IRP was established following the Second UN World Conference on Disaster Reduction in Kobe, Hyogo, Japan, in 2005 to support the implementation of the Hyogo Framework for Action (HFA) by addressing the gaps and constraints experienced in the context of post-disaster recovery. After a decade of functioning as an international source of knowledge on good recovery practice, IRP has been focusing on more specialized role as an “international mechanism for sharing experience and lessons associated with build-back-better”. In the context of the Priority Four of the Sendai Framework for Disaster Risk Reduction 2015-2030, IRP seeks to strengthen its global position as a recognized provider of information, including lessons and best practices in the field of build-back-better in recovery, rehabilitation, and reconstruction. Its vision, mission and goals reflect this specific focus.

Disclaimer: The findings, interpretations, and conclusions expressed in this document do not necessarily reflect the views of IRP members, observers, partners, and governments. The information and advice contained in this publication is provided as general guidance only. Every effort has been made to ensure the accuracy of the information. This policy brief may be freely quoted but acknowledgment of source is requested.

Copyright © International Recovery Platform 2020
First published June 2020

COVID-19 Recovery Policy Brief was developed by the International Recovery Platform (IRP) with financial support from the Cabinet Office, Government of Japan.

IRP Secretariat is coordinated by the UNDRR Office in Japan

Cover photo credit: “Tirusew Getachew, a Social Worker interviews a young girl who recently deported from Saudi Arabia amid the COVID-19 crisis.” by NahomTesfaye/UNICEF Ethiopia, licensed under CC BY-NC-ND 2.0
TABLE OF CONTENTS

INTRODUCTION ................................................................................................................................................................................................ 4
COVID-19 Overview and Recovery Context ........................................................................................................................................ 4

COVID-19: EIGHT PRINCIPLES FOR RECOVERY ........................................................................................................................................ 6
Principle 1: Recovery must begin during the ongoing response ........................................................................................................... 6
Principle 2: Inclusive, people-centered recovery to leave no one behind .................................................................................................. 6
Principle 3: Transparent evidence-based decision-making ....................................................................................................................... 7
Principle 4: Build back better (BBB) and greener ................................................................................................................................. 7
Principle 5: Preserve development gains .................................................................................................................................................. 8
Principle 6: Greater regional and global solidarity ..................................................................................................................................... 8
Principle 7: Institutionalize effective coping mechanisms ...................................................................................................................... 9
Principle 8: Effective risk communication ............................................................................................................................................... 9

NINE KEY ACTIONS FOR GOVERNMENT ............................................................................................................................................ 10
Action 1: Establish pandemic recovery coordination and implementation arrangements ............................................................ 10
Action 2: Assess the wider socioeconomic impacts of the crisis and the capabilities to manage needs ................................................. 11
Action 3: Ensure safe and healthy workplaces ......................................................................................................................................... 11
Action 4: Institute or provide guidance on societal recovery .................................................................................................................. 13
Action 5: Plan for a comprehensive economic recovery ...................................................................................................................... 14
Action 6: Promote livelihoods recovery and expansion ......................................................................................................................... 14
Action 7: Rehabilitate and strengthen the medical and public health sectors ........................................................................................... 15
Action 8: Support psychosocial recovery ............................................................................................................................................... 16
Action 9: Expand utilization of e-governance and emerging technologies in recovery ......................................................................... 16

RESOURCES ............................................................................................................................................................................................................ 18
INTRODUCTION

The World Health Organization (WHO) declared a Public Health Emergency of International Concern for the 2019 Coronavirus Disease (COVID-19) on January 30, 2020. Since the disease was first recognized in December of 2019, it has spread to almost every country, infected millions of people and killed hundreds of thousands. But this pandemic is much more than a public health crisis. In addition to causing the greatest global economic downturn in almost a century, it is threatening to reverse decades of development gains. It is pushing hundreds of millions of people into a state of food insecurity, magnifying national and regional instability, disrupting global supply chains, and much more (Sly, 2020). United Nations Secretary-General António Guterres has called COVID-19 a ‘human crisis,’ stressing that, “its unprecedented scale demands an unprecedented response” (United Nations, 2020a).

The global community must confront this “new normal” of social and economic disruption collectively and collaboratively (Mohammad, 2020). The capacity of traditional support mechanisms to address compounding impacts at the community, country, regional, and global levels is insufficient. While examination of past regional and global disease outbreaks does offer a wealth of information and recovery best practices, the unprecedented nature of the current disaster mandates consideration of novel approaches.

Although response to the COVID-19 crisis remains active and dynamic, the time to initiate recovery is now. There is a diverse range of recovery needs that extend far beyond that of human health. While maintaining a steady state of transmission control and the capacity to sustain intermittent spikes in case numbers are both foundational to long-term COVID-19 recovery, the wider recovery effort will require multisectoral participation to address a range of issues that are typical of many other disaster types (e.g., infrastructure, education, governance, commerce).

This brief is offered to define the COVID-19 recovery context and to supplement existing guidance with key principles and practices to guide recovery planning. The audience includes recovery decision makers and policy makers, development organizations, nongovernmental organizations, and corporate and private philanthropy.

COVID-19 Overview and Recovery Context

COVID-19 is a highly infectious viral disease related to severe acute respiratory syndrome (SARS-CoV) and Middle East respiratory syndrome (MERS-CoV). On May 28, 2020, the number of confirmed cases exceeded 5.5 million worldwide, of which more than 350,000 had resulted in the individual’s death (WHO, 2020a). The highest number of these reported infections have occurred in the Americas (2.5 million) and Europe (2.1 million). The actual number of people infected may be much higher than tests reveal, including in Africa, Southeast Asia, Eastern Mediterranean, and the Pacific where infection rates appear to be much lower (FEWSNET, 2020). Persistent shortages of test materials and processing capacities, problems with data reporting, and a high number of asymptomatic or mildly symptomatic cases have been cited as concealing the pandemic’s true extent (CIDRAP, 2020).

High person-to-person transmissibility and a lack of natural immunity among all of the world’s populations contribute to the catastrophic potential of this disease. Stay-at-home orders and encouraging physical distancing have been effective tools to stem further transmission, but the secondary socioeconomic impacts have been devastating and will require comprehensive recovery action to redress.

Recovery from COVID-19 is similar in many respects to what is experienced in other crises in that:

1. A multisectoral approach is required to address recovery needs that span the physical, social, and economic domains;
2. Recovery sustainability is contingent on the inclusion of measures that rectify existing social and economic vulnerability factors;
3. Recovery must account for and address setbacks to sustainable development progress; and
4. Recovery must account for societal changes that have occurred because of the disaster.

Photo credit: “COVID-19” by Mulugeta Ayene/UNICEF Ethiopia, licensed under CC BY-NC-ND 2.0
The global scope of the event is, however, relatively unique in that it is financially and operationally impeding the capacity of the global humanitarian and development communities (global, regional, bilateral, philanthropic, nongovernmental, private sector) at the same time that demands on those same institutions are rapidly increasing. In the short term, this is stressing the processes through which international disaster aid is formulated (e.g., the Humanitarian Programme Cycle) (UNOCHA, 2020). In the longer-term, however, the shocks will be more complex and profound. In addition to increasing nationalism (Vogel, 2020), the world order is shifting with regard to economic drivers, including the sharpest decline in remittances in recent history (World Bank, 2020a), a doubling of global unemployment from 190 million to 380 million (which is in addition to 1.6 billion informal sector job losses) (ILO, 2020; ILO, 2020b), and a huge increase in the number of people who draw from existing and fixed humanitarian resources (e.g., food aid) (FEWSNET, 2020) at a time when donors are less able to increase their contributions.

Recovery needs will extend across all sectors. For instance:

**Education**

Nationwide school closures occurred in over 190 countries at one point, impacting the education of over 1.9 billion students (over 90 percent of all grade-school learners) (UNESCO, 2020).

**Health**

The impact of COVID-19 has strained the capacity of health systems to balance the direct impacts of the pandemic with maintaining the delivery of essential health services. Tens of millions of vaccines are not being administered because of COVID-19 response measures, creating the potential for more total deaths from other preventable diseases than will be caused by COVID-19 (UNICEF, 2020a). The pandemic raises concerns about reduced health systems capacity to address treatable conditions during the crisis, including potentially up to 50,000 additional maternal deaths in Yemen, 500,000 additional HIV deaths in Africa (Ott, 2020; Kenny, 2020) and as many as 1.2 million additional preventable deaths of children under five (UNICEF, 2020b; Samuel, 2020).

**Finance**

The global economy is predicted to contract by 3.2% (representing USD 8.5 trillion in losses (UN News, 2020a). While stimulus packages measured in the trillions of dollars (USD) have been enacted in several industrialized countries, distinct pressures and constraints in developing countries have made similar actions much more difficult to enact thereby increasing the risk of protracted recession (UNCTAD, 2020).

**Housing**

Before the crisis, more than 1 billion people lived in informal housing, and about 2 percent of the world’s population (150 million) were homeless. Income losses threaten to greatly increase this number as mortgages or rents become unmanageable and evictions occur (Nnoko-Mewanu, 2020).

**Psychosocial**

Exposure to death and disease, as well as loss of livelihoods and life disruption (including schooling, and social and cultural networks) is creating a mental health crisis for millions that threatens to impact the overall well-being of society (Kelland, 2020). Deaths from despair, predicted to be as great as 75,000 in the United States alone, could be significant (Well Being Trust, 2020).

**Public Safety**

Crime is increasing worldwide and criminal organizations are gaining strength as organizations tasked with containing them become increasingly distracted (Burton, 2020)

It is unlikely that the current crisis will end soon, and past pandemics reveal that multiple waves of resurgence are likely to occur. By some estimates, full elimination of the virus may not be achievable for years or decades, if at all (Togoh, 2020). Pandemic management efforts will gradually shift toward a long-term risk-balanced approach wherein human, economic, and societal costs are weighed against the life-safety benefits achieved. Without such a shift, recovery is not possible and response measures may become increasingly more impactful than the disease itself, as was the case during the response to Ebola in 2014, where interruption of social services and economic breakdowns were linked to thousands of deaths (Mohammad, 2020).

COVID-19 continues to impact each country differently, and recovery will likewise be relatively heterogeneous. Even in countries where direct health impacts remain relatively mild (in terms of people infected or killed), multisectoral recovery requirements will be significant. And where concurrent crises are present, including conflict, displacement, natural hazards, or other issues, complexity will be greater. Developing countries with limited basic social and economic safety nets will have the least capacity to resume development and will thus require the greatest support. In this manner, COVID-19 exposes many of the imbalances and inequalities that exist in terms of access to health care, strength of labor markets, access to credit, governance capacity, and other development measures, each of which influences the nature of recovery required.
COVID-19: EIGHT PRINCIPLES FOR RECOVERY

COVID-19 has caused a complex crisis with no modern-day equivalent. Without a sustained, coordinated, and equitable approach to recovery, the pandemic’s impacts will increasingly compound inequality and vulnerability. The notion that disasters and development are intrinsically linked, and that recovery presents an unexpected new path to a safer and more sustainable future, has just as much relevance to a pandemic as to any physically destructive disaster. The prolonged nature and worldwide scope of this recovery effort will challenge even the most time-tested systems, structures, and stakeholders, so the stakes are high to get things right from the start.

The American philosopher George Santayana famously warned that those who fail to heed past lessons will be doomed to repeat them, and so we look to the greater record of experience to emulate success and minimize failure. What follows is a set of guiding principles that capture such lessons in the unique context of the present crisis:

**Principle 1: Recovery must begin during the ongoing response**

Pandemics manifest as both creeping and sudden-onset disasters. Whereas their public health impacts begin quietly and persist for months or even years, the associated economic and social impacts can strike in an instant. The implications of these secondary impacts are being felt in nearly all sectors.

Even where easing of stay-at-home measures is granted, residual strains on livelihoods and lingering public fear inhibit a clean transition from response to recovery. Where households, businesses, and communities are operating on thin or unstable margins, the need for recovery support is immediate.

Few recovery actions need to wait until the public health risk has subsided, in fact, and many are most effective when linked to early recovery activities. For instance, as physical distancing measures and plans for easing are drafted and implemented, recovery and rehabilitation should be designed in conjunction. Assessments, which begin early and continue throughout the pandemic, must contain a recovery focus. Even where recovery activities must wait for societal reopening or transmission control, implementation delays are rarely necessary. Once transmission has stabilized or is decreasing, recovery is enabled by maintaining this ‘steady-state’ including in the face of recurring waves of infection. In fact, recovery is largely contingent on governments finding an effective balance between limiting health risk and minimizing the collateral impacts of societal restrictions. For many countries that is achieved by ensuring capacity exists to test, trace, and treat any new cases that arise before they result in larger outbreaks (UN News, 2020b). However, in many countries testing remains nonexistent or sparse (Lawlor, 2020) and measures such as mandatory mask wearing in public must be enacted to achieve the same sustainment outcome.

**Principle 2: Inclusive, people-centered recovery to leave no one behind**

A pandemic of global significance will affect everyone to some extent, but the suffering endured from the direct and secondary impacts of the disease are by no means uniform.

Women, for instance, typically endure greater hardship because they represent 70 percent of the global health and social services workforce, because domestic violence increases when stay-at-home requirements are imposed, and because access to sexual and reproductive health services is reduced.

Any inequity that causes one group to sustain greater impacts than another is also likely to influence how much access that group has to recovery services and resources. Because pandemics and recovery can exacerbate existing inequalities, and create new vulnerable groups (UNDRR 2020b), recovery planners must pursue a strategy that is inclusive, equitable, and universal. Strong leadership and inclusive recovery processes are needed to galvanize all groups in the actions prescribed and the outcomes to be pursued. A balanced blend of recovery actions is likely to carry differential societal impacts.
costs and stressors—so buy-in and effectiveness will be contingent on broad representation in the planning process. Exclusionary planning and/or coordination mechanisms will validate any preconceptions that recovery actions favor some groups over others. Life in a pandemic is neither familiar nor comfortable to those affected. It therefore goes without saying that the person or organization tasked with leading this effort must be both capable and trusted.

The impacts of a disease outbreak are grounded in the social systems where they occur. Pre-existing inequalities and structural barriers provide a strong basis for outbreaks to have a disproportionate impact on specific individuals and communities. Recovery policies, programs, and activities must address all people, not just those with social or political power or who are most visible or vocal. Discrepancies in how COVID-19 manifests and impacts populations of different race or ethnicity, social class, language, legal status, income, and other factors are oftentimes the result of differences in access to safe and affordable housing, healthcare, employment, education, sanitation, and even the most basic human needs like food and water.

For some groups, this inequality manifests as a differing share of disease impacts that runs along ethnic or racial lines (APM Research Lab, 2020; Cookson and Milne, 2020). But vulnerable people are also much more likely to suffer the secondary economic and social impacts caused by societal restrictions on movement and other control measures given their lack of coping capacities (referred to as the ‘containment divide’) (Guan and Hallegatte, 2020). Manifestation of the pandemic’s impacts reflects a legacy of divergent privilege and poverty, but recovery presents an opportunity to reverse such imbalances through a comprehensive social ‘reset’ that ensures countries and communities ‘leave no one behind’ (LNOB) (Hayes, 2020). For displaced populations, refugees, and those living in conflict zones who already lack the most basic access to that which recovery seeks to restore, the implications of such impacts are even pronounced.

But there is another reason to ensure for everyone’s success that is not entirely altruistic; in a pandemic, nobody is safe until everyone is. Vaccines and treatments will be of little long-term utility if vulnerable populations remain at risk from the current (or a future) pathogen. Any vulnerability that enabled the disease to propagate in the first place and that remains post-recovery will, by extension, leave the door open for another future pathogen. Addressing any such roots of poverty and inequality, therefore, increases the resilience of all people.

Principle 3: Transparent evidence-based decision-making
As a novel threat, there previously existed little understanding of the COVID-19 virus’ effect on human health, and this is having an impact on countries’ abilities to transition into recovery. Through both clinical and laboratory research, knowledge is growing in terms of its transmissibility, morbidity, and mortality, and such knowledge drives decisions to safely reverse societal restrictions. Just as some groups are at greater risk than others, there are activities that pose a greater risk than others and community and country leaders will need to understand those differences in order to restart the economy.

Risk management is a discipline of balanced risk and reward, and decisions therefore consider both benefits and costs to those directly and indirectly affected. In the absence of early eradication, COVID-19 recovery efforts will mandate that governments take and recommend actions involving public health risk, and that they invest in projects that expend public resources. As has been proven in previous disaster events, people will trust interventions and actions only if information are open, drawn from trustworthy and verifiable resources, and meaningful given their use (UNDRR 2020). Countering the ‘infodemics’ that are prevalent in the digital age of disasters, wherein there exists an excessive amount of information on the problem, is likewise critical to enabling good decision-making on the part of the individual (UNDGC, 2020). Disinformation and misinformation, both spread widely through social media, are another problem.

Principle 4: Build back better (BBB) and greener
In many hazards, geographic exposure is the most influential factor in defining where impacts occur. With a pandemic, however, geographic exposure is global and it is therefore the presence of social and economic vulnerability and a lack of effective socioeconomic coping mechanisms that serve as the greatest determinants of human and financial impact. In this manner, recovery programs require investigation and action that extends far beyond the health sector.

Recovery programming must target the socioeconomic roots of pandemic risk - many of which have multi-hazard applicability – and address these as if they were just like any physical infrastructure damage caused by a more traditional natural hazard. In this manner, projects and programs may not be immediately recognizable as COVID-19 related, and may include aspects of governance but also employment, housing, human rights, access to technology, and more. Green recovery is one area that has received special attention given the rapid positive impacts societal shutdowns have had on air and water
quality in many places. The UN Secretary General has provided six ‘climate-related actions’ that will help guide how countries incorporate climate change resilience into their pandemic recovery efforts (United Nations, 2020d). Recovery efforts can restructure job markets such that reductions in carbon emissions related to stay-at-home measures are retained and even expanded and can channel recovery investments into renewable energy projects and low carbon/climate adaptive infrastructure (Kirchhofer, 2020). The Disaster Resilient Scorecard for Cities (https://bit.ly/3df2Jjr) provides a set of assessments that can help to ensure recovery measures contribute to this goal.

**Principle 5: Preserve development gains**

Development gains achieved since the 2015 launch of the Sustainable Development Goals could easily be erased because of the COVID-19 pandemic, especially in the least developed countries (LDCs) (Kharas and Hamel, 2020). As the pandemic begins to affect low and middle income countries to an increasing degree, previous epidemics reveal how the greatest long-term impacts will occur where coping capacities are weakest (Wahlen, 2020). Recovery will be a tremendous challenge for many developing countries, so donor nations need to stand by their ODA commitments (OECD, 2020).

COVID-19 recovery and development are closely linked, and policies must therefore reach far beyond addressing the emergency to balance short-term and long-term measures. Especially in the LDCs and small island developing states (SIDS), recovery is an opportunity to expand productive capacities and catalyze drivers of economic resilience (education, economic diversification, jobs creation, climate change adaptation, and more). Such policies should be based on strengthening national development governance that incentivizes the allocation of domestic and foreign resources (public and private) for industrial and technological upgrading while ensuring social and environmental protection (UNDESA, 2020). Preventing billions more from sliding further into poverty as a result of the crisis will require governments to rapidly ‘adapt, extend, and scale-up’ safety cushions, such as cash transfers, food assistance, social insurance schemes, and child benefits to support families” (Sharma, 2020).

Governments and donors alike must therefore take a human rights-based approach (HRBA) to programming and establish greater synergy between the immediate recovery efforts and the broader social, economic, health, and other agendas that address the root causes of all-hazards vulnerability (Tearfund and World Vision, 2017; United Nations, 2020c). Some have noted that the recovery from this event presents an opportunity to ‘reboot’ the pursuit of the SDGs and the Sendai Framework goals (Davidsen, 2020; Nurse, 2020). The World Bank ‘Proposed Sustainability Checklist for Assessing Economic Recovery Interventions’ (bit.ly/2YYzr16) helps to ensure such opportunities are harnessed.

**Principle 6: Greater regional and global solidarity**

In the absence of a coordinated international strategy, individual countries have applied a domestically-focused blend of pandemic control measures including stay-at-home orders, business closures, and Personal Protective Equipment (PPE) use requirements, among others. They have also imposed externally-focused provisions like border closures, foreign travel bans, and protectionist restrictions on commerce that can have collateral impacts on the economies and response and recovery capacities of other countries and regions. These efforts have resulted in varying degrees of success, but subsequent resurgences have underscored the erratic and transboundary nature of the crisis. COVID-19, which respects no borders, has proven capable of spreading to almost all countries in very little time. Although there are stark differences in how countries have been impacted, even the most wealthy and well-resourced governments are recognizing in this event and for similar future events that no country is safe until all countries are safe (Coppola, et al., 2020).

Countries have begun sharing information and joining efforts in the fight against COVID-19, but it is equally important that they remain united in addressing its lasting consequences as well. Approaching the virus as a common regional and global enemy incentivizes greater bilateral and multilateral support. This will be critical as donor economies continue to suffer from the ongoing economic downturn. High income countries must view international support for recovery not simply as humanitarian support, but rather an opportunity to redress the systems and conditions that fostered inequalities of vulnerability and risk in the first place. These are also investments in capacities, such as data collection and sharing for ongoing surveillance in the current and future events (ADB, 2020a).

In the immediate term, governments must make plans to ensure manufacturing capacity, finance, and distribution mechanisms exist such that global needs are met in a ‘fair, public health-driven manner’ (Bollyky, et. al., 2020). Countries that lead in the production of science & technology must therefore ensure that patent, copyright, and other intellectual property protections, which incentivize research, development, and innovation, are adequately balanced with support mechanisms to ensure global transfer of such technologies as they contribute to the resolution of the current and/or future global public health crises. Within regions, countries must work together to address recovery needs as a regional bloc, especially where south–south cooperation can address ongoing development issues. Several regions have developed
joint regional response strategies (e.g., the African Union Joint Continental Strategy for COVID-10 Outbreak), and the same must be true in recovery.

**Principle 7: Institutionalize effective coping mechanisms**

The immediacy of COVID-19 response requirements has led to a variety of coping mechanisms to address systemic or societal capacity shortfalls. In many instances these solutions, whether behavioral or functional, have a net positive effect on the risk posed not only from the current pandemic but also other potential hazards. Examples include enhanced standards of hygiene, increased application of telework and communications technologies, and emergency stockpiling of food and water. Efforts in many major cities to make automobile traffic reductions permanent (e.g., Athens, Dublin, Budapest, Sydney, Bogota) exemplify how COVID-19 response practices may be institutionalized to increase all-hazards resilience (Connolly, 2020). In Kenya, where the drive to institutionalize work-from-home procedures has originated in the private sector, government is seeking ways to support such efforts through regulations and legislation (Atalayar, 2020). Recovery programs help to institutionalize identified resilience-building practices wherever societies stand to benefit in the longer-term, but this may require countries’ legislatures to create commissions to study how laws and regulations inhibit or facilitate innovation. Some coping mechanisms, like the increased market share of online commerce to address restrictions on movement, are positive during the crisis but will have highly negative impacts on local markets if supply chains are not strengthened to connect local markets with such sales points. COVID-19 influenced shifts towards online commerce has already resulted in the closure of countless local businesses with little or no online presence (Del Rey, 2020), and the loss of millions of jobs those businesses provide.

**Principle 8: Effective risk communication**

The principles of recovery are underpinned by the need for effective communication that is targeted to specific contexts and populations. Recovery from COVID-19 requires significant behavioral changes and only through the deployment of effective communication methods and messages can knowledge be accurately translated into attitudes and actions. Information should be disseminated in readily understandable formats and languages adapted for people with specific needs. Social media should be adequately harnessed for widespread awareness.

Trust in decisions is supported through effective communications, which includes managing community expectations regarding what can and cannot be done, who is responsible for different aspects of the recovery effort, and what communities might expect in terms of recovery assistance (GFDRR, 2019). If what is communicated does not match what people are seeing or hearing, communicators must clearly justify why that is the case and why it matters. Where people have protested the nature of extended periods of stay-at-home, for instance, this has often been the result of conflicting communications messages, or messages that did not address preconceptions—both of which work to erode public trust.
NINE KEY ACTIONS FOR GOVERNMENT

What follows is a set of recovery-focused actions that address the unique requirements of a pandemic incident.

These are not meant to replace standard recovery practices but rather supplement them.

Photo credit: “Meeting on a building site: COVID-19 crisis.” by Marcel Crozet / ILO, licensed under CC BY-NC-ND 2.0
Pandemic recovery coordination requirements are significant given the scope of social and economic issues addressed and the stakeholders engaged (as compared to pandemic response). Even in countries where epidemics are more common, disaster laws may lack the specificity to establish effective long-term recovery leadership authority (including where the national disaster management organization is concerned).

Governments may need to establish and empower a dedicated multi-disciplinary committee, authority, or task force (Canyon et al, 2020b) whether through presidential decree or an equivalent action. There is a significant risk where ministries or departments of health retain both response and recovery authority in that recovery policies require the perspective of, and buy-in from, all societal components (focusing on minimization of harm across the entire population and inclusive of business, education, housing, livelihoods, and more). Review of past pandemic coordination efforts indicate that directives must be clear and unambiguous, transparent in their basis, and based on broad stakeholder discussion and debate (where appropriate) (ADB, 2020).

Many countries have sidelined their emergency management resources in this crisis, and the valuable lessons learned in other events are not being applied as a result. This can result in reduced implementation effectiveness, including where such arrangements limit access to traditional recovery funding streams or implementation frameworks. Pandemic recovery requires a sustained effort that begins during the ongoing and dynamic period of pandemic control, and which is prepared to manage future waves of increasing and decreasing transmission activity. Existing recovery coordination arrangements should be assessed to determine whether policies or authorities require adaptation to accommodate any unique pandemic-related needs.

### Action 1: Establish pandemic recovery coordination and implementation arrangements

- Assess and amend statutory authorities to empower more effective coordination
- Provide leadership and coordination to multisectoral resources to mitigate societal and economic impacts
- Amend existing laws, or provide supplemental funding through legislative action, to support implementation of recovery plans and strategies.

#### Resources:


### Action 2: Assess the wider socioeconomic impacts of the crisis and the capabilities to manage needs

- Establish national open data reporting protocols
- Leverage citizen science, big data, and other emerging technologies to expand and improve assessment efforts
- Recommend or provide a standard nationwide assessment protocol, such as the PDNA
- Link assessment methodologies to national action plans for multi-hazard disaster risk reduction, sustainable development, and climate change.

#### Resources


In public health emergencies, the focus of response is on public health implications and needs. Recovery, however, requires a more comprehensive and holistic investigation of the socioeconomic impacts of the greater crisis, especially in places where multiple waves of resurgence have occurred, and the local to national capabilities to address societal needs.

The broad financial and societal secondary and tertiary impacts of the pandemic will exacerbate many existing problems, and as such assessments must be flexible to capture these effects. Linkages with other multi-hazard and multi-dimensional global problems including climate change, income inequality, and conflict, likewise have relevance and so assessments cannot be unidimensional. The United Nations Development Programme (UNDP) has utilized the Socio-Economic Impact Assessment (SEIA) to capture such linkages in past public health crises, including the Zika outbreak in 2016. Building on these experiences and over 70 post-crisis needs assessments, UNDP, the World Bank, and the European Union have developed a methodology for COVID-19 Recovery Needs Assessment (CRNA). It builds on the post disaster needs assessment and peace building assessment methodology, but adds flexibility and a simplified approach to planning pandemic response, ongoing preparedness needs, and recovery needs with costs. The flexible methodology allows it to be adapted to the context and needs of individual countries and complements existing assessments already undertaken or underway.

Whatever the assessment utilized, countries should pull together information from multiple sectors to support a coherent strategic plan of action rather than multiple and potentially disparate sector by sector approaches.
Governments should prioritize assets and capacities on that which can be managed immediately, using all existing skills, resources, and technical experience, followed by priorities that may be achieved through a blend of support from nonprofit and international agencies, bilateral support, and other external mechanisms (USAID, 2009). Whatever the approach, the complexity of socioeconomic impact in a pandemic is significant and so efforts must leverage emerging and innovative technologies to the extent possible (including citizen science, big data, and GIS analysis).

**Action 3: Ensure safe and healthy workplaces**

- Develop national policy guidance for phased and safe return to work, including guidelines for risk assessment and prevention measures
- Review and change labor laws to address employee safety
- Assess long-term PPE requirements by sector, including medical workers, essential workers, those working in high-contact professions, and high-risk populations
- Support domestic PPE production capacity, including repurposing of private industrial facilities, and identify and promote alternative PPE options (e.g., community production of re-useable cloth masks and hand rub, 3-D printing)
- Educate the public on the proper use of PPE; ensure public officials promote positive messages about PPE use and model behavior
- Establish funding to support PPE use among small and medium-sized businesses and the poor

**Resources**

- Infection Prevention and Control During Health Care When nCoV is suspected (WHO) (https://bit.ly/3cMhQ3U)
- WHO-Recommended Handrub Formulations (WHO) (https://bit.ly/36f3k2a)

During the most acute phase of the crisis, PPE and sanitation needs will be greatest among healthcare workers who are most at risk to exposure from infected persons and essential employees required to work outside the home despite stay-at-home policies (e.g., police, fire, mail carriers, grocery store workers, restaurant workers).

As societies begin to reopen, especially in the context of ongoing local, national, or global transmission, the number of people whose jobs place them at risk from exposure will increase, and will require safe and healthy working conditions for a sustainable recovery. Strategies for reopening workplaces will depend on thorough risk assessments to plan for all measures necessary to protect those in the workplace. The International Labour Organization (ILO) recommends that any strategy to safely open workplaces should be based on a hierarchy of controls – an approach that supports decision makers by clearly organizing prevention measures by relative effectiveness. In the context of ongoing transmission risk, substituting remote work and virtual interactions wherever possible offers the most effective prevention. Engineered solutions that do not rely on worker behavior for their effectiveness, such as improved ventilation and physical barriers, are needed for a great number of workers, particularly those in the informal sector, for whom remote work is not possible. Changes in policies and procedures can adjust shifts and working days to reduce the number of workers present, implement physical distancing in the workplace and hygiene and infection control practices, and establish health monitoring and response measures for sick or potentially infected workers. Personal protective equipment may additionally be needed to prevent exposure (ILO 2020c).

PPE is a critical component of recovery because in addition to limiting transmission risk, it increases public willingness to emerge from periods of restrictions on movement. Few countries control all components of the PPE supply chain, and as a result, shortages have occurred throughout the world. Countries have addressed shortages in different ways, and many of these can be made permanent to ensure long-term availability and to reduce future vulnerability to supply shortages. These include public sector investment in private firms to support increasing capacity or...
repurposing of manufacturing capabilities (both PPE and testing supplies, such as the repurposing of Kenya’s textile and petroleum industries); enactment of policies or laws that mandate production, implementation of measures to prioritize sales and use for high-vulnerability settings and essential workplace use; and stockpiling of raw materials (ADB, 2020b). Disrupted supply chains may require the use of novel sourcing solutions, such as the use of 3-D printers (Petesch, 2020). Where associated costs are very high or even prohibitive, alternative solutions must be identified. A World Bank analysis found that a three-month supply of disposable masks for all essential workers in low- and middle-income countries could reach USD 277 billion, but that reusable cotton masks offer a feasible lower-cost alternative that is appropriate for many categories of work (Guan and Hallegatte, 2020).

PPE use and increased sanitation needs will generate a vast amount of contaminated waste above what is normally experienced, and many countries will need to establish novel means of managing it sustainably and safely to prevent further contamination and environmental damage. Governments must identify and deploy effective medical waste disposal technologies or adjust the medical waste supply chain, including in partnership with the private sector, especially in rural areas, the SIDS, and the LDCs where capabilities are often inadequate to meet even standard PPE use (Peters and Chan, 2020).

Countries around the world will also be forced to confront the dual challenge of managing the ongoing response and recovery in the context of other potential hazards. Many countries working to manage ongoing transmission are also moving into cyclone, drought, heatwave, or monsoon seasons presenting the potential for a double-disaster. This unprecedented challenge will require planners to consider revisions to standard operating procedures and contingency plans, and many of the workplace controls will be important considerations for evacuation centers, including physical distancing, engineered solutions, and PPE. Emergency response teams and frontline workers will require appropriate PPE to be available as well as specialized training on prevention measures and psycho-social care (UNDRR 2020b).

**Action 4: Institute or provide guidance on societal recovery**

- Establish framework monitoring and enforcement mechanisms
- Establish and support communication channels to broadcast daily framework status

Societal restrictions arrest runaway or uncertain community transmission using conservative measures including mandatory stay-at-home orders/measures and curfews. Once transmission is stabilized, and capabilities exist to test, trace, quarantine, and treat new cases, reversal of these restrictions will be required to minimize social and economic impacts. Reopening measures to support societal recovery cannot be a simple on/off switch that fully reverses those measures or redefines them in an ad-hoc way.

Easing must occur in a manner that is risk-informed, scalable, and responsive. With increased data analysis capabilities comes the capacity to identify sector-specific safety standards that support stakeholders in their efforts to affect safer societal functioning. This includes transportation, education, dining and entertainment, service-based industries, manufacturers, and many others. Understanding risk helps to reduce unnecessary containment impacts. For instance, in the low- and middle-income countries where up to 60% of the working population is engaged in production of essential goods and services, restrictive stay-at-home orders will have a much graver impact than in wealthy countries where only 35% of the workforce is engaged in such activities. Longer-term recovery implications of such measures are effectively reduced by focusing containment measures on urban areas and providing sufficient PPE to the essential workers there, recognizing that those engaged in agricultural activities in rural areas face comparatively less risk (Guan and Hallegatte, 2020).

Societal restrictions may need to be increased and decreased throughout the duration of the crisis as the status of transmission and availability of medical capacity both fluctuate. A standard framework enables recovery to be more incremental, regimented, and responsive than is possible or perhaps necessary in many other hazards. Some countries have introduced numbered or color-coded advisory systems that communicate risk-based and sector-specific interventions. Central governments can provide these to enable communities to act and react in an appropriate and coordinated manner.
**Action 5: Plan for a comprehensive economic recovery**

- Establish active fiscal and monetary policies to stimulate the economy and employment that counter declines in demand
- Provide immediate financial support for SMEs, including: grants, loans, tax relief; payroll protection loans and reimbursements; extensions on debt, rent, and utilities payments; and support to reconvert production towards immediate needs
- Support, consolidate, and repair supply chains

**Resources**

- The Secretary General’s UN COVID-19 Response and Recovery Fund (UN) (https://bit.ly/2XcK4xU)

The COVID-19 crisis is unique in modern history in that it is the result of a simultaneous supply shock, demand shock, and financial shock (Triggs and Kharas, 2020), and a multifaceted approach will be required to support recovery from each. Full economic recovery may not be possible until specific conditions are met, namely the COVID-19 risk has fully abated and all societal restrictions have been removed. Support cannot wait, however, as market sustainment is critical to the ongoing response and early recovery. Businesses that make up critical supply chains can fail, leaving access to food, medical and pharmaceutical supplies and therapies, energy, clothing, transportation, and many critical services (including those that support household operation) in jeopardy. Response and recovery are intimately linked in this regard.

As societies open incrementally, demand will increase at lower levels. Approaches that have been used to support demand include direct cash transfers to the public, especially the poor and those who have lost income. Such support may need to be sustained. As reopening advances, demand in some sectors will suffer on account of public risk perceptions regarding personal safety (related to ongoing viral transmission). Businesses may need collective promotional or operational support from public or nonprofit groups (e.g., local trade fairs) and through stimulus programs that boost demand for local stocks (e.g., VAT, income, and corporate tax reductions, cash-for-work, voucher programs). Public Private Partnerships may help in some sectors, such as transportation, where supply must precede demand, or in the medical sector where reduced demand is a directive of response despite the criticality of these facilities’ survival.

The UN Secretary-General’s UN COVID-19 Response and Recovery Fund may support some low- and middle-income countries in addressing these needs.

Supply shock, which is the result of supply chain breaks and mandated closures, will first require the easing but will also require access to low-interest credit. Many countries have instituted COVID-related tariffs and quotas, and these must be eased through bilateral and multilateral cooperation (especially with regard to medical equipment and resources).

Recovery from financial market shocks may require liquidity support from international financial institutions. Economic recovery cannot occur if the public does not feel safe, but businesses are typically perceived as having a vested interest and therefore cannot lead communications efforts. Economic recovery therefore requires a concerted consumer confidence campaign, which must align with the ongoing efforts to manage the pandemic itself. Where the disease is still circulating, this may require coordination with public and environmental health experts to ensure both employees and consumers or clients have adequate PPE. SMEs are at greatest risk from economic shocks as they lack the financial buffers to withstand even the smallest interruptions. Even those that possess the reserves to endure several weeks of interruption cannot endure extended closures or waves of recurring closures.

**Action 6: Promote livelihoods recovery and expansion**

- Provide cash and in-kind transfers to informal workers and self-employed
- Provide information services to support jobs creation and employment
- Ensure access to affordable health services given loss of employment-based coverage
- Support the safe opening and operation of childcare centers
- Expand or adapt disaster financing provisions to address livelihoods-related social protection requirements

**Resources**


Over one billion jobs have been lost – some permanently - on account of the direct impacts of societal shutdowns and the secondary effects of reduced global consumption and production. For many developing countries, domestic unemployment has been exacerbated by an ongoing return of citizens who are losing their overseas jobs. Societal reopening alone, whether incrementally or in full, will address only
a fraction of all job losses, and social safety nets will need to be implemented or expanded to address increasing demand.

Where assessment efforts are geared towards capturing such data, planning efforts can tailor recovery interventions to meet income-related losses. For instance, in the transportation, tourism, and entertainment, a combination of incremental easing policies and measures that reduce public fear will require different strategies (Powell, 2020). Sectors must look to regional and global organizations for coordination, support, and guidance, with the UN World Tourism Organization’s recommendations supporting jobs recovery in the tourism sector as one notable example (UNWTO, 2020).

Households must be sustained through fiscal and monetary policies aimed at direct provision of supplemental income, food, clothing, insurance, housing assistance, and other basic needs until employment returns. Although countries will have to find solutions to address these needs within existing programs and partnerships, several new disaster financing mechanisms have been introduced to address social protections (e.g., a dedicated fast-track facility for COVID-19 introduced by the World Bank) (World Bank, 2020). Technical, regulatory, and other forms of support may be needed to address dependent care services (e.g., childcare) if such services have been impacted by the crisis or if the ongoing incidence of infections mandates special measures (Hart, 2020). Individuals will require such protections to enable the conduct of job searches, education, and skills training. Communities will differ with regard to whether food for work or cash for work programs are more appropriate, with the former buffering food shortages and the latter supporting local markets (USAID, 2009).

Short-term relief efforts should be linked to longer-term strategies for building resources and skills that will reduce the impact of future disasters as well. This includes expanded use of work-from-home (WFH) and telework capabilities, greater utilization of shiftwork, greater geographic distribution of employees, and more. Because of the profound nature of the economic impacts of pandemics, livelihood support may be required for several years.

### Action 7: Rehabilitate and strengthen the medical and public health sectors

- Promote rehabilitation and rest of medical staff, restock medical supplies and resources, revise plans as needed, and rebuild essential services
- Expand financial and human resources support for preventable and chronic disease management efforts that have been adversely impacted by the pandemic

**Resources**


The COVID-19 pandemic is having both direct and indirect impacts on public health and on the public health and health care facilities themselves. A planned pandemic response framework for the health system can help to minimize collateral damages to the sector. Nonetheless, during a pandemic the focus of most health care facilities is on treatment and containment of the pathogen, even in places where infections have not yet surged. For instance, a pandemic the focus of most health care facilities is on treatment and containment of the pathogen, even in places where infections have not yet surged. For instance, standard pandemic procedures typically call for a moratorium on elective procedures, and non-pandemic patients are cleared from beds as quickly as possible to protect surge capacity. Because of these protective measures, and because the public’s fear that medical facilities are where the pandemic risk is highest, pandemics have secondary impacts on the management of trauma, acute care, prevention (e.g., vaccination programs), and chronic health maintenance (e.g., HIV/AIDS, diabetes, dialysis). For hospitals, this represents a large drop in critical revenues used to cover operating expenses and to pay staff and purchase supplies. And for the public this leads to an increase in incidence of preventable diseases and a downturn in the outlook for chronic diseases.

This is occurring at the same time that hospital staff are being sickened and killed at a much higher rate than...
the general public due to their concentrated daily exposure and stressful work environment, and hospital supplies are being exhausted due to the stringent infection control procedures.

When a country contains a novel outbreak, a pandemic is averted. In this way, global health security is determined by measuring the capacity of the weakest links. As facilities exhaust their financial reserves in the current crises and closures become likely or occur, such weaknesses are magnified. In rebuilding public health sector capacities, the Disaster Resilience Scorecard for Public Health provides a framework for building a more resilient healthcare capacity. Investment in any of these areas will not only enable improved recovery outcomes in the current pandemic but also in future events.

**Action 8: Support psychosocial recovery**

- Apply a whole-of-society approach to promote, protect, and care for mental health
- Ensure widespread long-term availability of mental health and psychosocial support resources
- Invest in efforts and programs that institutionalize mental health services and capacity, and promote sector reform.
- Expand access to alternate mental health service options, including telemedicine.

**Resources**


Pandemic events have a dramatic impact on mental health. These impacts are the result of a range of instigating factors, including the loss of a friend or family member, loss of income or livelihood, loss of one’s home, domestic abuse, loss of access to mental health services, extended exposure to suffering and death, isolation, fear, and more. For some groups, psychological harm is the result of racist, classist, or nationalistic conspiracies that have been utilized to shift blame or justify policies or actions (Mihm, 2020). The disruption of social networks, the loss of community foundations, and an inability to hold religious and cultural rituals such as funerals, weddings, and other important milestones, are likewise a source of depression and feelings of hopelessness.

Psychosocial impacts can have lasting impacts, especially among children whose vulnerability stems from a reduced capacity to understand what is happening to them and those around them. Post-traumatic stress disorder, depression, and other mental health issues have already begun to contribute to increased drug abuse, domestic abuse, and suicide.

A whole-of-society approach is needed to meet needs across each of these populations, and to ensure the myriad roots of need are targeted. Counseling can help to address many psychosocial recovery needs, but a concurrent rapid surge in demand and a lack of financial resources to access such services will mandate the creation of supplementary services. Prior to COVID-19, the capacity to manage psychosocial needs was already inadequate, especially in humanitarian and conflict settings, and the current crisis has further stretched those scarce services. Several countries have established mental health hotlines that use telemedicine systems or basic landline / mobile numbers to provide assistance (UN, 2020). There is significant space for NGO support in this area given the number of stakeholders that provide such services in other disasters, but coordination will be required given the non-traditional case management interface (due to the lack of physical damages, people may not otherwise interact with these agencies such as in emergency shelters or feeding centers).

Relatively unique to the pandemic context is that social distancing measures require governments to drastically increase the effective public fear response to compel individuals to comply with social distancing provisions. For many people, especially those who are most vulnerable and fear for their lives in public places, there will be residual effects that stifle their ability to re-emerge. This will impact them personally, but will also affect job markets, commerce, social networks, and more (e.g., parents hesitating to allow their children to attend school or visit a doctor). Recovery requires a risk communication campaign that is trusted and offers meaningful data.

**Action 9: Expand utilization of e-governance and emerging technologies in recovery**

- Establish multi-stakeholder partnerships to address financial and human resource needs
- Accelerate the e-government and innovative technologies implementation

**Resources**


Restrictions on movement imposed to control the spread of COVID-19 have placed an increased emphasis on the need for digital connectivity, including e-government and ICT. Most directly, this pertains to disease surveillance, testing, and contract tracing—all of which support a faster return to societal function. But society itself has changed as well, most notably in the utilization of technology to enable online and distance-
Based activities. Telemedicine, online education, and e-governance, for instance, have each expanded at remarkable speed to meet the ongoing needs of each sector during periods of restricted movement.

In the short term, societies are quickly learning how to navigate the challenges presented by an unprecedented shift towards such services, and the inherent challenges are being identified and solved faster than any previous time. Countries must work to formalize and further develop these improvements (both COVID-related and otherwise) where they stand to increase resilience, effectiveness, and/or productivity.

Countries that have not yet formalized an open government platform or approach or established effective digital communication channels that engage a variety of different audiences, can use this opportunity to leapfrog less efficient interim options.

Because everyone is affected by COVID-19, recovery leaders have a unique opportunity to nurture public-private partnerships, expand the interest of foundations, and foster greater sharing of technologies, expertise, and tools that support economic and social recovery.

Recovery funding streams are already accelerating the implementation of technological innovations including artificial intelligence, distributed ledger technologies (blockchain), big data, drones and robotics, additive manufacturing (3D printing), citizen science, and more. Investments in these technologies can tremendously support the future resilience of the health sector and the public services delivery (UN/DESA, 2020).
REFERENCES

- Ott, Haley. 2020. 48,000 Yemeni Women Could Die Giving Birth as UN Starts Shutting Down Maternity Services Due
Special thanks to the IRP Steering Committee members: Asian Development Bank (ADB); Asian Disaster Reduction Center (ADRC); Cabinet Office, Government of Japan; Central American Coordination Center for Natural Disaster Prevention (CEPREDENAC); Hyogo Prefectural Government, Japan; International Labour Organization (ILO); Ministry of Foreign Affairs, Government of Italy; Swiss Agency for Development and Cooperation (SDC), Government of Switzerland; The World Bank; United Nations Centre for Regional Development (UNCRD); United Nations Development Programme (UNDP); United Nations Educational, Scientific and Cultural Organization (UNESCO); United Nations Environment Programme (UNEP); United Nations Human Settlements Programme (UN Habitat); United Nations Office for Project Services (UNOPS); United Nations Office for Disaster Risk Reduction (UNDRR); and World Health Organization (WHO).