Chapter 5

Assessment of the Impact of COVID-19 Social Restriction Policy toward Urban Slum Population's Socio-Economic Condition in Indonesia

Cecep Hermawan & Taufik Kurrahman

A. The Socio-economic Consequences of COVID-19

COVID-19 brought developing countries into disarray as social security systems were unprepared to receive a sudden weight of hospitalizations, unemployment, and alternative education options. Despite the smooth national budget transition, Indonesia faced numerous challenges when implementing a social restriction policy. These challenges can be seen in the poverty gap index for the Jakarta region as the hotspot of the COVID-19 pandemic in Indonesia. In the second semester of 2021 (H2), the poverty gap index reached the number of 0.75 in comparison to H2 2019 at 0.40. The data is synonymous with the number of people living in poverty, which increased by 0.3% between March 2020 and March 2021 (BPS, 2021). The poverty gap index shows the distance between the spending of the poor population

C. Hermawan,* & T. Kurrahman

^{*}Lund University, Sweden, e-mail: cecephermawan9997@gmail.com

^{© 2022} Overseas Indonesian Students' Association Alliance & BRIN Publishing Hermawan, C., & Kurrahman, T. (2022). Assessment of the impact of COVID-19 social restriction policy toward urban slum population's socio-economic condition in Indonesia. In M. A. Hidayahtulloh, I. Jati, & D. Sumardani (Eds.), *Indonesia post-pandemic outlook series: Social perspectives* (73–95). BRIN Publishing. DOI: 10.55981/brin.536.c462 ISBN: 978-623-7425-88-5

against the poverty level reference, indicating that the conditions in most urban slums in Jakarta are more severe than reported.

The urban slums refer to a landscape area defined as systematic consolidation of informal settlements, with informal economies with its market dynamics, which largely escape from government care, and whose otherness is seen as an opposition to the ever-growing urban landscape of the city (Nuissl & Heinrichs, 2013). Urban slums can also be defined by their landscape feature as an area of poor housing, overcrowding, and the most impoverished part of the modern city. The area usually has a flawed education system, goods and services are primarily scarce, inadequate sanitation and occupied mainly by informal workers, and usually a nest for criminal and illegal activity in the city (Mayhew & Penny, 1992; Pangutta et al., 2021). Hence, by these two definitions, urban slums can be seen as the most vulnerable area in governance as they are barely controlled and usually forgotten by government services. This condition causes the high socio-economic vulnerability of slum dwellers, especially during the COVID-19 social restriction policy.

The severe socio-economic impacts on slum dwellers trigger a discussion about the efficiency of social security programs and how the distributional effect of social security programs has seemed to fail to cater to the needs of the existing and newly impoverished populations. Suryahadi et al. (2021) argued that the worsening socio-economic conditions due to COVID-19, which creates a diversified distributional effect on the greater population, cause increased levels of undetected poverty. The lack of coherent data reference could be the reason for various flaws in Indonesia's social security programs in off-setting the socio-economic impact of COVID-19.

The COVID-19 impact can be seen as a phenomenon that undoes Indonesia's economic achievements since the end of the Asian financial crisis in the late 1990s. However, a more severe socio-economic impact is observed in the urban region. While urban slums become more impoverished by the condition, the population on the borderline poor are impoverished due to decreased mobility that stops the

economy partially, if not entirely. This phenomenon is most likely to occur in developing economies. Gerard et al. (2020) explained four reasons why it is harder to handle the COVID-19 economic fallout in the developing economies: (1) more severe economic consequences; (2) government programs have limited scope; (3) many developing countries lack contingency plans, and building the assistance based on the existing underdeveloped social security systems; and (4) some vulnerable populations will remain uninsured due to incoherencies in the data of targeted people.

This chapter argues that this economic vulnerability during the COVID-19 pandemic among urban slum communities is significantly associated with implementing social restriction policy. In addition, the severe economic disturbance which massively strikes the urban slums' dwellers generated other major social issues, such as education and health problems. In this chapter, the impact of the COVID-19 social restriction policy on the urban slum population's socio-economic condition in Indonesia is assessed by further exploring three aspects: (1) the government's policy responses to COVID-19 pandemics during a national-scale social restriction period across three development sectors (economy, education, and health); (2) the impact of a social restriction policy towards urban slum population; and (3) social protection services and resources available for urban slum community.

B. Restriction Policy and Policy Responses

The Indonesian government began to implement a mobility restriction policy in late March 2020 under the name of Large-Scale Social Restriction (*Pembatasan Sosial Berskala Besar*/PSBB), later known as Community Activities Restriction (*Pemberlakuan Pembatasan Kegiatan Masyarakat*/PPKM), with four-level indicators from 1 to 4, with 4 indicating the heaviest restrictions. The social restriction can be seen as a successful move as it eventually reduced people's mobility by 25% in mid-July 2020 (Palma et al., 2022). Indonesia successfully avoided the further surge of COVID-19 cases within the said period. However, there is no back-casting data on the impact of

PSBB and PPKM on public health spending. The restriction policy decelerated the virus's spread within the population during the said period. Furthermore, in the following section, the chapter explores the government's policy responses during the COVID-19 social restriction period from the economic, social, and education perspectives.

Economically, lifting the mobility restriction regulation can be seen as an excellent policy to mobilize the economy to the prepandemic level gradually. However, these policy moves do not equally translate to all demographic groups. Some demographic groups are not recovered after the restrictions are erased. Consequently, there is intersectoral mobility between the formal and informal sectors, where formal workers who failed to retain their jobs during COVID-19 shifted their occupations to informal and part-time (Suryahadi et al., 2021). This transition toward the so-called 'new normal' period is also initially considered premature, as it exposes urban slum community that depends on the public space vulnerable to COVID-19. These rash transitions heavily endanger children and threaten informal workers because they lack resources to protect themselves from unfavorable conditions. The government's social protection programs are often lacking and mismanaged (Kusumaningrum et al., 2021).

However, as the government carried on with the reopening of the social restrictions in June 2020, the government argues that the COVID-19 social protection program, which utilizes National Economic Recovery Fund (*Program Pemulihan Ekonomi Nasional/PEN Fund*), is sufficient to off-setting these externalities arising from the COVID-19 dangers up to January 2022. Table 5.1 shows Indonesia's government PEN Fund allocation and realization in each program.

Table 5.1 PEN Fund Realizations (IDR Trillion)

Initiatives	2020			2021			2022
	Planned	Realization	%	Planned	Realization	%	Planned
Health	99.5	63.5	63.8	215.0	198.5	92.3	122.5
Social Pro- tection	230.2	220.4	95.7	186.6	171.0	91.5	154.8
MSMEs and Corporate Financing	177.0	173.2	97.8	162.4	116.2	71.5	
Priority Programs	67.9	66.6	98.1	117.9	105.4	89.3	178.3
Business Incentives	120.6	56.1	46.5	62.8	67.7	107.7	
Total	695.2	579.8	83.4	744.8	658.6	88.4	455.6

Source: Ministry of Finance (2022)

Several insights can be learned from Table 5.1. First, from the budgeting standpoint, although the social protection programs almost always reach their target of realizations, this does not come without trouble. Despite the government's efforts to assure that the poor population will get social benefits during COVID-19, many parts of these demographic groups are left behind. In the case of DKI Jakarta, there are two main reasons: (1) the incoherent data between the central government and provincial government, which creates an overlap of data and double-benefit errors, and (2) the newly impoverished population that is unregistered within the Ministry of Social Affairs database (Sagala et al., 2021). Consequently, while some families did not receive any social protection program since they are not registered in the Ministry of Social Affairs database, other individuals who either passed away or moved to other regions are still registered in their old residential address. Therefore, it creates a possibility of double counting and mismanagement of the beneficiaries of the social protection packages. Furthermore, the timing of social protection delivery often differs from one district to another due to different bureaucratic processes and other logistical issues. It subsequently leads to budgetary constraints issues, as the number later becomes

inflated, and some goods are halted in warehouses due to unclear data between the government database and the actual beneficiaries in each location (Ao, 2021).

From a public health perspective, the frequently changing regulations appear problematic for COVID-19 management. Several public health experts have warned the government to lift the restrictions by considering various elements such as public health, not only its economic dimension. Some even suggest the government builds an agency similar to the American Center for Disease Control and Prevention (ACDCP) to avoid another future pandemic crisis (Suryarandika, 2021). The fact that Indonesia's COVID-19 cases often fluctuated from time to time further increases the need for better contingency management for future health crises. During the mid-2021, it is proven that Indonesia cannot hold the imported wave of Delta-variant. Consequently, despite the ongoing vaccination efforts, Indonesia was severely hit by the variant. This precedent should have been a lesson for the Indonesian government in handling the most recent COVID-19, the Omicron variant. In early January 2022, Indonesia took a preventative measure to avert the Omicron variant by extending the quarantine period and restricting entry for every foreign citizen, including temporary residence cardholders. However, despite this effort, considering the infection rate of the variant, the Omicron wave seems unavoidable. Hence, it will be back to the social protection measures to ensure that Indonesian citizens are insured during the COVID-19 restriction period. Understanding the social protection policy might distribute differently among demographic groups, it is essential to understand the policy response toward COVID-19 and its potential differential effect on the most vulnerable groups, such as urban slum residents who rely on the public space and government aid for their survival. The following section explains the policy responses in the economic, education, public health, and social protection sector regarding urban slum residents.

1. Policy Responses: Economy

The government's economic response primarily took the form of a national budget adjustment, firstly through the Government Regulation in Lieu of Law No.1/2020 concerning Monetary Policy and Stability of the Financial System in Response to COVID-19. These allocations are later known to become PEN Fund, as discussed previously (Sumarto & Ferdiansyah, 2021).

In the banking sector, the central bank of Indonesia adjusted various kinds of regulations to ease the business during the pandemic. Such laws include decreasing the 7-Day Reserve Repo Rate, mainly used as a reference for interbank lending to help commercial banks in their daily operations and reduce the wholesale lending rate and consumer lending rate. This policy affects the private sector and the middle-class family. They own consumer credit, such as credit cards, in which the regulation for the minimum payment and annual interest rate has been reduced almost by 75% until December 2021 (BI, 2022).

Economic assistance is also a prominent feature in Indonesia's monetary policy response to COVID-19. Besides the financing project for corporations and medium enterprises, the government, in cooperation with the local government, also disbursed cash to the micro-enterprises surviving the economic crisis. The amount is not significant and varies across the region. Nevertheless, it can be seen as little support assistance to help micro-enterprises. Based on the data from one of the local government agencies in Yogyakarta, the micro-enterprises in 2021 can receive the one-sum direct cash aid of IDR 2.4 million (roughly USD 167). The number will increase by 100% from 2020 cash aid (Diskop UMKM Yogyakarta, 2021). However, this number is insignificant as it could probably only let the business float for another one to two operational months. With the one-sum aid every year, it is hard for small businesses to survive. In addition, the lengthy process and numerous administrative requirements could hinder cash aid distribution since small businesses lack information about government programs.

From a more consumer perspective, three innovative economic policy responses affect the general public: accelerating the digital payment system through the increased capacity of the Quick Response Code Indonesian Standard (QRIS), digitalizing the banking services, and rising digital access for the Micro, Small, and Medium Enterprises (MSMEs) by accelerating the network of cooperation between commercial banks and financial technology company (BI, 2021).

Although the MSMEs largely dominate Indonesia's economy, these policies aim to jump-start the national economy by shifting the transaction from pop-up stores closed due to COVID-19 into digital space. However, the impact has a vast distribution factor. On the one hand, economically savvy or versatile entrepreneurs with a good grasp of digital technology can quickly adapt, while the other is lagging. Some evidence from Yusuf (2021) mentioned the distributional impact of Industry 4.0, which will generally benefit the manufacturing industry while leaving the agriculture industry behind. This shows that technological development can be a double-edged sword that needs to be taken seriously; in Indonesia's context, a distributional development factor can become a big issue. Conservatively, this distributional impact on development also reflected by the Gini ratio, which refers to the measure of income distribution across population, where the rural Gini ratio is always worse than the urban Gini ratio. It shows that the distributional impact can affect the development from the demographic perspective (Cameron, 2003).

These policies have a huge potential. However, inter-institution collaborations are still lacking. The dissemination of this technology is not spread well enough, especially to the middle-to-lower economic group. The utilization of this technology could probably make the financial assistance run more smoothly with a higher penetration rate. When it comes to urban slums, the impact could be imminent, as the informal sector is heavily cash-based. The transformation of the payment system for these marginalized populations could alter the journey of social assistance and open-up further opportunities for them. One of the examples of this is India's ICT4D (ICT for Develop-

ment) program, which aims to increase digital stewardship among the people living in urban slums. Its missions include (1) immersing the technology into the society; (2) evolving the socio-technical development; and (3) seeking a fit between the technology and development goals for the area (Rangaswamy and Nair, 2012). This program was a success and something that Indonesia can also follow in developing the quality of life in the urban slums as one of the most vulnerable communities and forgotten parts of the national development.

Further, the number of informal workers increases because of the increased unemployment in younger demographic groups. SMERU Research Institute reported that 1 out of 5 workforces in the younger demographic group were unemployed in 2020, and within this number, diploma and bachelor's degrees holders dominate (Rahman & Fatah, 2021). As the need for technical and digital skills immensely increases, the government put forward the Pre-employment Card (*Kartu Prakerja*), which aims to improve workforce competence by providing free and subsidized courses for these groups.

2. Policy Responses: Education

The significant changes in the education policy revolve around distant education. For this chapter's context, remote education is defined as the learning method where teacher and student are not located in the same location and are instead connected through third-party media, such as computers, smartphones, and other digital interface technology. Right after Indonesia declared a state emergency due to COVID-19 in late March 2020, the Ministry of Education and Culture released a policy that mainly instructs students to conduct distant education activities with relevant technology. This instruction was later supplemented by several incentives for teachers and students. The incentives are primarily in the form of free internet services and funds to procure relevant technologies such as computers for teachers and students who did not have them at the time of the pandemic (Kencana, 2020).

Winata et al. (2021) mentioned four instruction features that could essentially change the general principle of education in Indonesia. First, distant education and learn-from-home program shall not pressure students in terms of curriculum achievement or graduation. Second, the learning-from-home shall also focus on education about the COVID-19 pandemic, such as health measures and introducing the COVID-19 adaptation. Third, school assignments should be contextual based on the students' condition and learning-from-home capability. Finally, the feedback should be done in the form of qualitative measures without having any quantitative measures.

In this context, these changes in education could be a catalyst in providing equitable education for all Indonesian and increasing the quality of education in the non-urban area as high-quality education can be disseminated through online channels. This change could also push students' creativity and increase their willingness to study as the pressures are majorly decreasing.

However, the changes in Indonesia's education system have not come easily. The technological divide across the region remains the biggest challenge. Indonesian Association for Internet Providers (AP-JII) mentioned that only 73.7% of Indonesians had internet access in the second quarter of 2020. A challenge that the government is trying to solve following the COVID-19 distant-education policy (Lidwina, 2021). The implementation will be easy for urban regions, including Jakarta, Bandung, and other cities. However, performance in a remote area is more stagnant. Considering this possibility, the relevant institutions have agreed on several exceptions for these remote regions to have face-to-face classes instead of learning-from-home programs as the technology is not supported, exposing the student to the possibility of catching COVID-19.

3. Policy Responses: Public Health and Social Protection

Social protection programs have taken one of the most significant shares in Indonesia's annual PEN Fund since 2020. In 2022, the allocation for social assistance reached IDR 154.8 trillion, almost 34%

of the total economic recovery fund. The most vulnerable people's aid is distributed through four existing social assistance channels (See Suryahadi et al., 2021). First, Family Hope Program (*Program Keluarga Harapan*/PKH) is a conditional cash transfer targeting a family with a vulnerable family member (child under five years of age, pregnant women, elderly, or persons with disabilities). The second is Non-Cash Food Aid (*Bantuan Pangan Non-Tunai*/BPNT) which provides people with vouchers that can be used for food. Third is Cash Social Assistance (*Bantuan Sosial Tunai*/BST), generally used as the main channel for the COVID-19 unconditional cash assistance. Furthermore, the government introduced the fourth, Direct Cash Aid of the Village Fund (*Bantuan Langsung Tunai-Dana Desa*/BLT DD), or unconditional cash assistance, which utilizes the village fund, in 2015 (Suryahadi et al., 2021). These programs target 70% of Indonesia's 20% poorest households.

The social assistance program undeniably put small reliefs to the most vulnerable population. However, numerous problems occur in the distribution process. They are starting from the embezzlement of the allocated fund in early 2020 to the ongoing problem of data incoherencies about the recipients between the central government with the local governments. However, these administrative issues have a more significant impact on the recipients as many of the poor population are unaccounted for within the government's database for the targeting process.

Besides the distribution issue, Wahyuni (2021) mentioned the issue of logistics and human resources, which are not adaptable to the COVID-19 situations. Social assistance distribution often takes longer than the planning, putting pressure on the vulnerable population. As the custodian of these programs, the Ministry of Social Affairs acknowledged this problem and promised to update the social assistance recipients' data periodically. In addition, state-owned companies are also utilized to accelerate the distribution process. Although there is more to improve, Suryahadi et al. (2021) mentioned that with a high realization rate, the efforts could maintain, if not decrease, the poverty

rate in challenging economic times. By 2021, Pre-employment Card reached 11.4 million workforces across the country and has increased the number of entrepreneurs by 13% since its inception in April 2020 (Mola, 2021). This number further affirms that COVID-19 and its relief do not ultimately return the unemployed workforce to the formal sector, but the shift toward the informal sector is unavoidable.

C. COVID-19 Social Restriction's Impact on Urban Slums

The devastating impact caused by COVID-19 triggered the implementation of social restriction policies in many countries worldwide. As mentioned in the previous section, restriction policies in Indonesia mandated individuals to reduce mobility and stay home except for medical and considerate reasons, education, and work that cannot be remotely performed or exercised, and primary needs shopping (Jacob et al., 2020). To control and minimize the spread of COVID-19, the government established various decisions ranging from stay-home policy, public gathering restrictions, transportation, workplaces, and school closure. Moreover, the large-scale social restriction incorporates not only transportation, school, and business closure but also includes restrictions on mass gatherings, religious activities, public facilities activities, and socio-cultural activities (Purnama & Susanna, 2020; Suraya et al., 2020). Daghriri and Ozmen (2021) highlighted that the social restriction policy minimized the COVID-19 spread by decelerating space and reducing the number of active cases. The COVID-19 transmission, especially at the community level, can be significantly prevented by implementing physical and social distancing policies (Purnama & Susanna, 2020).

Further, the lockdown and social restriction protocols and policies are the most effective strategies to control the virus (Suraya et al., 2020; Dai-Kosi et al., 2021). A study on the impact of social distancing policies on people's mobility and COVID-19 case growth revealed that the social restriction policies significantly reduced people's mobility, where a 5% reduction in people's time spent away from residence able

to decrease 9.2% new cases, and 10% reduction in people's mobility was associated with a decrease of 17.5% new cases (Wellenius et al., 2021). There are great benefits generated by establishing social restriction policies in controlling the virus and reducing death cases. However, the socio-economic disruption caused by the policies cannot be neglected, especially within urban slum communities (Ahmed et al., 2020; Buheji et al., 2020; Mueller et al., 2020).

Urban slums community or slum dwellers refer to the underprivileged people with low-income settlements who lack the primary necessities to sustain a safe and healthy livelihood. Urban slum community is usually associated with socio-economic vulnerabilities, poor housing, insufficient public facilities and social welfare access, overcrowded and unsafe neighborhoods, and a polluted environment (Pongguta et al., 2021). These situations limit slum dwellers from having a quality life in everyday situations. Further, when crises such as the COVID-19 pandemic occur, these communities are susceptible to suffering more and are severely impacted harder than others because of their vulnerability. In addition, it is observed that the urban slum community's ability to comply with the restrictions and rules during the pandemic is significantly limited compared to the developed city areas.

From an economic perspective, most urban slum residents are daily hired workers, small enterprise owners, and private company employees who have high vulnerability and do not have an opportunity for telework. This condition has caused many urban slum residents to lose their jobs and increased the poverty rate since the social restriction policy was implemented (Mueller et al., 2020; Buheji et al., 2020). Meanwhile, from a social perspective, restriction policies caused slum dwellers' education issues. The lack of electricity and internet for households instigated problems toward school children's education within communities that are negatively affecting masses of the young generation for years ahead. Furthermore, the community's health is also disrupted by social restriction policies. The difficulties for urban slum communities to work in the informal sector that do

not have the option to telework generate mental health problems and food insecurities (Pongguta et al., 2021). To overcome these challenges and formulate better problem solving, it is essential to critically discuss the impact of COVID-19 social restrictions on urban slums' socioeconomic life.

1. Social Restrictions Impact on Urban Slums' Economy

Under vulnerable living conditions, slum dwellers are challenged to survive the impact of COVID-19's social restriction policies. Especially in the economic dimension, the social restriction policies caused huge working issues and pushed millions of people into poverty (Auerbach & Thachil, 2020; Sethi & Creutzig, 2021). The data from World Bank showed that in 2020-2021 poverty increased to 97 million people due to the COVID-19 and social restriction policies (Mahler et al., 2021). Especially among the urban slum residents, the vast majority work in the vulnerable informal sectors (Mueller et al., 2020). The informal sector is usually associated with the following categories of work such as domestic work (housekeepers, maids, nannies, and other care providers), home-based work (craft makers, repairers/mechanics, and sub-contractors for factories), street vending (retail kiosk and food stalls), waste picking, construction workers, and factories labors (Baker et al., 2020). These informal workers usually have higher vulnerability because of the lack of workers' protections and labor regulations, high exposure to health and environmental hazards, and lower wages. In this vein, the COVID-19 pandemic worsens the situation by increasing shocks and disruptions. Slum-dwellers working in the informal sector were highly exposed to rapid COVID-19 transmission due to the close contact working environment. Even those who do home-based work are still highly exposed to the crowded urban slums living conditions, making them vulnerable to the virus spread.

Due to the close contact and crowded urban slum working conditions, social restriction policies are formulated to reduce the virus spread. While it is evident that the social restriction policies significantly minimized the COVID-19 spread, they also caused

substantial economic issues for most vulnerable groups, especially those who live in urban slums. As aforementioned, the urban slum residents who are in the majority working in an informal sector are exposed to close contact working environments. The social restriction policies established by the government may constrain the urban slum community's working conditions. Moreover, the lack of opportunities for informal sector workers to telework instigated issues and caused numerous slum dwellers to lose their jobs while also increasing the poverty rate (Mueller et al., 2020; Pangutta et al., 2021). A report from the Central Bureau of Statistics (Badan Pusat Statistik/BPS) found that the poverty rate of urban slum communities is increasing to 13% of the total urban slum population in 2021 (Izzati, 2021). In addition, the social restriction policy also caused higher unavailability of job vacancies which impacted the people economically, especially those who live in urban slums. It is reported that 43.3% of adolescents cannot find jobs to support their lives, and 17.4% cannot secure a job (Baird et al., 2020). Therefore, it is concluded that the social restriction policy negatively impacted people economically, especially in urban slum communities.

2. Social Restrictions Impact on Urban Slums' Education

The COVID-19 social restriction policy disrupts the people's economy and impacts the education quality of young generations. The impact on education is noted as one of the biggest challenges caused by the social restriction policy due to the need to shift the education system built around physical learning into non-physical learning activities. The Organization for Economic Cooperation and Development (OECD) (2020) highlighted that at the peak moment of the COVID-19 outbreak, 1.57 billion students, or 91% of enrolled students in over 188 countries, faced school closures to minimize the virus spread. Pongutta et al. (2021) argued that the social restriction policy constrains youth from accessing proper physical and financial education. These happen because of school closures in high-risk regions and the economic downturn during social restriction periods. Furthermore,

it is recognized that the extended school closures negatively impact youth development because of the isolated condition for education and social interaction (Pongutta et al., 2021).

This negative impact even strikes harder toward marginalized youth and slum dwellers. This condition affects urban slums' populations by widening literacy gaps and inequalities in accessing education. For instance, slum dwellers have lower access to the internet and digital technology, which has become a significant issue for marginalized children living in urban slums, producing inequalities and barriers to educational participation and activities. According to the United Nations Children's Fund (UNICEF), 376 million young generations cannot afford internet access for conducting remote or online learning (UNICEF, 2020). Moreover, the limited engagement in remote learning systems also reduces the quality of education and potentially impacts the students' capability for extended periods. In sum, it is recognized that the social restriction policy negatively impacted the young generations' quality of education, especially those living in urban slums.

3. Social Restrictions Impact on Urban Slums' Health

Besides impacting the economy and education, the COVID-19 social restriction policy threatens the community's well-being and health, with health denoting the physical, social, mental, and spiritual well-being conditions (Vanclay, 2003). Pongutta et al. (2021) highlighted that due to the economic downturn and difficulties during the social restriction period, slum dwellers' health is negatively impacted by mental health problems and food insecurity. A study by Kaiser Family Foundation found that in the United States during the COVID-19 pandemic, 35.8% of adults faced symptoms of anxiety disorder, and 28.4% reported symptoms of depressive disorder (Panchal et al., 2021). Furthermore, prior studies found that during the lockdown and large-scale social restriction, most urban slum communities encountered food issues due to economic constraints (Auerbach & Thachil, 2020), leading to a reduced nutritional status that threatens the community.

Furthermore, the economic constraint facing slum dwellers generates food insecurity issues and is mentally problematic for the community. Prior studies discovered that the stress level significantly increased among those who lived in urban slums during the lockdown period. The stress level is mainly associated with income loss, economic constraints, and self-quarantine mandates (Pongutta et al., 2021). In addition, the crowded urban slums settlement, which instigated closed spaces and close contact with other people, coupled with poor sanitation and unavailability of health services in the remote areas where several urban slum communities live, is worsening their well-being and health (Mueller et al., 2020; Ahmed et al., 2020). Hence, this chapter argues that the COVID-19 social restriction policy negatively affects urban slum community's health and well-being.

D. Conclusion

COVID-19 has a significant distributional impact on the Indonesian population. The economic impact of the pandemic differs across the economic group, with people living in poverty being the most vulnerable. Therefore, the policy response and social protection net should also follow these spread of impacts. The social protection policy and economic incentives during COVID-19 should have been a pareto-efficient policy that benefits all parts of the economy without sacrificing the interest of any actors. However, despite the great effort from the government to realize equitable social and economic protection for its citizens, some vulnerable groups suffered dramatically during the pandemic.

Partly due to a lack of contingency plan in the current governance for facing unforeseen pandemic, followed by incoherent databases of the poor population between the central and local government, the social protection programs which aimed to off-setting the economic impact of COVID-19 failed to reach certain vulnerable groups, including the citizens living in urban slums. These populations are vulnerable from economic, social, and public health perspectives. Moreover, the nature of their economy, which relies on an informal sector, and their

poor living conditions have led to multidimensional problems which require inclusive solutions.

The government has taken steps to restrict and mitigate the spread of COVID-19 by making various decisions. However, inadequate policies that cannot protect people of all economic classes have become a significant issue, particularly for slum dwellers who experience multiple vulnerabilities. The guidelines established by the government generated economic, social, and even health issues in urban slum communities. The root causes of these issues are the insufficient economic incentives received by these communities, lack of support for technological needs, and restriction policies by the government. Therefore, better policies and assistance must be formulated to protect vulnerable communities. The government needs to establish policies that can control and minimize the COVID-19 spread while also considering the concerns of vulnerable communities, i.e., their needs and interests, to survive and improve their well-being. Considering these circumstances, the government can ensure that the pareto-efficient effect provides optimum benefits to all demographic groups.

References

- Ahmed, S. A. K. S., Ajisola, M., & Azeem, K. (2020). Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria, and Pakistan: Results of pre-COVID and COVID-19 lockdown stakeholder engagements. *BMJ Global Health*, 5, 1–17. https://doi.org/bmjgh-2020-003042
- Ao, W. (2021). Menelusuri masalah pendataan warga penerima bansos COVID-19 di Trenggalek. *Kabar Trenggalek*. https://kabartrenggalek. com/2021/12/menelusuri-masalah-pendataan-warga-penerima-bansos-COVID-19-di-trenggalek.html
- Auerbach, A. M., & Thachil, T. (2021). How does COVID-19 affect urban slums? Evidence from settlement leaders in India. *World Development*, 140, 1–11. https://doi.org/10.1016/j.worldrev.2020.105304
- Baird, S., Jones, N., Seager, J., & Tauseef, S. (2020). The effect of COVID-19 on economic participation and human capital development of youth living in urban slums in Bangladesh. Innovations for Poverty Actions.

- https://www.poverty-action.org/study/effect-COVID-19-economic-participation-and-human-capital-development-youth-living-urban-slums
- Baker, J., Cira, D., & Lall, S. (2020). COVID-19 and the urban poor addressing those in slums. World Bank Group. https://thedocs.worldbank.org/en/doc/304801589388481883-0200022020/original/AddressingCOVID19andtheUrbanPoorSHORTversionrev3logos.pdf
- BI (2021). *Laporan perekonomian Indonesia 2020*. https://www.bi.go.id/id/publikasi/laporan/Pages/LPI_2020.aspx
- BPS. (2021 July 15). *Profil Kemiskinan di Indonesia Maret 2021*. https://www.bps.go.id/pressrelease/2021/07/15/1843/persentase-penduduk-miskin-maret-2021-turun-menjadi-10-14-persen.html
- Buheji, M., Cunha, K. C., Beka, G., Mavric, B., Souza, Y. L. C., Silva, S. S. C., Hanafi, M., & Yein, T. C. (2020). The extent of COVID-19 pandemic socio-economic impact on global poverty. A global integrative multidisciplinary review. *American Journal of Economics*, 10(4), 213–224. https://doi.org/105923/j.economics.20201004.02
- Cameron, L. (2003). Growth with or without equity? The distributional impact of Indonesian development. *Asian-Pacific Economic Literature*, 16(2), 1–17. https://doi.org/10.1111/1467-8411.00119
- Daghriri, T., & Ozmen, O. (2021). Quantifying the effects of social distancing on the spread of COVID-19. *International Journal of Environmental Research and Public Health*, 18(11), 1–17. https://doi.org/10.3390/ijerph18115566
- Dai-Kosi, A. D., Acquaye, V. A., Pereko, K. K. A., Blankson, P., & Ackom, C. (2021). The impact of COVID-19 social restrictions on culture and psychosocial well-being: The Ghanaian experience. In *Mental health effects of COVID-19* (pp. 103–115). Academic Press.
- Diskop UMKM Yogyakarta (2021). *Ini cara ajukan program bantuan bagi pengusaha mikro (BPUM) 2021*. Diskop UMKM Yogyakarta. https://dinkopumkm.patikab.go.id/berita/detail/ini-cara-ajukan-programbantuan-bagi-pelaku-usaha-mikro-bpum-2021
- Gerard, F., Imbert, C., & Orkin, K. (2020). Social protection response to the COVID-19 crisis: Options for developing countries. *Oxford Review of Economic Policy*, 36(Supplement_1), 281–296. https://doi.org/10.1093/oxrep/graa026
- Izzati, R. A. (2021). *Indonesia's poverty situation during the COVID-19 pandemic*. SMERU Research Institute. https://smeru.or.id/en/content/indonesia's-poverty-situation-during-COVID-19-pandemic

- Jacob, S., Mwagiru, D., Thakur, I., Moghadam, A., Oh, T., & Hsu, J. (2020). Impact of societal restrictions and lockdown on trauma admissions during the COVID-19 pandemic: A single-center cross-sectional observational study. ANZ Journal of Surgery, 90(11), 2228–2231. https://doi.org/10.1111/ans.16307
- Kencana, M. R. B. (2020, November 26). Optimisme tenaga pendidik usai peroleh berbagai insentif dari pemerintah. Liputan6.com. https://www.liputan6.com/bisnis/read/4418148/optimisme-tenaga-pendidik-usai-peroleh-berbagai-insentif-dari-pemerintah
- Kusumaningrum, S., Siagian, C., & Beazley, H. (2021). Children during the COVID-19 pandemic: children and young people's vulnerability and wellbeing in Indonesia. *Children's Geographies*, 1–11. https://doi.org/10.1080/14733285.2021.1900544
- Lidwina, A. (2021, August 5). *Ekonomi digital Indonesia terganjal pemerataan adopsi internet*. Katadata. https://katadata.co.id/ariayudhistira/analisisdata/610a57cd5f37d/ekonomi-digital-indonesia-terganjal-pemerataan-adopsi-internet
- Mahler, D. G., Yonzan, N., Lakner, C., Aguilar, R. A. C., & Wu, H. (2021). *Updated estimates of the impact of COVID-19 on global poverty: Turning the corner on the pandemic in 2021?*. World Bank Group. https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-turning-corner-pandemic-2021
- Mayhew, S., & Penny, A. (1992). Concise Oxford dictionary of geography. Oxford University Press.
- Ministry of Finance. (2022). *Program PEN*. https://pen.kemenkeu.go.id/in/home
- Mola, T. (2021). Program kartu prakerja diklaim sebagai keberhasilan 2 Tahun Jokowi-Ma'ruf. Bisnis.com. https://kabar24.bisnis.com/read/20211023/15/1457404/program-kartu-prakerja-diklaim-sebagai-keberhasilan-2-tahun-jokowi-maruf
- Mueller, J. T., McConnell. K., Burow, P. B., Pofahl, K., Merdjanoff, A. A., & Farrell, J. (2020). Impacts of the COVID-19 pandemic on rural America. *Proceedings of the National Academy of Sciences of the United States of America*, 118(1), 1–6. https://doi.org/10.1073/pnas.2019378118
- Nuissl, H., & Heinrichs, D. (2013). Slums: Perspectives on the definition, the appraisal, and the management of an urban phenomenon. *DIE ERDE-Journal of the Geographical Society of Berlin*, 144(2), 105–116. https://doi.org/10.12854/erde-144-8

- OECD. (2020). The impact of COVID-19 on student equity and inclusion: Supporting vulnerable students during school closures and school reopenings. OECD.
- Palma, A. D., Vosough, S., & Liao, F. (2022). An overview of effects of COVID-19 on mobility and lifestyle: 18 months since the outbreak. *Transportation Research Part A*, 159, 372-397. https://doi.org/10.1016/j. tra.2022.03.024
- Panchal, N., Kamal, R., Cox, C., & Garfield, R. (2021). *The implications of COVID-19 for mental health and substance use*. Kaiser Family Foundation. https://www.kff.org/coronavirus-covid-19/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/.
- Pongutta, S., Kantamaturapoj, K., Phakdeesettakun, K., & Phonsuk, P. (2021). The social impact of the COVID-19 outbreak on urban slums and the response of civil society organizations: A case study in Bangkok, Thailand. *Heliyon*, 7, 1–8. https://doi.org/10.1016/j. heliyon.2021.e07161
- Purnama, S. G., & Susanna, D. (2020). Attitude to COVID-19 prevention with large-scale social restrictions (PSBB) in Indonesia: Partial least squares structural equation modeling. *Frontier Public Health*, 8, 1–10. https://doi.org/10.3389/fpubh.2020.570394
- Rahman, M. A., & Fatah, A. R. (2021). *Urgensi peningkatan daya saing tenaga kerja muda selama pandemi COVID-19*. SMERU Research Institute. https://smeru.or.id/id/content/urgensi-peningkatan-daya-saing-tenaga-kerja-muda-selama-pandemi-COVID-19
- Rangaswamy, N., & Nair, S. The PC in an Indian urban slum: enterprise and entrepreneurship in ICT4D 2.0. *Information Technology for Development*, 18(2), 163–180. https://doi.org/10.1080/02681102.201 1.643211
- Sagala, S., Azhari, D., Rosyidie, A., Annisa, S. N., Ramadhani, A. K., Vicri, R. N., & Mahardika, M. D. (2021). COVID-19 in Indonesia: An analysis of DKI Jakarta's COVID-19 pandemic response and its governance during the new normal period. *The First International Conference on Social Science, Humanity, and Public Health*, 514, 185–191. https://doi.org/10.2991/assehr.k.210101.041
- Sethi, M., & Creutzig, F. (2021). COVID-19 recovery and the global urban poor. *NPJ Urban Sustainability*, *1*(23), 1–5. https://doi.org/10.1038/s42949-021-00025-x

- Sumarto, M., & Ferdiansyah, F. (2021). Indonesia's social policy response to COVID-19: Targeted social protection under budget constraints. *Global Dynamics of Social Policy*, 28, 3–12.
- Suraya, I., Nurmansyah, M. I., Rachmawati, E., Al Aufa, B., & Koire, I. I. (2020). The impact of large-scale social restrictions on the incidence of COVID-19: A case Study of four provinces in Indonesia. *Jurnal Kesehatan Masyarakat Nasional*, 1, 49–53. https://doi.org/10.21109/kesmas.v15i2.3990
- Suryahadi, A., Al Izzati, R., & Suryadarma, D. (2020). Estimating the impact of COVID-19 on poverty in Indonesia. *Bulletin of Indonesian Economic Studies*, 56(2), 175–192. https://doi.org/10.1080/00074918. 2020.1779390
- Suryahadi, A., Al Izzati, R., & Yumna, A. (2021). The impact of COVID-19 and social protection programs on poverty in Indonesia. *Bulletin of Indonesian Economic Studies*, *57*(3), 267–296. https://doi.org/10.1080/00074918.2021.2005519
- Suryarandika, R. (2021). Aliansi ilmuwan: Indonesia harus punya CDC seperti Amerika. *Republika*. https://www.republika.co.id/berita/qyrd8o414/aliansi-ilmuwan-indonesia-harus-punya-cdc-seperti-amerika
- UNICEF. (2020). Protecting the most vulnerable children from the impact of corona virus: An agenda for action. UNICEF. https://www.unicef.org/coronavirus/agenda-for-action
- Vanclay, F. (2003). International principles for social impact assessment. *Impact Assessment and Project Appraisal*, 21(1), 5–12. https://doi.org/10.3152/147154603781766491
- Wahyuni, D. (2021). Permasalahan penyaluran bantuan sosial masa pemberlakuan pembatasan kegiatan masyarakat. Info Singkat. Pusat Penelitian Badan Keahlian DPR RI. https://berkas.dpr.go.id/puslit/files/info_singkat/Info%20Singkat-XIII-15-I-P3DI-Agustus-2021-218.pdf
- Wellenius, G.A., Vispute, S., Espinosa, V., Fabrikant, A., Tsai, T. C., Hennessy, J., Dai, A., Williams, B., Gadepali, K., Boulanger, A., Pearce, A., Kamath, C., Schlosberg, A., Bendebury, C., Mandayam, C., Stanton, C., Bavadekar, S., Pluntke, C., Desfontaines, D.,... Gabrilovich, E. (2021). Impacts of social distancing policies on mobility and COVID-19 case growth in the US. *Nature Communication*, *12*(1), 3118. https://doi.org/10.1038/s41467-021-23404-5

- Winata, K. A., Zaqiah, Q. Y., Supiana, & Helmawati. (2021). Kebijakan pendidikan di masa pandemi. *Ad-Man-Pend: Jurnal Administrasi Manajemen Pendidikan*, 4(1), 1–6. https://doi.org/10.32502/amp. v4i1.3338
- Yusuf, A. A. (2021). The impact of Industry 4.0 on the Indonesian economy: A general equilibrium assessment. *Regional Science Policy & Practice*, 13(6), 1805–1824. https://doi.org/10.1111/rsp3.12463