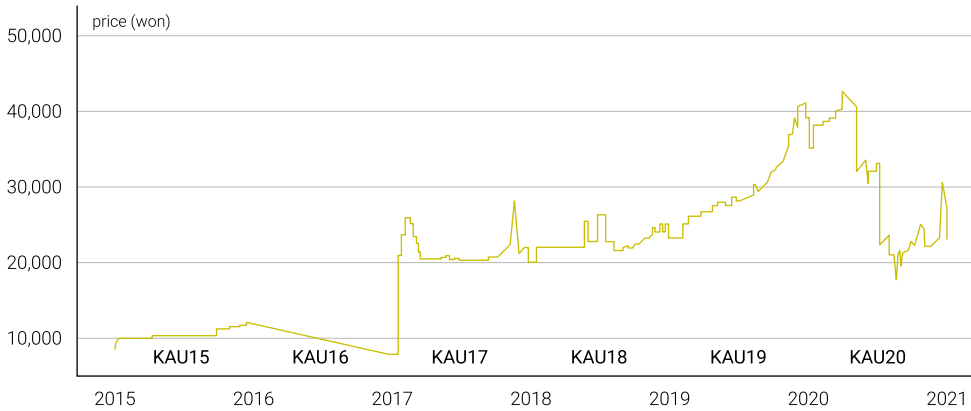
Through the Kyoto Protocol, economic approaches to climate change were internationally ratified for the first time in 1997 with the idea of tackling emissions by instituting a regulatory framework that sets a price on emissions (Bu et al., 2010). Later, in 2015, the Paris Agreement went a step further and contributed to maturing the climate regulations by replacing top-down legally binding measures with nationally determined contributions (NDCs) and a robust system

for monitoring, reporting, and reassessing targets. Korea is one of the countries that plays a leading role in achieving the broader objectives through a market-based approach and reserves the second-largest carbon market after the European Union Emissions Trading System (EU ETS) (Asian Development Bank [ADB], 2018).

Korea opened its carbon market in 2015, and the Korea Emissions Trading Scheme (KETS) has kicked off its third phase, scheduled from 2021 to 2025. Owing to the ongoing economic consequences of COVID-19 in 2020 and coupled with decreasing carbon emissions from reduced factory operations, the closing price of the 2020 Korean Allowance Unit (KAU20) was slashed from KRW 39,000 in January to KRW 23,000 in December 2020 (Korea Exchange [KRX], n.d; Yonhap, 2021). After hitting KRW 14,300 in mid-April 2021, the price of KAU20 slightly recovered to KRW 18,800 by the end of April (KRX, n.d.). To cope with the weak price and supply and demand mismatch, the Ministry of Environment (MOE) announced a plan to postpone the KAU20 auctions. Following the initial postponing of the February and March auctions, an additional measure deferred the April and May auctions to June 2021.

By exploring the post-2008 EU ETS with particular emphasis on how the EU handled

Figure 1. KAU price during Phase 1 and Phase 2



Source: KRX (n.d.)

the uncompetitive price and surplus market of carbon allowances, this paper draws implications for Phase 3 of the KETS market. As the major cause of the surplus market in the EU ETS following the financial crisis resembles that of the KETS, the paper finds this comparative analysis highly relevant. Contrary to the previous works that covered the EU ETS as a mere example or conducted a comparative analysis based on a chronological timeline, this research aims to deliver a historical analysis that focuses on a parallel situation. This paper is structured as follows: Section 2 examines the KETS market from Phase 1 to Phase 3; Section 3 puts emphasis on how the EU ETS coped with its surplus market; Section 4 concludes the study with some implications for a better functioning KETS market.

## II. Korea Emissions Trading Scheme (KETS)

### 1. Environmental Issues and the Korean Green New Deal

Environmental, social, and governance (ESG) related matters are receiving growing attention, and investors have started to perceive ESG as a signal to the world. This new funding trend is in line with the Korean government's K-GND national agenda, where the transition to a carbon-neutral society is seen as a national survival strategy. By and large, Korea seems to be on the right track of positioning pressing environmental issues as the most urgent national task and following the international trend of promoting environmental sustainability. At the start of 2021, Joe Biden, the newly elected President

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of the United States (US), led the country to rejoin the Paris Agreement and unveiled his strong ambition towards achieving net-zero emissions by 2050 (Biden, 2021). In the same vein, the EU has been specifying and stabilising its European Green Deal with an amplified emphasis on the Just Transition Mechanism (JTM), where the Commission plans to provide financial and technical support to assist the most affected industries by moving toward a green economy.

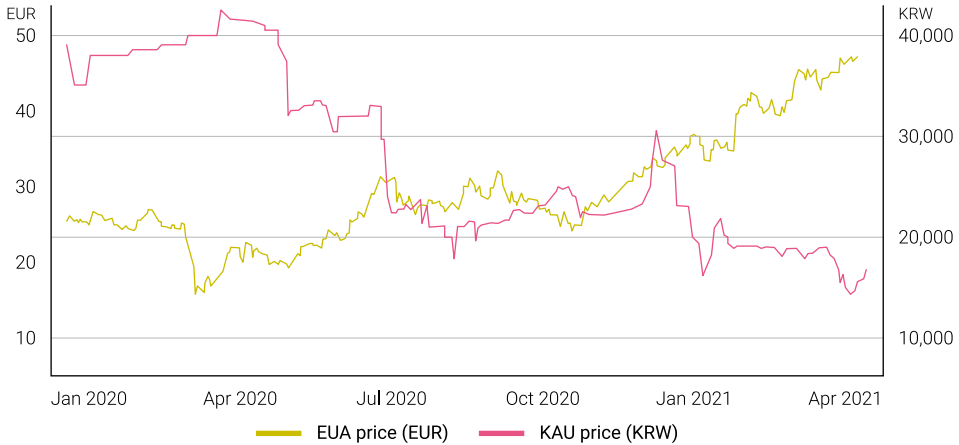
Korea's notable attempt to incorporate environmental issues into the national agenda can be traced back to 2008 when President Lee Myung-bak pitched the National Green Growth Strategy in an attempt to foresee a synergy between economic growth and environmental sustainability (Seong, 2011). President Lee's bifold attempt, which received mixed responses, focused on developing new growth engines while minimising carbon dioxide (CO<sub>2</sub>) emissions from the same energy and resource usage (Seong, 2011). Approximately ten years later, President Moon Jae-in proposed the K-GND in 2020 with a bigger ambition of achieving net-zero by 2050 (Lee & Woo, 2020). While the overall idea of connecting economic growth with environmental sustainability has stayed unchanged, the K-GND is supported by the world's second-largest ETS market that has been running since 2015. For the K-GND to

avoid mixed responses and retain its initial aims and purposes, a detailed and careful diagnosis of the KETS market is pivotal. Thus, the KETS market needs to signal appropriate abatement incentives to the industry to ensure environmental targets are more than just declarations.

## 2. Background of the Emissions Trading System

The idea of ETS, first proposed by Dales in 1968 but initially rejected by environmentalists at the time, was finally accepted owing to the Coase theorem, which tries to solve the externality problem by setting property rights for the production factors (Bu et al., 2010). The ETS mechanism is based on a belief that the fundamental cause of environmental issues lies in the absence or incompleteness of property rights for the environment (Bu et al., 2010). By approving the right to pollute and opening a market where individual pollutants could buy and sell these rights, the ETS allows voluntary compliance of environmental standards through a market function. Within this system, entities with low abatement costs could cut more emissions and make profits by selling their unused allowances to those with relatively higher abatement costs. On the other hand, entities with high abatement costs could fulfill their reduction duties by purchasing allowances rather than trying excessively to

Figure 2. EUA and KAU from January 2020 to April 2021



Source: Ember (2021), KRX (n.d.)

cut emission reduction costs. As the allowance cost will be positioned between the seller's marginal abatement cost (MAC) and the buyer's MAC, all participants in the deal will benefit, while the total volume of emissions will remain the same (Bu et al., 2010).

In terms of market size, the two biggest carbon markets are the EU ETS and the KETS, both running under the cap-and-trade mechanism, where a line on the total volume of greenhouse gas (GHG) emissions is drawn and trading of emission allowances is allowed. Under this mechanism, the total emissions are kept under the cap and the least costly measures are carried out by individual participants to reduce emissions, whether they are buying allowances or developing new technologies for abatement. On a different

note, the EU ETS and the KETS show differing traits and reverse trends in the recent price of allowances. After the EUA experienced a notable drop in price following the COVID-19 outbreak, the price jumped back shortly and continued to rise, going above EUR 40 and hitting all-time high. Meanwhile, the downtrend continued after the KAU price started to drop following the COVID-19 outbreak, although several attempts were made to stabilise the market.

With its history of 16 years, the EU has its official evaluation structure embedded in its ETS market and puts auctioning as a default. The KETS, in contrast, has a much shorter history of only six years with no evaluation system in hand, and free allocation still plays a much bigger role within the market structure.

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Moreover, the EU ETS has a vibrant secondary market and uses a wide variety of derivatives to support market liquidity. While exchange trading in the primary market of the KETS is 100% spot exchange, futures trading makes up for most of the EU ETS (Ahn, 2018). Various strands of literature on the carbon market have made attempts to compare the KETS with the EU ETS, and a literature gap arises from the difference in the maturity of the two carbon markets. To fill this gap, this paper goes beyond a contemporaneous comparison and adopts a historical approach, focusing on the influencing conditions of the post-2008 EU ETS market.

### 3. Overview of the KETS From Phase 1 to Phase 3

Based on Article 1 of the Act on Allocation and Trading of GHG Emissions Allowances, the Korean government aims to achieve “national targets for reducing GHG efficiently by introducing a system for trading GHG emission permits through market mechanisms pursuant to Article 46 of the Framework Act on Low Carbon, Green Growth.” In 2016, the duty of overseeing the KETS market was transferred from the MOE to the Ministry of Economy and Finance (MOEF). At the beginning of 2018, however, responsibility was transferred back to the MOE, with the MOEF chairing the Allocation Committee. After

the KETS was ratified in 2015, it has finished two phases and commenced Phase 3 in 2021. Unlike the EU ETS, auctioning is yet to settle in the KETS market, and specific regulations on the usage of revenues have been left undecided.

The biggest milestone over the last six years was the shift from grandfathering (GF) to benchmarking (BM). Emissions permits can be allocated either through free allocation or auctions, where emitters purchase from the government. Regarding free allocation, GF is based on historical GHG emissions, while BM refers to the production performance of the firms (Bu et al., 2010). According to the MOE and MOEF, KETS is expected to introduce futures trading and expand participants in the market to include unaffiliated individuals and financial institutions during Phase 3 (International Carbon Action Partnership [ICAP], 2021b). Through these measures, the Korean government plans to promote the ETS by enhancing the price discovery process and expanding the market predictability.

According to the Korea Exchange (KRX), from the opening of the KETS market until the beginning of 2020, over-the-counter (OTC) trading accounted for more than half of total transactions. Although OTC trades pose less advantage in terms of transaction fees, they can attract diverse market participants that request forward and swap transactions.

Table 1. KETS transactions from 12 January 2015 to 28 February 2020

(Unit: ton)	Exchange	OTC	Auction	Total
KAU	42,396,361	52,807,082	9,249,500	104,452,943
KCU (Korean Credit Unit)	3,127,760	296,149	-	3,423,909
KOC (Korean Offset Credit)	2,861,083	19,126,358	-	21,987,441
Total (%)	48,385,204 (37.3%)	72,229,589 (55.6%)	9,249,500 (7.1%)	129,864,293

Source: KRX (n.d.)

Table 2. KETS from Phase 1 to Phase 3

Trading period	Phase 1: 3 years (2015-2017)			Phase 2: 3 years (2018-2020)			Phase 3: 5 years (2021-2025)
Calculation method (free allocation)	Mostly GF			Expansion of BM			BM
Free allocation	100%			97%			90%
Auctioning	0%			3%			10%
Closing price (Unit: KRW)	End of 2015	End of 2016	End of 2017	End of 2018	End of 2019	End of 2020	
KAU (Year-on-Year, YoY)	12,000	19,000 (60.8%↑)	20,000 (3.6%↑)	25,000 (25.0%↑)	38,100 (52.0%↑)	23,000 (39.6%↓)	
KCU (YoY)	13,700	18,550	20,800 (12.1%↑)	21,800 (4.8%↑)	31,850 (46.1%↑)	-	
KOC (YoY)	-	18,900	24,000 (27.0%↑)	24,500 (2.1%↑)	39,500 (61.2%↑)	26,000 (34.2%↓)	

Source: ICAP (2021b), KRX (n.d.)

Meanwhile, the MOE announced its plans for stricter regulations on the offset policy in Phase 3, where the maximum offset limit will be cut from 10% to 5%. This measure is

expected to hit firms that seek offset through external abatement activities. Furthermore, unlike the EU ETS, the KETS has had few issues in the past regarding a weak inflow of



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Certified Emission Reduction (CER) credits issued by the Clean Development Mechanism (CDM).

#### 4. Evaluation of Phase 1 and Phase 2

Among the 37 OECD countries, Korea was ranked the fifth largest per capita CO<sub>2</sub> emitter in 2018 (11.93 tonnes, for energy use) after Canada, Australia, the US, and Luxemburg (Organisation for Economic Co-operation and Development [OECD], n.d.). Except during the 1997 Asian financial crisis, the per capita CO<sub>2</sub> emissions in Korea increased steadily without any significant downward trend (Our World in Data, n.d.). Compared to 2000, while the per capita CO<sub>2</sub> emissions in the US and EU regions decreased substantially, Korea showed a relative increase of 27% in 2019 (Our World in Data, n.d.). Meanwhile, as the causal relationship between the KETS and CO<sub>2</sub> emissions is opaque due to overlapping regulations and endogeneity concerns, this part of the paper focuses on the market performance. According to the International Carbon Action Partnership (ICAP) (2021a), no standardised evaluation process has been developed till date to gauge the KETS. To deliver a meaningful analysis of the debate on how the market performance of the KETS during Phases 1 and 2 can be assessed, this paper refers to the past literature. Among the major works, the often-visited concerns on

the KETS market during Phases 1 and 2 were geared toward the lack of market liquidity and a shortage of allowance supply. In a market without liquidity, an insufficient number of buyers and sellers makes buying and selling allowances difficult, resulting in a rather fragile market. Accordingly, considering the market infancy, the KAU price in Phase 1 does not provide a reliable baseline price, and the downward trend in 2020 cannot be a price adjustment compared to 2015.

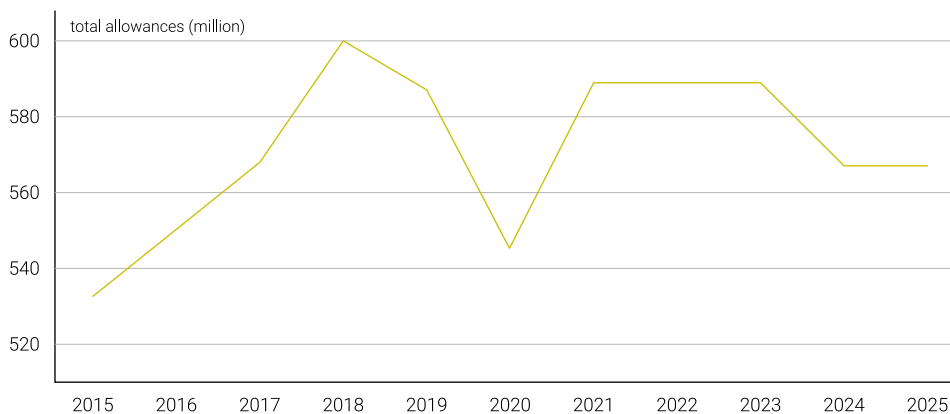
#### 5. Outlook for Phase 3

According to Reinhart (2021), despite vaccines being distributed since the beginning of 2021, the balance sheet damage is not expected to recover promptly and could lead to a long deleveraging period. The downward trend of the KAU20 price can be attributed to the decreased emissions in 2020 due to the COVID-19 outbreak and the possibility of stamping out a large volume of surpluses due to the carryover regulations. During Phase 2, the Korean government made amendments and regulated the carryovers to stabilise the situation in Phase 1, where companies with excess allowances held onto their shares, expecting the price to be higher in the future (MOE, 2019). Following the Phase 3 plans, the total allowance for 2021, including auctions, is worth 589.32 million tonnes of CO<sub>2</sub>. As the assigned companies emitted 610 million

Table 3. Summary of literature on the KETS: Assessment of Phase 1 and Phase 2

Author	Title	Source	KETS Assessment
Lee, J. and Yu, J. (2017)	Market Analysis During the First Year of Korea Emission Trading Scheme	Energies	<ol style="list-style-type: none"> <li>1) During phase 1 (2015-2017), the power generation and energy sector faced a shortage of emission permits and the KETS is fixated and narrowed down to handle the shortage of the permit supply.</li> <li>2) For the upcoming phases, liquidity control system, namely, the market stability reserve (MSR) under the EU ETS needs to be widely considered.</li> </ol>
Asian Development Bank (ADB) (2018)	The Korea Emissions Trading Scheme – Challenges and Emerging Opportunities	Asian Development Bank	Drawbacks to market liquidity.
Narassimhan, E., Gallagher, K.S., Koester, S. and Alejo, J.R. (2018)	Carbon Pricing in Practice: A Review of Existing Emissions Trading Systems	Climate Policy	<ol style="list-style-type: none"> <li>1) Excessive dependence on the information provided by the firms when putting together abatement targets, as opposed to depreciating the affiliated environmental organisations and civil society.</li> <li>2) Lack of market liquidity resulting in fragile system with trivial transaction volumes in the early phase.</li> <li>3) 100% free allocations in phase 1 and preferential conditions offered to energy-intensive and trade-exposed (EITE) industries resulted in a low-performing system.</li> </ol>
Suk, S., Lee, S. and Jeong, Y.S. (2018)	The Korean Emissions Trading Scheme : Business Perspectives on the Early Years of Operations	Climate Policy	<ol style="list-style-type: none"> <li>1) Early stages of the KETS experienced market stagnation resulting from supply-demand imbalance, policy ambiguity, and infancy of carbon-oriented management in firms.</li> <li>2) Initially, participating companies were uncertain about selling their surplus allowances, carried them over, and causing a shortage of supply in the market.</li> </ol>
Son, I. (2020)	Performance Analysis of Korea Emissions Trading Scheme Phase 1	Korea Energy Economics Institute	<ol style="list-style-type: none"> <li>1) Phase 1 of KETS can be described as a thin market and the hypothesis of it being an efficient market was not accepted.</li> <li>2) Regarding the impact on firms and industries, overall fiscal conditions showed notable improvements.</li> <li>3) As a part of the plan to form a more efficient KETS market, increasing market liquidity and lowering information costs in the market should be considered.</li> </ol>

Figure 3. Total KETS allowances from Phase 1 to Phase 3



Source: ICAP (2021a)

tonnes of CO<sub>2</sub> in 2019, the allowances for 2021 could be understood as 20 million tons lesser.

Considering the long-term effects of the COVID-19 pandemic and carryovers worth 28.8 million tonnes from 2020, however, the KETS in Phase 3 is expected to be a surplus market. Moreover, within the GHG roadmap, as the reduction rate from 2021 to 2023 is relatively low, the KETS is not expected to be short of allowances in Phase 3. Meanwhile, the emission target for 2021-2023 in the industry sector, 401 million tonnes, is reduced by 1% in absolute terms when compared to the 2018-2020 emission target of 405 million tonnes. Although the share of free allocation in KETS Phase 3 is set to decrease, the possibility of a price trend reversal is low as the total volume of yearly allowances in Phase 3, especially from 2021 to 2023, is expected to be larger

than that of 2020. Due to the nature of the ETS system, which does not burden the industry with its goal of improving emissions relative to power generation, the emission target of the industry sector in Phase 3 is expected to rise compared to the past. Additionally, while the European Green Deal is partially responsible for the soaring price of EUA in 2020 and 2021, the K-GND is not expected to deliver a comparable outcome as its reduction targets and timelines are inexplicit.

### III. European Union Emissions Trading System (EU ETS)

#### 1. Overview of the EU ETS From Phase 1 to Phase 4

After the EU adopted ETS in 2005, the

ETS has undergone several changes as a part of its efforts to stay resilient and adaptive to the changing environment. Before Phase 4, which started in 2021 and is due by the end of 2030, the EU ETS has gone through three phases and managed to handle unprecedented global challenges, including the 2008 financial crisis. Within the EU ETS, auctioning has settled as a default, and the Member States are obligated to report their revenue usage. According to the European Commission (2019), in

2018, the Member States spent up to 70% of their earnings from auctioning on climate-related purposes. Additionally, as a part of the Innovation Fund, the European Commission has set out the first call for projects and plans to arrange around EUR 10 billion worth of assistance from 2020 to 2030 (International Energy Agency [IEA], 2020). The fund is envisaged to subsidise pilot projects on renewable energy, carbon capture, utilisation and storage (CCUS), energy storage, and low-

Table 4. EU ETS from phase 1 to 4 (ICAP, 2021)

Trading period	Phase 1: 3 years (2005-2007)	Phase 2: 5 years (2008-2012)	Phase 3: 8 years (2013-2020)	Phase 4: 10 years (2021-2030)
Calculation method (free allocation)	GF based on the national allocation plans (NAPs) of each Member State	Mostly GF with some BM	BM	BM
Free allocation	Almost 100%	Up to 90%	43%	Except for the highest risk sectors, free allocation is expected to be terminated after 2026 and hit zero by the end of Phase 4
Auctioning	Up to 5%	Up to 10%	57%	Up to 100%
Highlights	Total amount of issued allowances exceeded actual emissions	2008 economic crisis led to a large surplus of allowances and credits	Auctioning became a default (uniform price, single-round, sealed-bid) and an EU-wide cap on emission was introduced	MSR to be reinforced

Source: ICAP (2021a)

carbon cutting-edge technologies in energy-intensive industries (IEA, 2020).

In Phase 3 of the EU ETS primary market, exchange trading accounted for 80% of the total transactions and only 20% was OTC trading (Ahn, 2018). Meanwhile, vibrant secondary markets have equipped the EU ETS with usable sources of liquidity, immediacy for hedging, and trading activities for a wide range of participants (Wallner et al., 2014). The commonly used carbon derivatives in the OTC market include forwards, options, and swaps (Wallner et al., 2014). Following the inception of Phase 4, the EU ETS has been subject to an unexpectedly escalated price of allowances partially due to the ratification of the European Climate Law, which is coupled with the Commission's strong ambition toward

the European Green Deal. Furthermore, the recent price trend has incentivised investors to increase investments, making carbon trading susceptible to speculation.

## 2. Falling Price of Allowances and Post-2008 Surplus Market

Following the 2008 financial crisis, the EU ETS experienced a stockpiling of EUAs, and the surplus market eventually led to a downward trend in the allowance price in Phases 2 and 3 (European Environment Agency, 2020). In April 2008, the EUA price was EUR 25 and maintained an above EUR 20 level until the end of October 2008 (Ember, 2020). For four consecutive years, the price stayed under EUR 20 and went below EUR 10 at the end of 2011, hitting EUR 2.97 in April

Figure 4. EUA price during Phase 2 and Phase 3



Source: Ember (2021)

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2013 (Ember, 2020). The EUA price remained below EUR 10 until the beginning of 2018 and only jumped above EUR 30 by the end of 2020 (Ember, 2020). According to Koch et al. (2014), when the EUA price is less than EUR 5 per tonne of CO<sub>2</sub>, participants and observers opine that the market has not delivered the right incentives to cut emissions.

The EU finds reasons for this increase in supply and fall in price from several aspects, namely, the economic downturn and unexpected influx of CER credits (European Commission, 2017; Neuhoff, 2012). During Phase 2, the economic recession played a decisive role in shaping the participants' expectations twofold: production decrease in the short-term and deteriorated growth outlooks in the long-term. After the 2008 financial crisis, factories ceased to operate, leading to decreased carbon emissions and the unexpected influx of international credits also led to the stockpiling of EUAs. As cash liquidity assurance amid falling oil prices became important, participating firms tried to secure their cash by selling EUAs (Bu et al., 2010). Additionally, Phase 3 experienced an unforeseen piling of EUAs due to a surplus from Phase 2 and early auctioning of the electricity industry as well as other industries that hold high carbon efficiency (Chevaleyre & Berghmans, 2013). The situation of the EU in Phase 2 highly resembles what Korea has been

experiencing since the COVID-19 outbreak in 2020, where a decreased production has led to reduced emissions and a surplus of allowances (Yonhap, 2021). As the EU had made efforts to fix the ETS market in Phase 3 from 2013 to 2020, and saw some notable improvements, including recovered carbon cost, this paper finds it highly relevant to examine how the EU dealt with its surplus market.

According to Perthuis and Trotignon (2014), other than the well-known mechanism of finding weakness of the EU ETS in a diminished industrial output followed by a surplus of allowances, causes for the malfunctioning of the EU ETS can also be traced outside the market. First, higher incentives for participants using offsets have been in place, and carbon offsets have become popular in an unprecedented manner. Second, intimate connections between the ETS and other climate-related regulations have slashed emissions without regard to the EUA price. According to an annual report from Redl et al. (2021), renewables overtook fossil fuels in 2020 across Europe for the first time, generating 38% of Europe's electricity while fossil-fired generation was 37%. With the growing awareness of climate change, policies linked to the development of renewable energy and improving energy efficiency have been implemented sporadically, greatly dropping the demand for EUAs in the short

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term and obscuring the long-term trajectory.

Overestimation of the constraint ex-ante is not unique to the EU ETS and occurred in the US sulfur dioxide (SO<sub>2</sub>) allowance trading program as well. Following the Clean Air Act Amendments (CAAA) of 1990, a market-based approach to regulate SO<sub>2</sub> was adopted in the US (Schmalensee & Stavins, 2013). While this program was considered a success by the end of the twentieth century, about one-third of the emissions reductions in the early years can be attributed to the preceding railroad deregulation, which allowed the substitution of low-sulfur coal to be more competitive (Schmalensee & Stavins, 2013). With the inception of the K-GND, the above-mentioned situation can occur in Korea as diverse layers of environmental regulations unfold. The green industry is anticipating increased subsidies and support from the government, which is likely to result in lower abatement costs and increased accessibility to low-carbon technology. Moreover, K-GND is only the starting point of environmental regulations, and as the national agenda is married to the idea of sustainability, a disparate range of renewable energy policies will arise organically.

### **3. Short-Term Response: Backloading**

As a short-term response to the surplus market, the EU ETS adopted a backloading

approach in 2014 to raise the carbon price and incentivise mitigation actions, namely, investments in low-carbon technology (European Commission, 2017). Backloading is performed by a simple mechanism of reducing the supply of EUAs entering the market by temporarily holding back the allowances (Jalard et al., 2015). After the EUA price went below EUR 3 per tonne in 2013 and the over-supply hit 2 billion allowances, which exceeds the yearly emissions for the entire EU ETS, backloading was proposed as a part of the reform strategy (Redshaw Advisors, n.d.). As a result, auction volumes were reduced by 400 million tonnes in 2014, 300 tonnes in 2015, and 200 tonnes in 2016 (Jalard et al., 2015). While the backloaded allowances were initially scheduled to be added in the 2019 and 2020 markets, the emergence of the MSR lifted this plan to fix the EUA price in the long-term (European Commission, 2017).

### **4. Long-Term Response: Market Stability Reserve**

MSR started to operate at the beginning of 2019 to avoid a situation where the EU ETS market holds a surplus of allowances (European Commission, 2017). In the long run, the MSR is expected to decouple the EU ETS from supply-demand imbalances and improve structural resilience. The MSR functions under a pre-set mechanism where allowances are added to

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the reserve if the total number of allowances in circulation (TNAC) goes beyond the threshold and vice versa (European Commission, 2017). For instance, when the EU wants to store allowances in the MSR and tackle the oversupply of EUAs, it reduces auctions. According to Article 1(4) of the Decision concerning the establishment and operation of the MSR for the Union GHG ETS and amending Directive 2003/87/EC, the TNAC “shall be the cumulative number of allowances issued in the period since 1 January 2008, including the number issued pursuant to Article 13(2) of Directive 2003/87/EC in that period and entitlements to use international credits exercised by installations under the EU ETS in respect of emissions up to 31 December of that given year, minus the cumulative tonnes of verified emissions from installations under the EU ETS between 1 January 2008 and 31 December of that same given year, any allowances cancelled in accordance with Article 12(4) of Directive 2003/87/EC and the number of allowances in the reserve.” In a nutshell, elements that plot the TNAC are threefold: supply of allowances since 1 January 2008, demand for allowances, and holdings in the MSR.

$TNAC = \text{Supply} - (\text{Demand} + \text{Allowances in the MSR})$

## 5. Individual Response to the Malfunctioning Market: UK Carbon Price Floor

While the EU warned of individual actions by member countries, the United Kingdom (UK) independently fixed a price floor for CO<sub>2</sub> emissions in 2013 to supplement the deficient performance of the EU ETS market in managing a proper price that could drive low-carbon investment (Hirst & Keep, 2018). The Carbon Price Floor (CPF) regulates UK power plants involved in the EU ETS market and operates a domestic carbon price support rate that gauges the EUA prices to assure that the domestic price floor is reached at all times (Hirst & Keep, 2018). If the EUA price is EUR 5 and the UK CPF is fixed at EUR 19 per tonne of CO<sub>2</sub>, the carbon price support rate will be EUR 14. Meanwhile, if the EUA price outstrips the UK CPF, the domestic support rate will be zero.

The UK CPF is enforced outside the formal EU ETS, and the level of CPF was capped at a maximum of GBP 18 per tonne of CO<sub>2</sub> from 2016 to 2020 (Hirst & Keep, 2018). Based on the work of Ares and Delebarre (2016), the UK’s recent graduation from coal reliance could be attributable to the success of CPF. In the same vein, the UK government announced a drop in reliance on coal for electricity from 70% in 1990 to 3% in 2020 and praised its accomplishment of economic



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growth while cutting emissions (Department for Business, Energy & Industrial Strategy, 2020). Meanwhile, Ares and Delebarre (2016) also pointed out the absence of a solution to the waterbed effect. With no allowance being taken out from the market, the CPF performance could be understood as a simple shift of emissions across time and space, while the allowance price continues to stay weak.

## 6. European Green Deal as a Leverage to Carbon Neutrality

After the European Green Deal was proposed in December 2019, the European Climate Law was ratified to set a legally binding target for Europe to become the first climate-neutral continent in the world by 2050. Within the bloc, the unavoidable transition concerning carbon-neutrality is perceived to provide an ample amount of benefits, including improved well-being of the people and competitiveness of the EU. However, sectors and regions relying more heavily on fossil fuels than others will inevitably face more difficulties during the transition. As a part of the Commission's pledge to leave no one behind, JTM is envisaged to uphold the most affected by utilising a targeted financial support package worth at least EUR 150 billion (European Commission, 2020).

According to Article 1(2) of the Proposal

for a regulation of the European Parliament and of the Council establishing the Just Transition Fund (JTF), "this Regulation established the JTF to provide support to territories facing serious socio-economic challenges deriving from the transition process towards a climate-neutral economy of the Union by 2050." The major pillars of financing the JTM can be specified threefold: a new JTF, InvestEU "Just Transition" scheme, and European Investment Bank (EIB) public sector loan facility (European Commission, 2020). While the JTF is the first and the main pillar of the JTM, InvestEU is one of the programmes from the EU budget (2021-2027) and the EIB is the EU's lending arm.

As a part of the European Green Deal pursuant to the EU's pledge to reach carbon-neutrality by 2050, one of the core sectors the Commission is keen on tackling is the transport sector. While the transport sector emits 29% of energy-related CO<sub>2</sub>, road travel accounts for almost three-quarters of transport emissions, making it a prioritised area for reduction (IEA, 2020). According to the International Energy Agency (IEA) (2020), the European Green Deal proposes reducing emissions by 90% in the transport sector by 2050. To this end, 75% of inland freight transportation will be converted to railroads, and 1 million charging stations will be needed for 13 million eco-friendly vehicles by 2025

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(IEA, 2020). From 2025 onward, major countries in the EU are also expected to ban the sale of vehicles with internal combustion engines (IEA, 2020).

## IV. Conclusion

With the objective of delivering the implications for Phase 3 of the KETS, this paper examined the downturn price trend and the mismatch of supply and demand following the COVID-19 outbreak. Contrary to the previous literature that reviewed the EU ETS as an exemplary case study or conducted a chronological analysis that overlooks the influencing conditions, this research took an in-depth view of how the EU ETS managed its uncompetitive allowance price and surplus market. Although COVID-19 has induced an unprecedented crisis, its economic consequences closely resemble those following the 2008 financial crisis, and a study on how the EU ETS came through provides a cautionary tale for what the future may hold for the KETS.

The analysis of the post-2008 EU ETS revealed that along with production decrease in the short-term and deteriorated growth outlooks in the long-term, the popularity of offsets and other climate-related regulations also helped slash emissions, leading to a

surplus of allowances. To cope with this situation, the EU ETS adopted backloading as a short-term response and MSR as a long-term response. While market stabilisation strategies in the KETS focus on putting aside a certain volume of allowances to be additionally allocated to new entrants or utilised in the case of a sudden increase in demand, the EU MSR highlights the handling of oversupply by removing allowances and cutting total transactions. Although the EU tried to avoid additional regulations by individual countries, the UK independently introduced the CPF in 2013 to supplement the deficient performance of the EU ETS market.

To cope with the downturn price trend of the KAU20, auctions scheduled from February to May 2021 were postponed to June 2021 as a part of the government's measures to stabilise the KAU20 price and the volume of allowances in the carbon market. However, based on the observations from the EU ETS, backloading can only be a Band-Aid solution for the KETS market. Furthermore, the legal feasibility of these measures remains unclear. According to its public notice, the MOE can adjust the volume or cancel auctions if the price is extremely low or high. However, the specific baseline price is not disclosed, and boundaries are ambiguous. Instead, the Korean carbon market needs urgent, yet carefully planned structural adjustments to

strengthen the KETS while avoiding excessive interference in the system, as it would undermine the market confidence.

The world is faced with the inconclusive economic consequences of the COVID-19 pandemic, and Korea is no exception. With the surplus of allowances and weak KAU prices, government intervention and additional

regulations are foreseen as necessary in Phase 3 for the KETS market to recover its performance. In the meantime, the Korean government should be attentive towards overlapping or inconsistent regulations that could undermine the purpose of the KETS by injecting uncertainty and excessive costs.

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# Developing a management system for governmental subsidy programs using classification of the risk of improper payment

This article is based on research "A study on improving the efficiency of the management system using classification of the risk of improper payment for government subsidy programs" conducted at the Korea Institute of Public Administration.

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## Abstract

Various policy fields use government subsidy programs at an increasing scale, but they continue to encounter problems related to managing inefficiencies, such as improper payments, redundancy, and low execution rates. However, the three major comprehensive measures for improper payments announced by the South Korean government so far are only ex-post measures that focus mainly on the results of detection. It is necessary to manage improper payments for national subsidy programs efficiently through management in advance based on the risk of improper payments.

This study aims to categorize subsidy programs by internalizing risk assessments for improper payments of government subsidy programs to establish a management system properly. The purpose of this study is to prepare a method for classifying government subsidy programs by the risk of improper payment for effective and efficient management. In other words, through the establishment of a plan to manage government subsidy programs differently according to the possibility of improper payments, programs with high probability of improper payments will execute enhanced levels of management and supervision. Furthermore, programs with low probability of improper payment will implement a low level of management and supervision. To this end, this study suggests a method and procedure for classifying the risk of improper payment of government subsidy programs from high-risk to low-risk groups into three levels. In addition, according to the classification using a risk-based approach, this study also suggests a distinctive management plan.

**Keywords:** Government subsidy, improper payments, management system, risk-based approach, classification



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## I. Introduction

Subsidies are widely used policy tools in various areas, such as politics, economy, society, and culture. National support through subsidies has the advantage of improving the efficiency of resource allocation through internalization of external effects. In Korea, the “Subsidy Management Act” was enacted in 1963 and played an important role in the industrialization process, and recently it also has played an important role in supplying welfare services. Over the past 10 years, government subsidies have increased by about 6% per year on average (Korea Public Finance Information Service, 2019). However, with the increase of government subsidies, the issue of improper payment of subsidies has continuously been raised in the scholarly field and the media. Improper payments were a major obstacle to improving policy effectiveness and overall efficiency on the subsidy system by causing inefficient use of public resources, leakage of available resources, and loss of trust in subsidy programs. There is also a concern that improper payments may lead to the public feeling distrustful and deprived by

the government. Accordingly, the need for an improper payments management system is increasing and has become an important national policy task in many countries. For example, the UK Government enacted the Fraud Act in 2006 for the Cabinet Office, focusing on understanding the size of improper payments and prevention policies. The US also carries out whole-of-government planning and management of improper payments, centered on the Management and Budget Office (OMB). The Improper Payment Information Act (IPIA) was enacted in 2002 and its subsequent laws such as the Improper Payment Eradication and Redemption Law (IPERA), the Improper Payment Eradication and Redemption Improvement Law (IPERIA) were enacted to identify programs and activities, measure the risk of improper payments, and mandate the annual reporting of improper payment reduction measures to Congress. South Korea has also announced comprehensive measures for improper payments on three separate occasions.<sup>1</sup> However, the comprehensive measures for improper payments of subsidies that the government has announced to date are evaluated as ex-post measures, focusing

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1 Announced “Comprehensive Measures for Improving the Welfare Program Improper Payment System” in December 2013, “Comprehensive Measures for Improper Payment with National Subsidies” in December 2014, and “Measures to Eliminate Improper Payment for Subsidies” in January 2018.

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mainly on the results of detection. The government subsidy program is complex to manage, because a number of stakeholders (ministries, local governments, and private sectors) execute various functions (policy fields) through diverse delivery systems. The possibility of improper payments may vary depending on the situation. Therefore, to reduce the total amount of improper payments, it is necessary to develop a proactive prevention system through a more comprehensive and in-depth understanding of the management system of state subsidy programs. In addition, to establish an effective improper payment management system, it is necessary to establish a method to manage complex government subsidies according to the possibility of improper payments.

Based on these discussions, this study aims to design proactive indicators that can identify programs with a high risk of improper payments. Among the various classification criteria for government subsidy programs, we identified factors that increase the probability of improper payments and classified the risk of improper payments from high-risk to low-risk groups. In accordance with this risk classification, we propose a differential improper payments management plan.

## **II. Literature Review**

### **1. Government Subsidies**

Prior research on government subsidies can be divided into three major categories: financial functions and effects; laws, regulations, and systems; operation and management systems. While most of the studies on government subsidies have at first been related to financial functions and financial effects, studies on operation and management systems have emerged relatively recently.

#### ***Financial Function and Effect***

Studies on the fiscal functions and effects of government subsidies have mainly focused on the analysis of functions and effects as a local fiscal coordination system, from an economic and fiscal perspective. Kim et al. (2001) analyzed the effects of government subsidies, local concessions, and local grants on the horizontal fiscal equilibrium among local governments. They found that the equalization effect of local grants was greater at the county level. In a study by Park (2006), an analysis of whether local grant taxes and government subsidies actually alleviate the fiscal imbalance between regions, found that government subsidies have the effect of mitigating fiscal imbalances. Park argued that local grants are a key means of fiscal

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coordination between central and local governments. On the other hand, according to a study by Hwang (2015), even if the government uses government subsidies as a policy tool, if there are many problems such as improper payments or inefficient operation, the public does not perceive the government's performance positively. This suggests that it is important to improve the Korean Government's reliability. In addition, Moon (2008) argued that for efficient government subsidy programs, ambiguities in the standard subsidy system should be specified, and the types of subsidy programs should be systematized.

### ***Laws and Institutions***

Studies on the legal and institutional aspects of government subsidies have mainly been conducted from a legal point of view. Huh (2002) stated that political distribution and improper payments arise due to the considerable powers given to the heads of central government offices and local governments in related laws for flexible subsidy administration. Jang (2010) pointed out that there is no clear agreement on the terms of subsidies in academic and practical areas, and through a review of prior research and legal analysis; one-time or continuous, including the acquisition of final payment obligations to companies or individuals.

Transfer of purchasing power or assets, but not on the premise of a full response commonly used in the market, but at least legally, is a benefit that expects a specific attitude of the beneficiary guaranteed through additional conditions or other additional regulations, and public institutions in its execution. The subsidy was defined as "a benefit in which a regular public law subsidy relationship is formed between the recipient and the beneficiary" (Jang, 2010, p. 105). Jeong (2011) argued that the concept of a subsidy needs to be defined in terms of academic, legal, and practical concerns, and added that in order to secure the effectiveness of subsidies, it is necessary to discuss the legal basis of subsidies, the legal nature of grant decisions, and cancelation.

### ***Operation and Management Systems***

Studies on the operation and management systems of national treasury subsidies have mainly been conducted from an administrative perspective. In a study by Yoon and Kong (2012), the cause of the under-execution that occurred at each stage of a government subsidy program is presented; a number of organizations and related persons have complicated relationships to the program, mainly because of the delay in granting subsidies due to the program execution structure between local governments. Oh and

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Hong (2015) also pointed out that it is difficult to grasp a program systematically, because the subsidy goes through several stages before reaching the recipient, and this complexity is an important feature of the government subsidy program. Lee (2015) emphasized that the state subsidy as a transfer resource is “a medium that functionally connects the central and local governments” (p. 12), the uncertainty of setting the standard subsidy rate, lack of autonomy of local governments, and subsidy programs. Lee insisted that the lack of cooperation in relations should be improved. In a study by Kwon (2016), the general status and problems of the legal system, program structure, operation, and management system, were analyzed based on the national treasury subsidy program, and measures to improve the legal system and program structure to enhance the accountability and effectiveness of the government subsidy program management system were explored. Kwon also suggested an improvement plan for operation/management systems.

## 2. Concept of Improper Payment

The concept of improper payment is defined as “receiving unemployment benefits

in an improper way.”<sup>2</sup> In the US, it is defined as fraud, similar to illegal supply and demand, and in the UK, it is defined as fraud and error, similar to improper payments. Furthermore, the World Bank considers improper payments as error, fraud, and corruption (Van Stolk & Tesliuc, 2010). Fraud is a recipient’s intentional act of taking money under false pretenses. The main causes of deception are the recipient’s intentional failure to apply and execute subsidy programs honestly, forging false status, or intentionally abusing the complexity of the management system (Van Stolk & Tesliuc, 2010). Error means that the recipient or administrator makes an unintended mistake. Mistakes are caused by lack of employee training, errors in processing claim forms, and the complexity of the management system or its processes (Van Stolk & Tesliuc, 2010). Errors can be made by customers or officials. Customer error means the customer (recipient) fails to disclose, hides or improperly communicates important information; as a result of which, 1) excessive or underpayment occurs during a certain period, or 2) the department in charge does not use the important information to pay the salary. This is a case of failure (Van Stolk & Tesliuc, 2010). An official error occurs “if

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2 Naver dictionary. <https://dict.naver.com/>

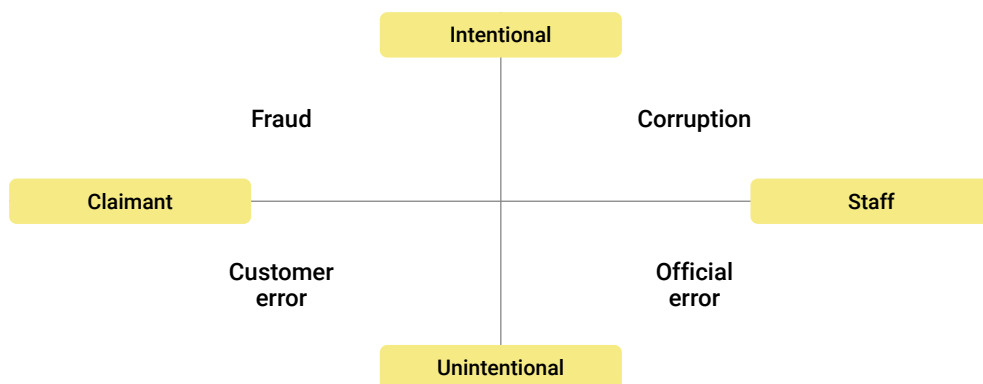
the applicant's salary is rejected or delayed due to incorrect administrative supervision or procedures, or if the salary is provided to someone other than the applicant" (Lim et al., 2017, p. 164). Corruption refers to the intentional abuse of the subsidy system by administrators. In most OECD countries, appropriate personnel training, results-based management, and beneficiary qualification requirements are being managed, and the risk of corruption is low because of the verification methods established within the payroll and payment system, but in middle- and low-income countries, auditing and the risk of corruption is higher because the supervisory and control system is weak, and the remuneration for administrative personnel is relatively low (Van Stolk & Tesliuc, 2010; see Figure 1).

The definition of improper payment depends on the recipient's qualifications, the deception, and the administrative agency's errors (Kwon et al., 2013). In other words, the concept of improper payments can be divided into negotiated improper payments, including deception and corruption, and broader improper payments, including improper expenditure due to errors or negligence.

### 3. Typology of Improper Payment

Previous studies attempting to categorize improper payments include ones by Seo et al. (2018), M. Kim et al. (2015), Y. Kim et al. (2015), Kwon et al. (2014), and Lim (2019). Seo et al. (2018) analyzed data from 151 audits, media reports, and local governments and assessed the inefficient execution of government subsidies for the following

Figure 1. Typology of fraud and error in benefit system



Source: Van Stolk and Tesliuc (2010, p. 3)

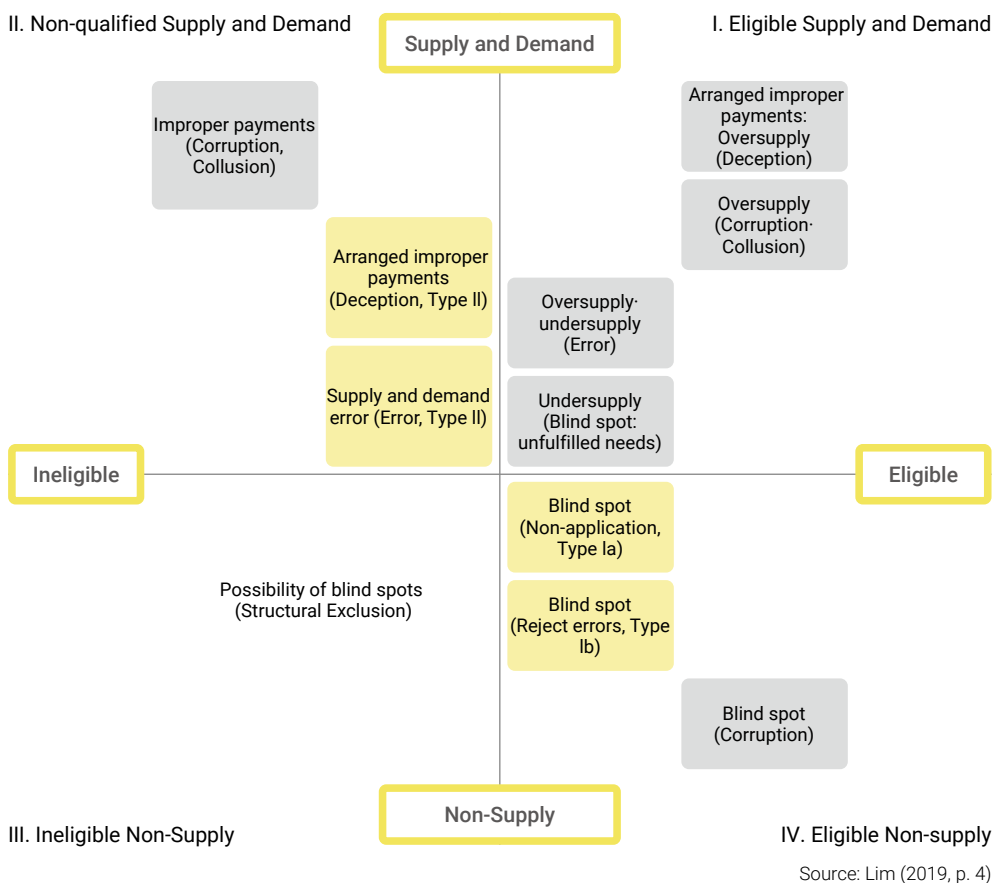
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areas: unfair supply, embezzlement and bribery, insolvent execution, creation of false documents and forgery of official documents, neglect of qualification verification, overlapping support, non-purpose use, unsuitable settlement, and negligence of follow-up management (privatization). In addition, types of inefficient execution were classified into the following stages: application stage; program plan and organization stage; application and decision stage for issuance; operation and execution stage; settlement and follow-up management according to the implementation stage of the government subsidy program. However, the Seo et al. (2018) study has a limitation in that it merely lists the types of improper payments according to the subsidy management procedure rather than the typology of improper payments. On the other hand, Y. Kim et al. (2015), in a study using profiling of improper payers and in-depth interviews of improper payment investigators, identified the types of improper payments that appear in each unemployment benefit procedure largely as the types of false reports of reasons for turnover and working period. The researchers classified these into false reports and other types, duplicate beneficiary types, and sub-formal job-seeking activities. This study is also limited because the standard of classification is not clear, and it attempts to classify a relatively complex form.

Lim (2019) expressed improper payment as a quadrant, as shown in Figure 2, based on the improper payments type of Kleven and Kopczuk (2011), who classified improper payment into eligible non-supply and non-qualified supply and demand. Among the quadrants, improper payment occurs in areas I and II; in area III, there is a blind spot due to institutional problems, and in area IV, there is a blind spot due to non-application or rejection. Area II (non-qualified supply and demand) where improper payment occurs and area IV (non-qualified supply and demand), which are blind spots, conflict with each other according to their complexity. Lim's classification is significant in introducing the concept of blind spots to the frame explaining improper payment, but it is subject to tangible restrictions that is limited to welfare subsidies.

Kwon et al. (2014) divided the stages of government subsidy management into the selection stage, execution stage, and follow-up management stage, and suggested types of improper payments that can occur at each stage. In the selection stage, improper payment types appear, such as inadequate selection criteria and procedures for subsidy companies or selection of inappropriate targets. In the execution stage, improper payment types appear, such as lack of operation management and instructions, inefficient operation, incomplete documents,

Figure 2. Typology of improper payments (Kleven &amp; Kopczuk, 2011)



use for other purposes, false reports, similar redundant payments, or overcharges. In the post-management stage, improper payment types appear, such as delayed settlement, insufficient management, or non-refundable subsidies. It is significant that Kwon et al. (2014) presented types of improper payments for each step of state subsidy program management, but the factors that influence

the possibility of improper payments were not directly analyzed.

### III. Developing a Risk Index for Improper Payment

If the existing measures to deal with improper payments in government subsidy

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programs remain in a post-mortem method, preemptive measures should be taken as a precautionary measure in the future. Therefore, among the characteristics of various subsidy programs, improper payment is likely to be high, and improper payments are likely to occur (high risk), along with the occurrence of intermediate-stage programs (medium risk), and programs that are unlikely to occur (low risk). After categorization, this study presents a differentiated management plan for each type.

## **1. Analysis of Improper Payment Risk by Characteristics of Subsidy Programs**

Using open-ended questions in the first Delphi questionnaire, indicators showing the characteristics of subsidy programs with high potential for improper payment were derived. First, experts responded that there is a type of government subsidy program with high improper payment in the general perception of improper payment of government subsidies. The characteristics of government subsidy programs that affect the risk of improper payments include “characteristic of goods,” “supply and demand entity,” “type of subsidy program,” “complexity of the delivery system,” “budget structure,” “area of a subsidy program,” “types of qualification criteria for beneficiaries,” “whether to contest,” “practice

selection management,” “management conditions of the relevant ministries,” and “special relations.” However, for subsidy programs that do not use the e-document system e-Nara, among the management conditions of the relevant ministries, the score of the researcher group was relatively higher than that of the public official’s group, confirming the difference in perception between researchers and public officials. In addition, the characteristics of government subsidy programs with a high risk of improper payment include “the government subsidy program with insufficient subsidy program management,” “a program that can apply for subsidy through fraudulent methods,” “the government subsidy program with insufficient penalties in case of detection,” and “improper payment.” Respondents said that the risk of improper payment would increase due to “lack of information sharing,” “misuse of vouchers,” “private relationships in subsidy program,” and “characteristics of beneficiary organizations.”

A questionnaire on countermeasures includes questions on the management plan for the improper payment behavior of subsidies, such as false manpower, false income property, false attendance, price inflation, self-payment avoidance/payment, false voucher card payment, non-purpose use, discretionary disposal of important property, etc. As a result, “strengthening punishment,”



“building a system for prevention,” and “sharing information with other administrative systems” were presented as common opinions.

### ***Checklist for Classification of Improper Payment Risk***

The characteristics of subsidy programs that affect the risk of improper payments derived from the summation of the case analysis and the Delphi survey conducted previously were identified as management

level (government and local government), structural level (subsidy programs), and selection level. It is divided into three subsidy dimensions.

The management level is related to the role of the government and local governments, and is difficult to manage on-site due to physical distance, such as programs with low management capabilities, subsidy programs with several detailed programs to be managed, and programs with low capabilities of officials

Table 1: Checklists for categorizing the risk of improper payment

Dimension	Questionnaires	Check
Management	Is the expertise of the person in charge of the subsidy program (main department/local government/public institution, etc.) sufficient?	yes/no
	Is the number of subsidy program managed by the person in charge of subsidy program sustainable (main ministries/local governments/public institutions, etc.)?	yes/no
	Is it possible to sustain (stable) management of the person in charge of the subsidy program (main ministries/local governments/public institutions, etc.)?	yes/no
Structure	Is the subsidy program adequate?	yes/no
	Is the delivery system of subsidy program complex?	yes/no
	Is the proportion of specific expenses (labor, goods) excessive in light of the program's purpose?	yes/no
Selection	Is the qualification verification of the subsidy program conducted sufficiently?	yes/no
	Was there any significant competition in the public offering process of subsidy?	yes/no
	Are the same subsidies continuing to be selected?	yes/no

Note: Questions that increase the risk of improper payment when bold is no (reverse coding)

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in charge. The structural dimension refers to the problem of the program entity's structural dimension. Accordingly, one-time programs, programs with complex delivery systems, and programs with subsidies to private persons were divided into structural-level programs. The selection dimension is related to the selection of the subsidy program and the presence or absence of competition, such as whether there is fair and sufficient competition in the process of selecting a subsidy. It was classified as a characteristic that increased the risk of payment.

By synthesizing the above, the characteristics of subsidy programs related to improper payment are largely divided into management, structure, and selection dimensions, from which we formed a checklist for each factor. Subsequently, using this checklist for all government subsidy programs, the risk of improper payment of subsidy programs was classified into high-risk, medium-risk, and low-risk groups.

#### ***Derivation of Weights for Each Criterion under Improper Payment Risk Classification***

The weights for each type were presented using a checklist for classifying the risk of improper payments of the subsidy program previously derived. Detailed classification through weighting can help to measure the risk of improper payments of subsidies in a

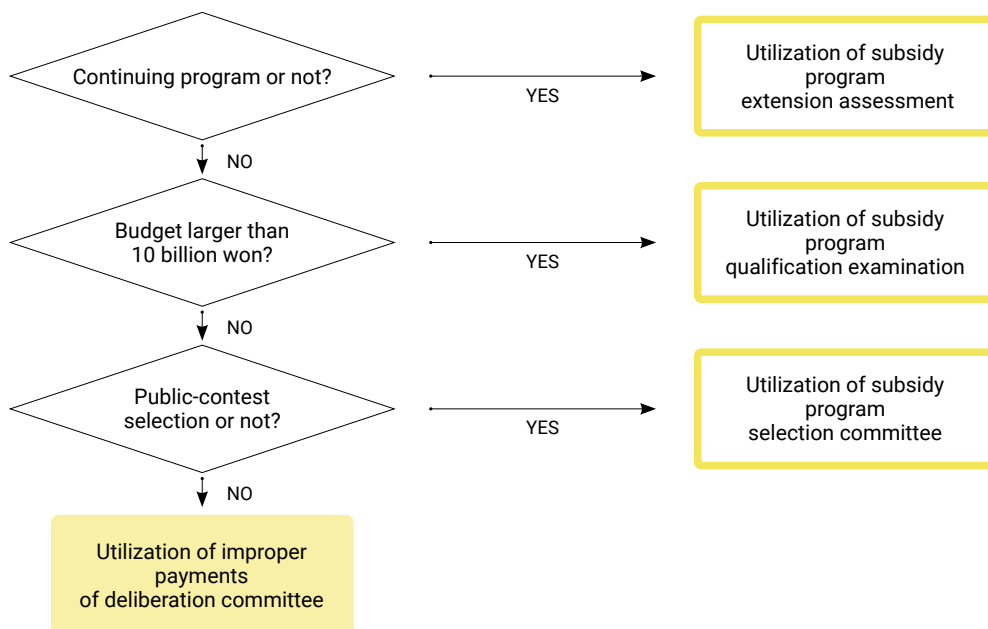
stricter sense and has the advantage of being able to be applied to a tailored management plan. By synthesizing the results of the stratification analysis obtained through the Delphi survey, we tried to derive weights for the selection of the subsidy program type considering the risk of improper payment. The relative importance of each derived checklist criterion was presented as the final weight by multiplying the weights of the checklist criteria in each major category. In the case of classifying subsidy programs using weights and checklists suggested in this study at the time of actual policymaking, it will be more rigorous to determine the weights through a large-scale expert questionnaire.

#### **IV. Applying the Risk Index to Manage Improper Payments**

In the current situation where government subsidies reach 80 trillion Korean won, it is difficult to investigate and prevent all improper subsidy payments for all subsidy programs. Therefore, we propose an efficient improper payment management system by evaluating the improper payment risk of each subsidy program and managing improper payments according to their risk.

In the case of a program in which the measured risk of improper payment exceeds

Figure 3. Determination of governance of improper payment management



a certain level, the probability of improper payment is higher than that of other programs. Therefore, for these programs, there is a need for enhanced management, prevention, and inspection.

### 1. Countermeasures from a Short-Term Perspective

There is currently no organization dedicated to the assessment and management of improper payments of subsidy programs. In the short term, committees such as the subsidy management committee (Ministry of Strategy and Finance), subsidy program

selection committee (each central government office), and improper payment deliberation committee (each central office) should be utilized. It is necessary to use all available resources. However, the approach should differ depending on whether the program will continue, the difference between the size of the program and the public offering method, and the subsidy program.

In addition, after selecting a subsidy program, it is necessary to notify them of their own program's risk of improper payment and to conduct related training (notice and training) after which there is a need for change

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(execution check). After the program is completed, the process of reviewing whether improper payment occurs in the process of reporting and reviewing performance is added to the settlement process. This is mandatory for high-risk programs, and samples are extracted from medium-risk and low-risk programs. It is necessary to check whether an improper payment is required. An audit on the actual status of improper subsidy payments is added as a regular audit item every year, and for high-risk programs, a certain rate is extracted every year to conduct an audit. We suggest extracting and conducting audits differentially according to the level of risk.

## **2. Countermeasures from a Long-Term Perspective**

There is a need to establish a dedicated organization for the systematic management of improper payments, like the improper payment response headquarters, which serves as the improper payment response expert center under the UK's Cabinet Office and manages the issue of improper payments of subsidies from a long-term perspective. The operation of the integrated subsidy management network is currently under the jurisdiction of the Ministry of Strategy and Finance.

The improper payment response headquarters should play various roles

in relation to the improper payment of subsidies. First, it can be a research and development agency for improper payments, researching the development and evaluation of improper payment risk characteristics, providing education for subsidy and public officials in charge of the program, and promoting academic activities such as holding international forums. Second, it is the on-site inspector for improper payments, carrying out actual management, such as the detailed inspection of performance reports. Third, it supports the subsidy-related committee and provides practical assistance, such as supporting the preparation of necessary legal and institutional arrangements and developing related guidelines and manuals. The establishment of such a dedicated organization is a long-term plan to ensure continuity and efficiency in dealing with the problem of illegal supply and demand for subsidies.

## **V. Conclusion**

As the efficiency of fiscal expenditure is emphasized, management of improper payments has become an important issue, even in state subsidies. In particular, in the case of government subsidy programs, subsidies are more exposed to the risk of improper payment

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because the process involves a multitude of players (ministries, local governments, private sectors) participating and executing various functions through a complex delivery system. However, countermeasures against improper payments so far have only been post-management. Therefore, to establish proactive preventive measures, we suggest a management plan for subsidy programs based on the risk of improper payments.

This study derives the main factors that affect the improper payment of subsidies through an analysis of the management system of the government subsidy program, a case analysis of improper payments, and an expert Delphi analysis. We divided the derived factors into three dimensions and nine detailed characteristics.

The first dimension, management, included the expertise of the subsidy program manager, the number of subsidy program managed by the person in charge, and whether the position was sustained and stable. In the second dimension, structural, the feasibility of the subsidy program, the complexity of

the delivery system, and the weight of the skewed expense appeared to be important characteristics. In the final dimension, the sufficiency of the qualification and the competition, and the adequacy of the selection process in the subsidy programs should be considered.

After evaluating the risk of improper payments by using a checklist consisting of nine characteristics showing the risk of improper payments, the government subsidy program was classified according to risk level into high- and low-risk programs. We presented a management plan in which we suggest programs classified into high-risk groups, after selecting a program operator, additional implementation of improper payment cases and prevention training, mandatory execution and detailed inspection of performance reports, and a plan to conduct regular audits by sampling at a certain rate every year. In addition, we proposed to amend the laws and regulations for these changes and to establish a dedicated organization to handle these tasks in the mid to long term.

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# Korea Institute of Public Administration

## Purpose

KIPA is committed to conduct research on the development and improvement of administrative system.  
It collects and manages information and data related to public administration.  
It aims to contribute to national development by promoting an exchange of information among domestic and overseas research institutes.

## Vision

Vibrant research environment, leading the innovative and inclusive government

## Mission

Propose and support advanced policies through creative administrative research in preparation for the post COVID-19 era



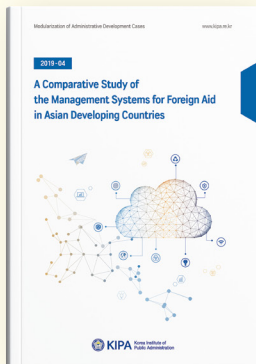
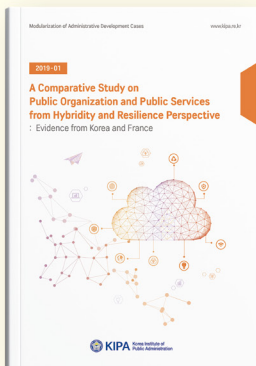
# Modularization of Korean Administration Development Experience



Since 2017, the Korea Institute of Public Administration has developed module series on South Korean policy cases for global audiences and initiated a systemized advanced module, "Modularization of Korean Administration Development Experience," from 2020.

Aims to derive policy implications and suggest avenues for future development to developing countries by sharing South Korea's administrative experiences.

The accumulated modules will serve as benchmarks for growth and government innovation of developing countries and spread South Korea's administrative wave.



# KIPA Public Policy Review (PPR) Call for Papers



The KIPA Public Policy Review, KIPA PPR, is a journal published by the Korea Institute of Public Administration, KIPA. The journal seeks to advance scholarly discourse in public administration and policy and addresses public policy practice by sharing robust policy research findings and best policy practices worldwide.

We encourage policy experts, researchers, academicians from around the world to submit your paper for consideration to be published in the KIPA PPR.

\* Free to publish – no submission fees

## Topics

- Theoretical and research frameworks about topics across the domain of public administration

## Eligibility

- No eligibility requirements apply
  - \* Must not have been published or submitted elsewhere

## Honoraria

- 2,000,000 KRW/manuscript
  - \* For published manuscript only

## Submission

- **Length:** 25 pages including abstract and references
- **Submission Documents:**
  1. Manuscript (in doc or docx file format)
  2. Submission form (must be signed by all authors)
  3. Personal Information Collection and Usage Agreement (must be signed by all authors)
- **E-mail Submission:** [kipappr@kipa.re.kr](mailto:kipappr@kipa.re.kr)
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## Questions & Inquiries

- KIPA PPR Editorial Board  
Tel: 02-2007-0533  
Email: [kipappr@kipa.re.kr](mailto:kipappr@kipa.re.kr)



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# Manuscript Submission Guidelines

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## Instructions for Authors

### 1. GENERAL

The KIPA Public Policy Review, KIPA PPR, is a journal published by the Korea Institute of Public Administration, KIPA. The journal aims to link research and policy in the field of public administration. It further seeks to advance scholarly discourse in public administration and policies and addresses public policy practice by sharing robust policy research findings and best policy practices worldwide.

### 2. PREPARATION OF MANUSCRIPTS

a) KIPA PPR invites manuscripts on, but not confined to, the following topics:

- Policy responses to COVID-19
- State inclusiveness
- Regulations related to the 4th Industrial Revolution
- Open Policy Lab
- Public administration policy.

b) **Format and style of manuscript:**

Manuscripts should be in MS Word format; on letter size (8½" x 11") or A4 size (8.27" x 11.69") with 1" margin all four sides; using 12-point Times New Roman, double-spaced; 20 to 30 pages long. Number all pages consecutively, beginning with page 1 with the title page.

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**c) Manuscript order:**

- i. Title page
  - Title
  - First and last name(s) of author(s)
  - Affiliation(s) of author(s)
  - Address, telephone, e-mail address (for internal purpose)
  - Abstract: each article is to be preceded by a succinct abstract of up to 200 words
  - Keywords
- i. Main text
- ii. References

**d) Terms and symbols:**

All technical terms should be defined; acronyms and abbreviations must be spelled out completely on initial appearance in text.

**e) Tables and figures:**

All tables and figures should be numbered serially, and should be placed near their first mention in the text; all tables and figures must be referred in the manuscript.

**3. INVITED  
MANUSCRIPTS**

The Editorial Board may sometimes invite expert journals/articles in the field of public administration and policy.

Submitted manuscripts are evaluated and reviewed by randomly selected referees. Confidential pertinent comments are brought to the author's attention, but manuscripts are not returned.

The Editorial Board will select manuscripts for publication based on the review results.

**4. REVIEW  
PROCESS**

In cases where submission of revised manuscripts is requested, the authors should support this request and address the referees' concerns. All revised manuscripts must include how the comments are addressed (minor errors do not need to be mentioned). If authors disagree with any of the points raised, adequate justifications must be provided.

The revised version is sent back to the original referees for re-review. However, the final decision for publication will be made by the

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Editorial Board based on the final comments.

## 5. REVISED MANUSCRIPTS SUBMISSION

Submitted manuscript should not be published before (except in the form of abstract or as part of a published lecture, review, or thesis); it is not under consideration for publication elsewhere; all coauthors have approved its publication; the authors agree to automatic transfer of copyright to the publisher of published manuscript; the manuscript will not be published elsewhere in any language without the consent of the copyright holders; written permission of the copyright holder is obtained by the authors for material used from other copyrighted sources; and any costs associated with obtaining this permission are the authors' responsibility.

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Please note that all manuscripts submitted to the KIPA PPR are screened for plagiarism by plagiarism detection software. The manuscripts in which the plagiarism is detected are handled based on the extent of the plagiarism.

**<5-30% Plagiarism:** The manuscript is sent to the author for content revision.

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References are listed in alphabetical order according to the last name of the first author and not numbered.

## 8. REFERENCES

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