

# Responding to Social Disruptions and Urban Complexities in Post-Pandemic Dhaka Using Resilience Framework: Implications for Low-Income Urban Populations

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## Abstract

*Social, economic, and spatial inequalities are not unknown in megacities like Dhaka, which have a degree of urbanization that could be termed “hyperurbanization” or “overurbanization.” Currently, Dhaka is the home of almost 18 million people and, prior to COVID-19, the population grew, mostly by the rural-urban migrants, by thousands of people every day. In Bangladesh, various natural hazards, food insecurity, low-investment, and policy priorities in rural areas have played a major role in mass-scale rural-urban migration. COVID-19 has brought a new reality. Despite an initial effort, the state is not in a position to provide food and other resources to its citizens for the duration of the pandemic. An increased rate of employment loss and decreased salary, along with poor-management of government response and emergency assistance to the people who are in need have complicated the overall scenario. All of these factors have contributed to the situation of deurbanization. During the COVID-19 pandemic, thousands of low-income people have left this megacity, where they once came to pursue their dreams, and returned to their home villages. Even though going back to rural origins is not a defeat for all, overall prospects are not very promising in their villages, either. Many of these people might experience long-term poverty traps, with no adequate employment or livelihood opportunities. Some see this “deurbanization” as an opportunity to ease Dhaka’s population strain; however, the deurbanization process might create a deep scar in the post-COVID economy, including the nation’s capacity to achieve the United Nations Sustainable Development Goals (UNSDGs) by 2030. Using the core arguments of resilience, this article provides critical insight on the management of urban complexity and social disruptions in post-pandemic Dhaka. Even though this article has a geographical focus, it has broader policy relevance to other cities in the Global South that are facing similar challenges.*

**Keywords:** deurbanization; megacity Dhaka; pandemic; planning; resilience

## Introduction

With an estimated population of 18 million, Dhaka is the political, social, and economic capital of Bangladesh (United Nations, 2018a). In recent decades, it has emerged as one of the major megacities in the Global South. Even though the city

is over 400 years-old, Dhaka has experienced its phenomenal growth since 1971, when it became the capital of a sovereign nation (Afsar & Hossain, 2020). The city will continue its growth, which is also reflected in the UN prognosis that predicts Dhaka will have approximately 28 million people by 2030

(United Nations, 2018b). Currently, it is one of the most densely populated cities in the world. The benefits of urbanization, however, are not equally distributed among the vast majority of low-income working-class urban residents (Ahmed, 2020) who live in substandard conditions.

Nevertheless, this unequal development and distribution of opportunities could not stem the overall growing trend of rural-urban migration, which has been fueled by natural population growth as well as by a growing number of rural to urban migrants, and can be seen in Dhaka. On average, 300,000 to 400,000 people permanently migrate to Dhaka every year (World Bank, 2007), and a majority end up living in various substandard informal settlements (Ahmed & Rahaman, 2014). These rural-urban migrants drive the majority of the urban informal economy, providing low-cost labor in construction and other service sectors.

Even prior to their rural-urban migration, a large share of these migrants faced various natural hazards in the countryside since Bangladesh is one of the most natural disaster-prone poor nations in the world. In different parts of the country, people are continuously exposed to sea level rise, tropical cyclones, flashfloods, riverbank erosion, coastal flooding, salinity intrusions, and a major variation of rainfall patterns. All of these contribute to the loss of livelihoods, income, and economic hardship, and fuel human suffering in rural areas.

In addition, rural areas usually receive lower policy and investment priorities in Bangladesh. Lack of adequate employment opportunity is among the top local economic problems. Therefore, economically distressed rural populations tend to migrate to nearby cities or to the capital, Dhaka. Many of these low-income rural-urban migrants end up living in substandard conditions where density is exceedingly high (Ahmed & Rahaman, 2014).

During the ongoing COVID-19 pandemic, many of these low-income

people have faced even greater challenges due to loss of their subsistent income and employment. At the same time, many of them received minimal government support (Alam, 2020). Maintaining physical distancing or remaining in lockdown is almost impossible. Even though the geographical focus of this article is Dhaka, the scenarios for the majority of world's urban population, particularly in the low-income Global South, are not very different (United Nations, 2020). The substandard densely-populated living conditions have proved to be a major factor affecting people during the ongoing global pandemic.

The ongoing pandemic has already exposed existing social, economic, and spatial inequalities in Dhaka, which can further deepen urban suffering even in a post-pandemic period. Despite government efforts to provide the economic assistance needed for recovery from the ongoing pandemic, a large share of economic supports was earmarked for major economic sectors. Criticism suggests that only a few were directly targeted for the working-class populations, who are struggling for their day-to-day survival.

As a response, thousands of low-income urban dwellers from Dhaka left or are in the process of leaving for their village of origin (Ali & Amin, 2020). In most cases, there are no promising futures waiting for them in their ancestral locations, and many of them might enter a long-term poverty trap (UNDP, 2020).

However, some residents of Dhaka might see this deurbanization process as an opportunity to ease population strain on this densely populated city. The question that remains unanswered is, How will the

process of depopulation and deurbanization in cities like Dhaka impact the post-pandemic economic recovery, when the cities might, once again, require a tremendous formal and informal labor force. Since deurbanization can potentially create long-term poverty in some areas and it decentralizes the population, the process creates a new challenge for how nations respond to increasing poverty and alter their efforts to achieve long-term development goals like the United Nations Sustainable Development Goals (UNSDGs).

To address these complex development issues during and after the ongoing COVID-19 global pandemic, this article uses the theoretical lens of resilience, and provides insights into how to manage social disruption and urban complexity in post-pandemic Dhaka. In addition to its relevance to Dhaka, these insights are relevant to other cities in the Global South that are facing similar challenges.

## COVID-19 Reality in Megacity Dhaka

For the low-income urban population, COVID-19 brought a new reality. Suddenly, they experienced orders from the government to stay at home, causing them to face a radical decrease in various urban economic activities and opportunities. The government announced what would be the first lockdown in March 25, 2020. In total, there were 66 days of lockdown in 2020 (BanglaNews24, 2021a). During that lockdown, there were some major policy mismatches in government-level decision making.

First, they announced this lockdown as “general holiday” (BanglaNews24, 2020). People misinterpreted this

announcement and thought it referred to their vacations. In response, a major portion of urban population moved to their rural countryside origins, which eventually contributed to the spread of the COVID-19 pandemic across the country. Second, the government tried to keep open the garment industries, which employ thousands of people and thus are also a major source of national income (Karim, 2021). Later, the government decided to close these factories, which created confusion among the majority of the country's population. Then, given the rapid surge of affected people in March and April 2021, the government was forced to announce another lockdown, but this time, several industries remained open (BanglaNews24, 2021a).

In the early months of 2020, people in Dhaka and other urban areas in Bangladesh were cautiously observing the pandemic outbreak and economic situation. However, without having any major savings or social security supports, low-income urban residents were forced to go to work daily to maintain their income. For them, a stay-home order or a city-wide lock down was not a viable option (Alam, 2020). People struggled with and sometimes defied public health instructions from government sources. One individual who worked daily reported: "My children have become anxious without food. Arranging for each meal is a worry, one has to worry about arranging breakfast, about arranging lunch." (Telephone interview with Daily Worker, May 12, 2020)

Given the bind many low-income working-class residents found themselves in, they came out of their homes, disregarding government orders, to find work. By June and July of 2020, when the pandemic

started to unfold in this densely crowded, low-income country, non-coordinated and random reactive responses were all around the country (Anwar et al., 2020). People, in general, experienced a massive panic. However, for low-income urban residents, going outside their homes for daily work became a choice between life (safety from contracting COVID) and livelihood (income for providing food and essentials). Sadly, at that point, there were not many opportunities for work since everything was scaled down to a minimum by then (Pain & Devereux, 2020).

Without food, income, or any other livelihood opportunities, many low-income urban residents had only one option left: return to their rural origins (Ahamad, 2020). People in Dhaka started to experience the deurbanization process beginning in June 2020, an unusual phenomenon for most of the city's residents. For the first time, they experienced population out-migration, the opposite of what had become the norm—an ever-increasing in-migration and explosion of the city's population.

At the beginning of the pandemic outbreak, the government tried to provide some emergency food support to its distressed poor citizens. During the lockdown that began April 5, 2021, the government also allocated 5,720 million taka (1 USD = ~85 Taka) (BanglaNews24, 2021b). This money will be distributed to 12,441,900 families under the coverage of the nation's vulnerable group feeding. However, it is not possible for the government to continue this type of support for longer periods. In addition, despite government initiatives, corruption at the local level has undermined the effectiveness of emergency supports. Therefore, without employment or alternative income opportunities,

people will continue to face increasing hunger, malnutrition, and poverty during the COVID-19 pandemic (Rashid et al., 2020).

## Deurbanization and Deepening Poverty during the Pandemic

The deurbanization process in Dhaka during the COVID-19 pandemic did not start in a vacuum; years of social, economic, political, and environmental marginalization of low-income urban poor fueled this process. Spatial manifestations of urban poverty are pervasive in all parts of urban lives (Ahmed & Rahaman, 2014). Some people initially thought that this deurbanization process would be helpful for the city since it has been overburdened with its population size and density. The deurbanization process, in theory, could help to lessen the pressure of excessive urban density and to improve quality of life in the city. However, at the same time deurbanization could create challenges on two fronts: first in urban contexts, and second in rural contexts.

Firstly, both formal and informal urban economies are usually supported by the active engagement of low-income urban poor. They are an integral part of urban economy and fuel the city's continuing economic growth and prosperity (Afsar & Hossain, 2020). An ongoing deurbanization process could create a lack of available work force to recover and sustain Dhaka's complex urban economy in the post-pandemic period. Secondly, in the rural context, the situation could be even worse. Many rural families at least partially depend on the incomes earned by their immediate or extended family members in urban areas (Ahmed & Eklund, 2021).

During this ongoing pandemic, people lost their employment in urban formal and informal sectors so less money could be sent home, creating economic and social strains in the rural economies. In addition, the deurbanization process is returning former residents to the countryside, effectively adding new people to an already struggling rural economy. At the same time that the added population in rural areas needs food, shelter, and health support, along with many other basic services, the nation is experiencing a severe crisis due to the pandemic. However, the rural economy, particularly during the pandemic, is not robust enough to provide services or opportunities for the newly added population (Mohammad, Truong, & Sonobe, 2021). Poverty and hunger are on the rise (Vatican News, 2020). Since many rural communities are also exposed to various weather and climate-related crises (e.g., floods, riverbank erosion, rainfall variability), increased poverty and hunger will make people more vulnerable to natural hazards than ever before.

The entire story is not bleak, however. Part of this new rural population might be able to use their entrepreneurial skills to contribute to their local economy. It is nevertheless not entirely clear how this process would work in a rural context once the pandemic is over.

Current government policies on COVID-19 response are somewhat confusing. As of early 2021, Dhaka has experienced another wave of virus transmission, now labeled the third wave of COVID-19. Even though the rate of affected people is higher than the first or second waves, the government has no intention to shut down the economy or the cities. Several top govern-

ment executives have mentioned that Bangladesh's economy is not strong enough to withstand another round of shutdown (Haider & Hasan, 2021). Even though the government is trying, in its maximum capacity, to make sure its citizens get vaccinated, it is aiming to achieve some level of herd immunity so that the nation and its economy can return to some form of normalcy.

### Resilience at the Time of Destabilization

Some cities in the Global South are often blamed for their shortsighted planning, despite their efforts to manage various urban challenges (Ahmed, 2020). Most of the planning and development interventions have been aimed at increasing economic growth. However, those interventions categorically overlook systemic social, economic, and spatial inequalities (Ahmed & Meenar, 2018); concepts of social justice and inclusive development have often been under-prioritized. The needs and voices of low-income marginalized people have not been reflected in the decision-making process (Ahmad, 2020). The ongoing pandemic has made this legacy even more complex.

At this stage, it is important to address how cities like Dhaka can move toward a more inclusive urbanization, one in which opportunities are available to a majority of its citizens. To pursue inclusive urbanization in the post-pandemic time, renewed thinking about planning and policy is required to address increasingly complex urban challenges. It is, therefore, important to embrace the urban complexity through the theoretical lens of resilience by recognizing cross-scale and cross-sectoral interactions.

Even though resilience can be defined as a stand-alone concept, it is

important to grasp the concept of stability, which refers to a condition or tendency of a system to return to a position of equilibrium when facing any disturbances (Ludwig et al., 2002). Various phenomena can affect the stability of a system (Carpenter et al., 2002). During the COVID-19 pandemic, the stability of peoples' livelihoods has been impacted by the sudden closure of the national economy. When life becomes destabilized, the importance of resilience becomes even more apparent.

The concept of resilience has been defined in two different ways, which highlight two different aspects of stability. One definition emphasizes efficiency, control, constancy, and predictability, all of which imply a desire for fail-safe design and optimal performance even in times of disturbance or crises. However, those desires are appropriate for systems in which sustainability or stability is low; the process can be counter-productive for any dynamic, evolving systems in which variability and novelty result in high levels of uncertainty. Scholars like C. S. Holling have referred to this as engineering resilience (Holling et al., 2002).

Addressing the ongoing pandemic crisis, another definition of resilience appears to be more appropriate, one that stresses the importance of persistence, adaptivity, variability, and unpredictability. This overall process of resilience emphasizes conditions that are far from any equilibrium state, where instabilities can change a system into another regime of behavior, or stability domain (Holling, 1973).

In this case, resilience can be measured by the magnitude or scale of disturbance that can be absorbed before the system changes its

structure or integrity by changing the variables and process that controls its behavior (Holling & Gunderson, 2002). In the context of urban areas, this means that resilience is not just a defensive system in place to minimize disruption during any human-made or natural crisis; rather, it is an opportunity for transformation and advancement.

The concept of resilience highlights the need to understand the system from a holistic perspective, which makes systems thinking more appropriate than any time before. Systems thinking is the interdisciplinary and integrated study of social, economic, political, environmental, infrastructural, and informational systems. This holistic approach provides the ability to comprehend the interconnectedness and interdependencies needed to achieve a desired outcome, particularly, those which are complex or wicked in nature (Stroh, 2015).

The challenges associated with the COVID-19 pandemic illustrate that it is a wicked problem and involves various aspects of society, environment, and economy. The challenges that societies are now facing during the pandemic, in most cases, are multidimensional in nature, and therefore require the engagement of multiple stakeholders to address multiple causal-effect equations and focus on multidimensional symptoms that can affect urban livelihoods and at the same time, allow multiple solutions to emerge.

Meanwhile, since the situation of the pandemic is constantly evolving, it becomes challenging to form wise answers that will not cause further social disruptions, but rather will create new opportunities that can pave paths toward recovery from the

despair experienced during the pandemic. Fragmented, piecemeal efforts will not help. Rather, creative, flexible, and adaptive planning and development interventions can help communities bounce back to an inclusive, humane, and resilient condition.

It is easy to conclude that a resilience framework using the deep understanding of systems thinking can equip planners and policy makers with the insights, judgment, and skills needed to consider resilience. The framework includes interactions, processes, synergies, and trade-offs between various subcomponents at multiple levels that are critical for resilient livelihoods both in rural and urban areas.

### Policy Response

During the pandemic, we have seen that governments in many societies have failed to act in a coordinated manner, mostly because of the lack of an institutional framework to promote resilience that can support polycentric initiatives that engage various stakeholders. Rather, it has been shown that during the pandemic, democratic space and the appreciation of inclusivity and polycentrism in the decision-making process was compromised (Repucci & Slipowitz, 2020). Centralized efforts without the engagement of people or stakeholders at various scales can have limited outcomes.

To address the social disruption and urban complexity during this pandemic, cities like Dhaka can respond in two different ways. Planners and policy makers can focus on renewal and novelty, or others can pursue buffering themselves from any negative change (Gunderson et al., 2002). In the latter case, inequality

will exist through the urban veins, which can further amplify existing vulnerabilities in post-pandemic times or during any other future crises.

Despite the social, economic, political, and environmental damage caused by the pandemic, this crisis has also brought the opportunity to revisit conventional urban strategies that have been used for generations in many parts of the world. If managed properly by creating the social, economic, and political space for polycentric and inclusive processes, unpredictable new opportunities may appear at the core of sustainable development (Holling, 1994).

Uncertainty is becoming increasingly common in modern-day social, economic, political, and environmental systems. Often the nature of uncertainties is nonlinear, unpredictable, and unknown for the decision makers. However, when an unprepared system confronts any form of uncertainty, the outcome often results in large-scale panic, crisis, and human and economic loss. Governments should be prepared for unknown-unknowns, so that in a time of crisis, systems do not fall apart, but retain the core functions of the social and economic systems.

Since modern-day uncertainties are often nonlinear and unpredictable, it is important to embrace the components of uncertainties as part of society's most predictive planning and response. Proactive planning and development interventions should be integral to national or regional-level planning processes. Since people's mobility and livelihood are not restricted to a specific space, urban planning should embrace and acknowledge the rural-urban connectivity of people, goods, and information and regional dimensions of growth, change, and development.

Ultimately, the major obstacles to any form of sustainable development in the post-pandemic period can be reduced to three basic categories: willingness, understanding, and capacity (Gallopín, 2002). The first obstacle is a lack of political will to implement changes that are critically important. Existing asymmetric power structures in society; vested interests of social, economic, and political elites; and conceptions by humankind that emphasize hatred or hostility, unfair and unequal competition, and egoistic individualism over cooperation and solidarity are at the core of society's struggle to achieve resilient and inclusive development.

Even in cases where political will is present, another obstacle may be a lack of understanding about the nature and features of the complex systems driving, or could be driving, social disruptions and urban challenges during and after the pandemic. This lack of understanding of these complex but dynamic systems can result in a failed attempt to address the relevant linkages within and between systems across scales and at a time when resilience is most needed. Finally, lack of financial and institutional capacities, weak infrastructure, rampant poverty, and other social and cultural limitations can contribute to the insufficient capacity to perform the actions and changes needed during or after the time of the crises.

## Conclusion

Social disruptions and urban complexities, including inequality, are on the rise. It has been shown that our practiced mantra regarding development and the process of achieving sustainability and resilience needs some additional reflection related to social justice, inclusivity, and sustain-

ability. Responding to rising urban inequalities requires an understanding of the complex interrelations of various social, economic, political, and environmental factors on various scales. In recent decades, most countries like Bangladesh had no prior experience tackling a pandemic at this scale. In their immediate response in the early days of the pandemic, the government response was fragmented and reactive. Because of poor institutional capacity, many of its efforts proved to be shortsighted and have been criticized for lack of transparency and accountability. The early response can be also criticized for corruption at various levels of the government. A renewed thinking about policy and planning is necessary, and using resilience as the core of recovery and growth that is sustainable and inclusive in nature, will provide opportunities for all, not just a few urban elites.

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