

COVID-19: SUSTAINING MOMENTUM AND COLLABORATIONS

CASE STUDY ON THE RELIEF ECOSYSTEM
IN KARNATAKA

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Sustainable Urban Development - Smart Cities (SUD-SC)

B-5/2, Safdarjung Enclave

New Delhi- 110029, India

T +91 11 4949 5353

F +91 11 4949 5391

www.giz.de/india

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Authors

GIZ – SUDSC: Kiran Rajashekariah, Krishna Kumar

Fields of View: Bharath M. Palavalli, Sruthi Krishnan, Harsha K, Ketaki Paranjape, Vaibhav Dutt, Srinidhi Santosh, Yashwin Iddya



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EXECUTIVE SUMMARY

On March 25, 2020, India went into a nationwide lockdown to control the spread of COVID-19. All economic and social activities, except essential services, were halted. While the lockdown adversely affected the society at large, it more specifically had profound impact on the vulnerable groups including daily wage earners, migrant workers, slum dwellers, homeless, people with disabilities, senior citizens, among others, across the country. Many suffered loss of livelihood, putting them into distress from hunger and loss of shelter. For instance, in the southern Indian state of Karnataka, various studies suggested that more than 70 per cent of the contract workers in the private sector became unemployed. Workers, especially migrants, were running out of money to pay for their rent or to buy food. In response to the crisis, the Government at the centre and state level announced number of measures including fiscal and tax policy, economic stimulus, livelihood policy, healthcare, trade among others.

In this report, we document the relief efforts undertaken in Karnataka, by the various state and non-state agencies, including how they collaborated in their efforts. Data for the study was gathered from a sample of 232 non-state organisations who worked across the state in providing relief, based on interviews and focus group discussions, to understand the context and the landscape of relief efforts.

Results show that majority of the non-state organisations focused on providing relief to the vulnerable and marginalised groups (85 percent of the organisations), and more than half of them (55 per cent) provided relief to the migrant communities. Further, around 64 percent of the organisations served local communities and 68 percent served informal workers. In terms of categories, it was observed that relief provided majorly included cooked food, dry rations, medicines, and economic relief. Further, analysis of the information and material flows revealed that relief operations adopted different approaches based on vulnerabilities stemming from material or psychological distress.

The cascading effect of COVID-19 on the global Sustainable Development Goals (SDGs) indicated the long-term impacts of the pandemic. In response, the report substantiates targeted strategies for inclusive development to foster achieving the SDGs. The relief efforts demonstrated how decentralised networks for information exchange and dissemination proved to be resilient and provided greater utility for relief workers. The distributed nature of resource flow in relief operations suggested that the robustness of distributed system offers immense potential to develop as a model for collaboration for future relief operations.

Collaboration between the state and the non-state organisations, in the form of distributed hub-and-spoke model emerged as the optimal model for providing relief. The adoption of Standard Operating Protocols (SOPs), co-created by the state and non-state organisations can help make the information and material flows more efficient. Further, a non-intrusive feedback mechanism with multiple command centres and central coordination would enable the model to be more adaptive and responsive to the changing needs on the ground. In order to strengthen such decentralised networks, empowering local governments with adequate financial resources, decision-making powers and creating pathways for citizens to participate in governance systems, would be prudent.

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ABBREVIATIONS

Abbreviations	Descriptions
APMC	Agricultural Produce Market Committee
ARHCs	Affordable Rental Housing Complexes
AWP&B	Annual Work Plan and Budget
BBMP	Bruhat Bengaluru Mahanagara Palike
BSUP	Basic Services to Urban Poor
CFAR	Centre for Advocacy and Research
CII	Confederation of Indian Industry
COP	Common Operating Procedure
COINEX	COVID-19 Information Exchange Platform
COVID-19	Coronavirus disease
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
DBT	Direct Benefit Transfer
DC	District Commissioner
DRO	Disaster Relief Operations
ESMA	Essential Services Maintenance Act
FCI	Food Corporation of India
FPO	Farmers Producer Organisation
GDP	Gross Domestic Product
GHG	Greenhouse Gas
Gol	Government of India
H1N1	Hemagglutinin Type 1 and Neuraminidase Type 1

Abbreviations	Descriptions
H-CLOP	Humanitarian-Common Logistic Operating Procedure
ICT	Information and Communication Technology
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MoHUA	Ministry of Housing and Urban Affairs
MoSPI	Ministry of Statistics and Programme Implementation
MSME	Micro, Small and Medium Enterprises
NGO	Non-Governmental Organisation
NITI Aayog	National Institution for Transforming India Aayog
NREGS	National Rural Employment Guarantee Scheme
OPD	Outpatient Department
PDS	Public Distribution System
PHEIC	Public Health Emergency of International Concern
PMAY	Pradhan Mantri Aawas Yojna
PPE	Personal Protective Equipment
RDPR	Rural Development and Panchayat Raj Department
RWA	Resident Welfare Association
SAARC	South Asian Association for Regional Cooperation
SARS	Severe Acute Respiratory Syndrome
SDG	Sustainable Development Goals
SHG	Self-Help Group
SMS	Short Message Service
SOP	Standard Operating Procedure
TB	Tuberculosis
ULBs	Urban Local Bodies

Abbreviations	Descriptions
UN	United Nations
USD	United States Dollar
WHO	World Health Organization

1

COVID-19: A GLOBAL EMERGENCY

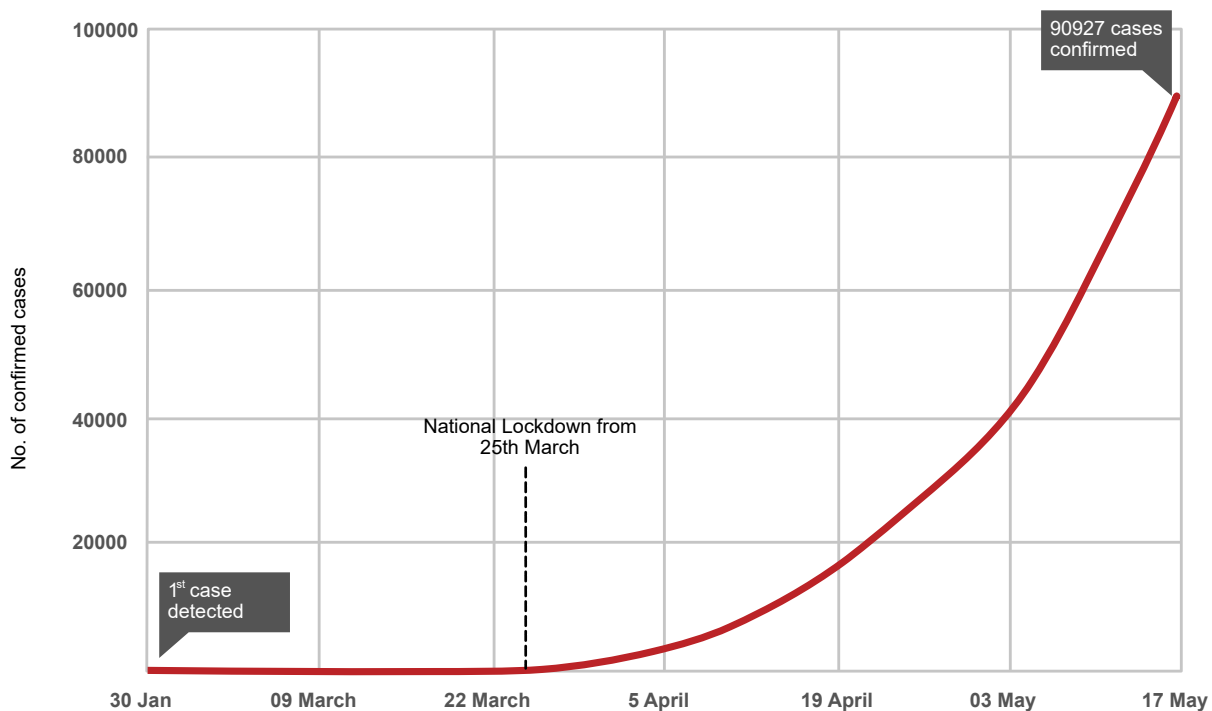
In the end of December 2019, Wuhan Municipal Health Commission reported to the World Health Organization's (WHO) China office, about several pneumonia cases in Wuhan City, located in the Hubei Province from unidentified causes. By early January, it was identified that a new strain of coronavirus was the cause for the outbreak and the first case outside China, with no travel history to Wuhan was reported in Thailand (WHO, 2020). With the rapid spread of the outbreak to several countries, WHO declared the virus, a Public Health Emergency of International Concern (PHEIC) on January 30, 2020 and assigned the name COVID-19 to the novel coronavirus on February 11, 2020. Within three

months from the reporting of the first case, the virus had spread to more than 100 countries and a third of the world's population were living under coronavirus-related restrictions.

In India, the first case of COVID-19 was detected on January 30, 2020 in the southern state of Kerala. With the number of cases steadily rising across the country from around 360 confirmed cases in mid-March to over 90,000 in mid-May 2020 (Figure 1), the Central and State administrations undertook several measures to contain the spread of the pandemic and to mitigate its effects.

Figure 1

Timeline showing the rise in COVID-19 cases



Source: [https://www.who.int/india/emergencies/coronavirus-disease-\(covid-19\)/india-situation-report](https://www.who.int/india/emergencies/coronavirus-disease-(covid-19)/india-situation-report)

Note: The number of confirmed cases include people who have been cured/discharged, deaths and migrated. The timeline shown in the figure above is representative of the period in which the study was undertaken (25 March - 18 May, 2020).

In response to the pandemic, a countrywide lockdown was imposed on March 25, 2020 in order to mitigate and flatten the curve of the virus spreading. This meant, a shutdown of the movement of people, goods, and services. During the lockdown, all economic activities, except essential services, were halted and 'work from home' measures were initiated, educational institutions were closed, public gatherings were prohibited and public transport including trains, road and air travel and inter-state movement were shutdown. The Stringency Index created by the Blavatnik School of Government at Oxford University that measured policy responses of

countries in light of the COVID-19 pandemic gave India the highest score of 100 following the national lockdown.

Assessment of Indian government's response was scored at 79.17 on May 18, 2020. It is interesting to note that this was an absolute change of +79.17 when computed based on the first reported date of January 30, 2020 in Kerala. However, if we were to begin with the date of total lockdown announced on March 25 2020, the stringency index score for India reduces by 20.83.

Indicators used by the Blavatnik School of Government, Oxford University to track government response

The Blavatnik School of Government of Oxford University launched a Coronavirus Government Response Tracker in March 2020 to track and compare policy responses by national governments, and as part of this tracker, they created a Stringency Index that evaluates the measures taken by countries on seven parameters and scored them on the strictness of the measures. The major indicators included:

- 1. Closing of schools, workplaces, and public transport*
- 2. Cancelling public events and restricting large gatherings*
- 3. Restrictions on domestic and international movement*
- 4. Income support and debt relief for households*
- 5. International support for other countries*
- 6. Testing policy and contact tracing*
- 7. Investment in vaccine development and emergency healthcare*



COVID-19: Government Response Stringency Index

This is a composite measure based on nine response indicators including school closures, workplace closures, and travel bans, rescaled to a value from 0 to 100 (100 = strictest). If policies vary at the subnational level, the index is shown as the response level of the strictest sub-region.

Figure 2

India's stringency score as compared to China, Brazil, UK, and USA between January 1, 2020 to May 18, 2020

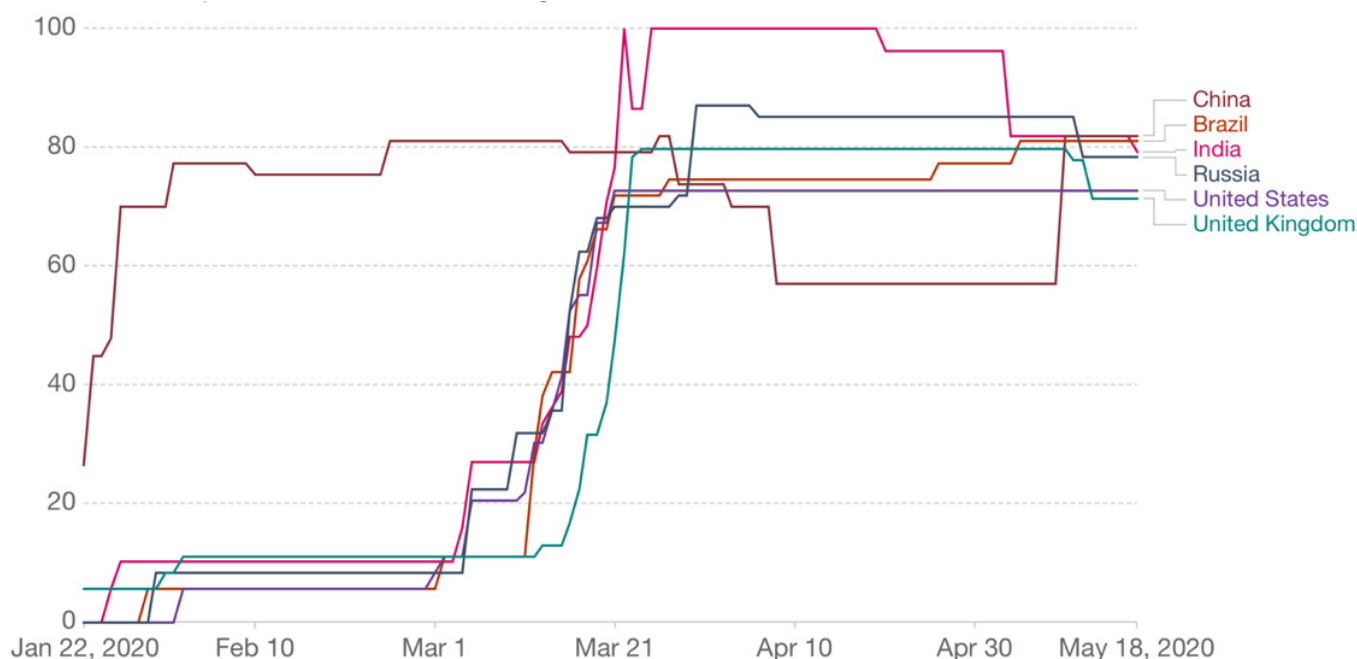
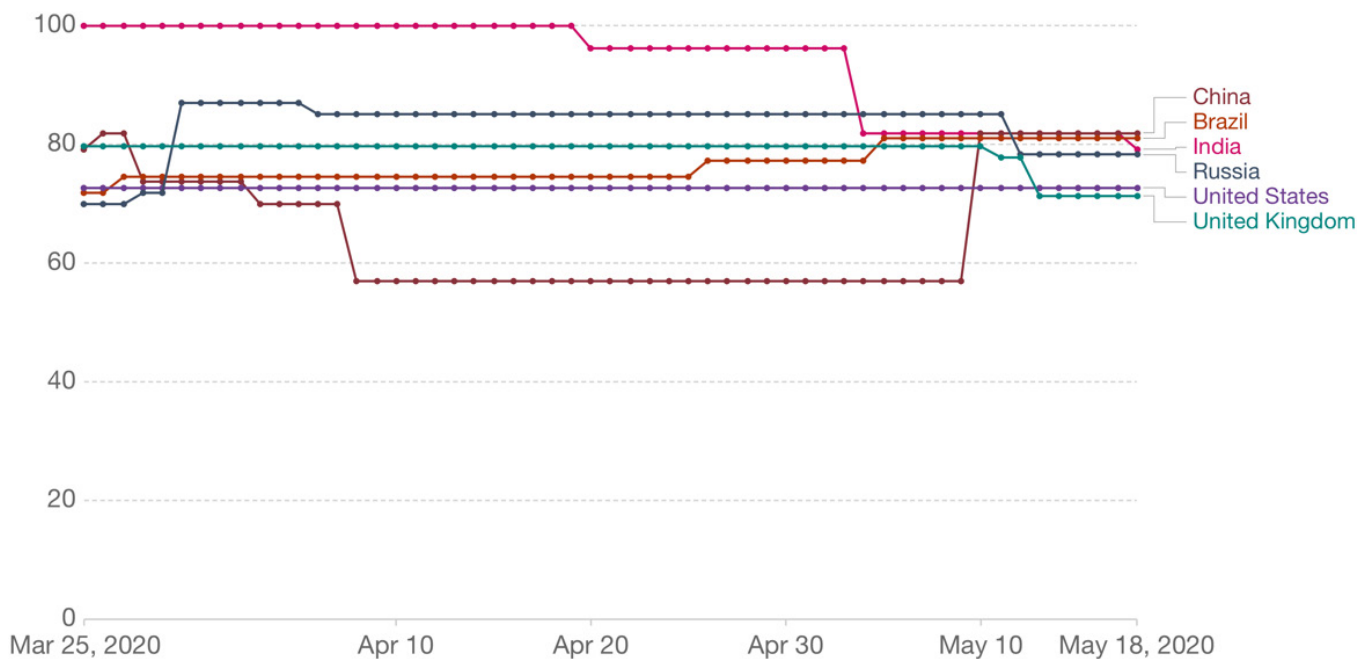


Figure 3

India's stringency score as compared to China, Brazil, UK, and USA between March 25, 2020 to May 18, 2020



Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last updated 31 August, 14:31 (London time)

Note: This index simply records the number and strictness of government policies, and should not be interpreted as 'scoring' the appropriateness or effectiveness of a country's response.

OurWorldInData.org/coronavirus × CC BY

Context

The lockdown and its attendant consequences adversely affected the society at large and more specifically the vulnerable groups including those working in the informal sector, daily wage workers, street vendors, sex workers, homeless, people with disabilities, senior citizens, transgenders, slum dwellers, tribal communities, patients, among others, across the country. Many suffered loss of livelihood, putting them into distress from hunger and loss of shelter. As economic activities shutdown, devastating images of migrant workers trudging on foot homeward flooded print and electronic media.

According to India's 2011 census, estimated 455 million Indians are today seen as 'internal migrants'—those that are living in a place they were not born in or did not live in six months ago (Census of India Website: Office of the Registrar General & Census Commissioner, India, 2011). Among them, about 54 million are migrants who have moved from their home states to other states for work (Census of India Website: Office of the Registrar General & Census Commissioner, India, 2011). These migrant populations working in the unorganised sectors lack a robust social security net, have low savings, and fragile support systems making them vulnerable during the lockdown. Migrant workers were the most affected by the lockdown, given the strict restrictions on inter-state movement.

Government of India's measures to address economic and social damage

A week after the first lockdown was imposed, the Government of India announced a number of measures to respond to the social and economic damage caused from the pandemic and the consequent lockdown. The measures included fiscal and tax policy measures; economic stimulus; livelihood policy; and other trade and healthcare measures along with initiatives such as the PM Garib Kalyan Anna Yojana; increasing wage rates under MGNREGA; free cylinders for women under Ujjwala; collateral-free loans for SHGs and MSMEs; and medical insurance for health workers.

Situation in Karnataka

Over the last few decades, Karnataka has seen marked improvement in its performance on social and economic indicators. This has largely been attributed to its high-tech development in urban areas. According to the 2011 census, the state had about 10.9 million migrants of which at least 2 million were engaged in the construction industry as registered workers. The proportion of migrants (both from outside the state and other districts of Karnataka) in Bangalore is even higher, with almost 40 percent of its population from outside the district.

Soon after the national lockdown was imposed in mid-March, more than 70 per cent of the contract workers in the private sector in Karnataka became unemployed (Azim Premji University; Centre for Advocacy and Research (CFAR); Gauri Media Trust, 2020). According to the COVID-19 Livelihoods Survey conducted by Azim

Premji University, even for those workers who managed to retain their jobs, they experienced a fall of almost 67 per cent in their average weekly earnings (Azim Premji University; Centre for Advocacy and Research (CFAR); Gauri Media Trust, 2020). In the initial days of the lockdown, state departments as well as local NGOs reported that workers, especially migrants, were running out of money to pay for their rent or to buy food. The problem was aggravated as almost 60 per cent of migrant workers in urban areas did not possess a ration card, according to the survey. The situation in urban areas was more precarious, with almost 50 per cent positive COVID-19 cases reported from Bangalore Urban district alone (Arakal, 2020).

Objective

The primary objective of the study is to document the nature of relief efforts undertaken by the state and non-governmental organisations in Karnataka, and how they collaborated during the pandemic. It documents the key learnings and challenges from such collaborations and propose strategies for developing an inclusive and sustainable model. In general, the study covers the following areas:

1. Understanding the context, in terms of who required relief and the different strategies adopted by organisations to identify the need.
2. Documenting the different kinds of relief, and its supply chain, and strategies adopted to acquire them.
3. Identifying the critical challenges faced by different stakeholders involved, in providing the relief.
4. Understanding the interface and interaction between different stakeholders to build long-term collaborations and institutional partnerships that can sustain beyond disasters.

In documenting different aspects of the relief undertaken, the study provides insights on:

1. Relief measures: Due to the unprecedented nature of the mitigation measure employed, the study identifies gaps in such measures for preparedness for the future.
2. Status of social security: The pandemic and the subsequent mitigation measures employed by the state has brought discussions around public healthcare, social security, local governance and inclusion to the fore. The study examines the various social security measures and strategies to improve and institutionalise the same.
3. Recommendations:
 - a. Policy measures to strengthen local governments to handle pandemic disaster and to ensure sustainability.
 - b. Strategies and plans for disaster preparedness and mitigation measures including preparation of comprehensive Standard Operating Procedures (SOP).

Scope

In this report, we provide an overview of the relief efforts undertaken by the Government of Karnataka and non-governmental Organisations (NGOs) across the state from March 25, 2020 to May 18, 2020. The information for the study were largely based on primary research. A total of 232 organisations were shortlisted for the study and semi-structured telephonic interviews were carried out with them. The details, including the process of shortlisting and the interview process, are described in the section on Methodology.

Due to the limitations arising from the geographic scope, challenges of the lockdown and the nature of the pandemic, it is important to highlight the boundaries of the recommendations:

1. The documentation of the relief efforts is limited to the State of Karnataka and do not present the state of relief across India.
2. Due to the nature of the mitigation measure employed, the roles and responsibilities of the agencies (government as well as state bodies) have continued to evolve beyond the study period.
3. While there have been multiple announcements made by the various state agencies after the study period, these measures are not covered in this study.

Approach

Network of actors engaged in relief

Responses to disasters are implemented in the form of mitigation efforts, relief and rehabilitation, and the ability to plan, prepare, and build capacity. Typically, provisioning of relief during and after the disaster is characterised as inter-agency, multi-stakeholder, state-led or public-private based operations. As in the case of any relief operations that involve many actors, the range of interactions varies from exchanging information among the different actors involved to exchanging resources.

In any multi-agency operation, to coordinate between multiple actors, standard operating procedures (SOP) are applied in order to increase the operational efficiency. In case of humanitarian relief, given the diversity of actors involved, a different set of operating procedures are required. For instance, there are actors such as volunteers, civil society organisations who are not trained formally, but provide the much-needed critical support. The relief operation thus involves a complex network involving multiple actors and relationships between them. Thus, in case of humanitarian relief operations, there is a growing acknowledgement to move towards common operating procedures (COP) when agencies who are not specialised in disaster management work/relief work are involved, due to various needs stemming from the disaster and the context for relief.

Another view of the system involves viewing actors as those who are part of a logistical supply chain such as vendors, suppliers, warehouse-operators, fleet managers; and those aware of the context such as civil society organisations and volunteer networks. While actors who are part of the supply chain are not privy to the situation on the ground during the disaster, those aware of the context provide the much-needed information to help

direct the relief operations. The interaction between different actors typically part of the supply chain and not involved in the context and actors who are situationally aware and contextually relevant are discussed as part of Humanitarian-Common Logistic Operating Procedure (H-CLOP) (Tatham et al., 2017).

The degree of their embeddedness in the community and with those in need is often an indicator of possible interaction. Shared risk and availability of shared resources (or unavailability of the shared resource) is a marker for the reciprocity of actions and engagement in providing relief (Bealt et al., 2016; Choi et al., 2016; Martin et al., 2016; Sanderson, 2017).

Tangible and intangible interaction costs during disaster relief operations

The costs for interaction during disasters are often measured in tangible indicators such as time, financial and manpower requirements, while, intangible components such as organisational change framework, their philosophy of impact, ideals and goals play an important role in the nature of engagement and willingness to engage. However, the intangible costs are rarely discussed or considered during disaster. Yet, commonality of goals along with the history of interaction(s) play an important role in engaging with each other.

Table 1

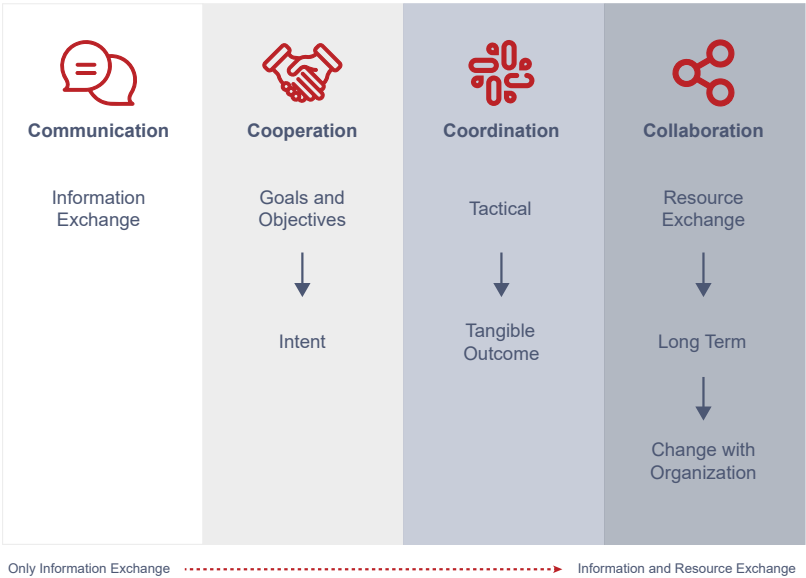
Description of 4Cs in disaster relief operations (Martin et al., 2016)

	Communication	Cooperation	Coordination	Collaboration
Cost of interaction	Low	Medium	Medium	High
Degree of embeddedness	Low	Medium	High	High
Following of common goals	Low	Medium	High	High
Frequency of interaction	Low	Medium	Medium	High
Reciprocity	Low	Medium	High	High
Shared resources	Low	Medium	Medium	High
Shared risk	Low	Medium	Medium	High

Engagement between actors and stakeholders often begins with information exchange, once intent, goals and objectives are established, following which the engagement moves into a tactical phase for tangible outcomes. The next step in the process leads to resources exchange between the organisations involved in the transaction. And in certain cases of communication, cooperation, coordination and collaboration, the engagement could lead to long-term changes in the structures of interactions and internal functioning of the organisations (Martin et al., 2016).

It is fairly well documented that during disaster relief operations, the problem does not often lie in the amount of supplies available, but in ensuring that the supplies reach those in need as and when they are required (Thomas & Kopczak, 2005). Emergency logistics in this case is essential and vital, so that the process of planning, managing and controlling the efficient flow of information, services and material is smooth (Sheu, 2007).

Figure 4
Challenges documented in the report under the 4Cs framework



Data Capture Method

For this study, multiple lists of organisations who were providing relief in the state were sourced through the Rural Development and Panchayat Raj Department (RDPR), Government of Karnataka. In all, the list contained a total of 3,367 NGOs working within the state of Karnataka, compiled district-wise. The lists were categorised as those providing food relief, health related relief and for specific needs. The list was further collated and pruned to remove duplicates and those that did not have contact details. Further, the organisations that were not actively involved in providing relief in the context of the COVID-19 pandemic and the lockdown were removed. In all, a total of 453 organisations were shortlisted.

In the next step, calls were made to each of the short-listed organisations to solicit their availability and willingness to participate for a telephonic interview/discussion. Based on the response, a total of 232 organisations were selected for detailed investigation including 5 organisations who agreed to participate on conditions of anonymity. The list of the organisations who participated in the study is provided in Annexure 1.

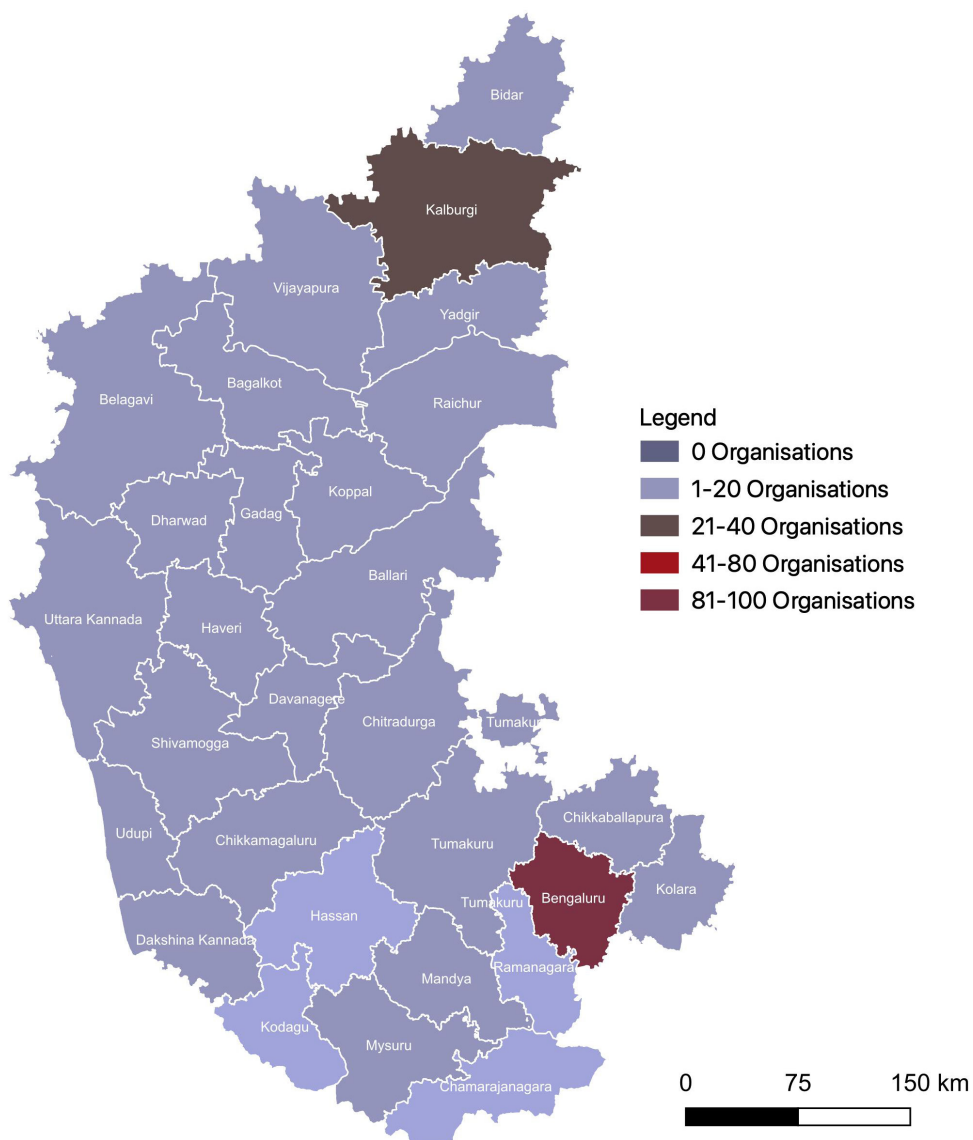
Figure 5

Process followed in shortlisting organisations



Figure 6

Number of organisations interviewed across all districts of Karnataka



Note: Location of 14 organisations (of 232) was unavailable and has not been used to generate this map.

The organisations involved in the relief work mainly included those already working with vulnerable groups for development, social services and allied activities, and having connections with local networks. There were also a few institutions and groups which were formed during the lockdown to provide aid and assistance to the people in need. All the organisations were involved in various activities and catered to different groups and personnel based on their scale of work, knowledge of local context and financial capacity.

Semi-structured interviews were carried out with the selected organisations to understand the relief provided by them and to capture allied information. The semi-structured questionnaire focussed on the following topics:

1. Organisation details
2. Nature and type of relief operations provided
3. Target group who needed relief
4. Patterns of request
5. Sourcing of relief material (material, logistics, and in-kind)
6. Coordination mechanism
7. Challenges faced in sourcing and distributing relief

8. Interaction with government agencies and other non-govt actors

In terms of scale, the organisations interviewed ranged from those working at neighbourhood level, focusing on a few nearby streets, to those providing relief across the state, and setup their own helplines to source information. In the case of state actors in Karnataka and the Bangalore region, the following Departments and Government agencies were active in providing relief during the lockdown:

1. Department of Food, Civil Supplies and Consumer Affairs
2. Department of Labour, Department of Health and Family Welfare
3. Department of Women and Child Development
4. Urban Local Bodies (ULBs)
5. District Collectors' officers and teams
6. Karnataka State Police

The details of their role in the relief operations and how they interfaced with the non-governmental organisations are discussed in subsequent chapters.



2 RELIEF ECOSYSTEM

The rapid response of the state, NGOs, creation of ad-hoc networks to procure and distribute relief and use of technology were the key strengths that aided timely and appropriate relief.

As different actors took upon different roles, the partnerships formed hinged upon information sharing, resource and material management, trust, and commitment. And such partnerships are often a result of ad-hoc networks or hastily formed networks that do not have governance and accountability structures. These networks also lack standardisation and contextual knowledge.

In order to examine the partnerships between the different actors and to seek pathways to improve relief efforts for future efforts, two aspects have been discussed. The two aspects are:

1. Information flow: The flow of information is key to any form of inter-actor collaboration in relief operations. The key characteristics of such a system include: (i) authentic and relevant information (ii) de-duplicated (iii) timely (iv) non-spurious and (v) actionable for those who require this information. This typically underscores the need for hierarchical, centralised information flow and management systems.
2. Material and resource flow: In case of material and resource flow, the need stems from accessibility, redundancy, scale, response time, and contextual needs and priorities. This indicates that, distributed, local systems of resource storing, and flow have higher efficacy for disaster relief operations. The various activities followed during the stages of material flow in relief operations are presented in Figure 8.

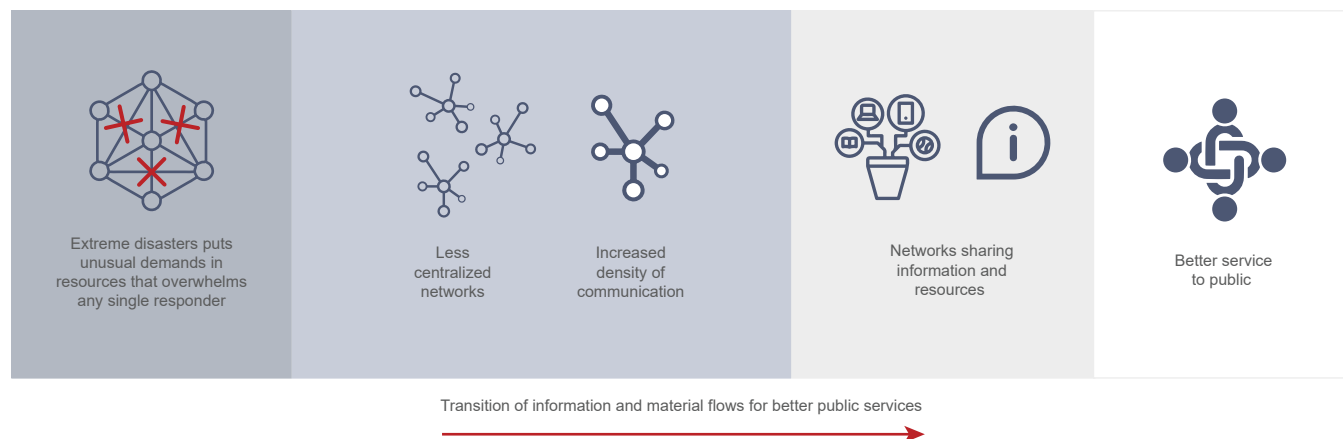
Fluid roles of actors disaster relief

Disaster relief operations are often discussed as a partnership between actors who play two kinds of roles: humanitarian, those providing relief, and logistics, those who perform roles of production, storage, and distribution of relief material. While most studies argue that these roles are mutually exclusive, in the context of the response to COVID-19 pandemic in Karnataka, the study observed a false dichotomy between the two.

Note: The term actor refers to formal and informal organisations, as well as individuals who perform formal and informal roles.

Figure 7

Information and material flow in inter-agency relief operations (Kapucu, 2007)



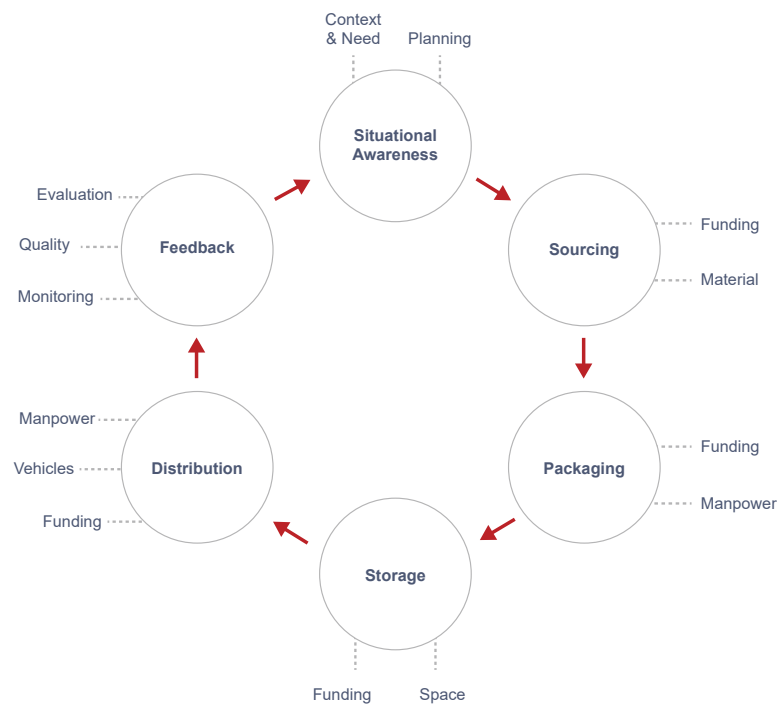
Information flow to create a situational awareness

In order to understand the information flow between different actors during disaster response, situational awareness is critical to provide a pivotal context as it identifies beneficiaries, nature of relief, among others for directing all relief efforts. The different aspects of information flow that frame situational awareness are as follows:

- 1. Sources of information for relief requirement*
- 2. Processes used for information collection*
- 3. Changes observed in the relief requests*
- 4. Constraints and challenges faced in assessing need*

Figure 8

Stages of information and material flow in relief operations



Following the announcement of a nationwide lockdown to mitigate the COVID-19 pandemic, in Karnataka, both the government and non-governmental organisations undertook relief efforts on a war-footing. This chapter discusses the information and material flow in the ad-hoc networks formed during the relief efforts based on secondary information, discussion and interviews of the organisations engaged in relief work.

Since the geographical scope of the work is limited to the state of Karnataka, the need assessment techniques as well as consequent observations must be understood in the context of the state, although some of the learnings can be extrapolated and implemented in other parts of the country.

Situational awareness

Sources of information

Analysis of the data from the study showed that the NGOs obtained information from three primary sources on who required relief and what kind of relief. The affinity between the organisation and the source they relied on to understand the need depended on the experience of the organisation and the duration of their engagement. In this section we shall discuss the three main sources of information that NGOs relied on to ascertain relief requirements.

Sourced from Government

Different government institutions provided details about the context of need, depending on the location. Out of the 232 organisations interviewed, 22 organisations approached the government departments for collecting information on relief. They included urban local bodies such as BBMP in Bangalore, labour department, local police among others. While at the district-level, office of district collectors and nodal officers of various state departments provided the required information, Gram Panchayats provided the same at village level. The Department of Labour, Government of Karnataka provided information regarding the relief at the state level.

Sourced by organisations

A total of 65 out of the 232 organisations interviewed, assessed the need for relief on their own. They can be broadly classified into two groups. The first, are those organisations who were already involved in development and aid activities for the vulnerable and the marginalised groups affected by the lockdown (viz., those working with daily wage labourers, commercial

sex workers, among others). Given these organisations have established trust and knowledge networks with vulnerable communities who needed relief, they could reach out to them directly and provide support. The second group consists of organisations who were involved in social service and allied activities but did not directly work with those affected during the lockdown. Examples of such organisations include volunteer groups and religious organisations. These organisations had the advantage of good understanding of the local context and connections with local networks, in addition to engaging with volunteers and other members who helped in surveys, to identify who needed relief.

Sourced through organisation's network

Some of the organisations relied on their local networks to identify who needed relief. Out of the 232 organisations interviewed, 22 organisations fell into this category. The entities who provided information included other NGOs, companies, and volunteers. Once they received the information on the need, these organisations helped coordinate procurement and distribution of relief.

Process for information collection

As the lockdown progressed, the situation on the ground evolved progressively. Still the information regarding the relief needs had to be authentic and relevant. Therefore, the organisations adopted a variety of strategies and processes to understand the context:

1. In-person visits: In order to assess the relief needs due to the evolving situation, organisations undertook in-person visits to neighbourhoods. Further coupons were distributed to those who needed relief and strategies were developed to coordinate between the need assessment and provision of relief.

Channels of information flow used by relief providers

Given the localised nature of the relief efforts and the contextual knowledge required, mass media such as television, local news media were not a key source of information. However, in one case an organisation, who on seeing a report of isolated nomadic people who required help, acted on it, and in another instance an organisation reaching out to a local media group for potential information. While WhatsApp and SMS (and Twitter to a limited extent) was the most useful tool used by many organisations, other social media platforms, such as Facebook and Instagram, were not useful in sourcing information on the needs of vulnerable groups, except in the case of two Bangalore-based organisations who crowd-sourced information on relief through Facebook and Instagram.

Unique nature of the situation posed by the lockdown due to COVID-19

Adoption of a nationwide lockdown as a mitigation strategy was unprecedented in India for previous pandemics such as SARS, H1N1, Ebola, etc. This coupled with lack of preparedness and lack of situational awareness created challenges for information flow. While disasters generally cause a temporal disruption in supply chains and unavailability of stocks, the lockdown posed a problem of availability of stock and complete disruption of supply chains.

2. Social media: Organisations collected information regarding relief from WhatsApp groups created by the Government agency to provide information and to coordinate between different actors providing relief. Further, the WhatsApp groups allowed all those involved to keep track of the relief requests and to avoid duplication of efforts.

3. Contact numbers to solicit information: In order to source information, organisations distributed contact details (phone numbers, contact details, a registered helpline), so that people in need could call in and provide details.

Changes observed in relief

During the lockdown period, organisations were requested for a variety of relief including dry rations, cooked food, medical supplies, PPEs, transportation, shelter, among others. The type of relief requested varied, based on who were making the requests. For instance, many migrant labourers preferred cooked food and transportation as a more immediate relief, but as the lockdown proceeded, the nature of relief sought by them changed to dry rations. Further, as sources of income had dried up, people, who received food and rations, requested for funds to support rent payments.

Challenges in need assessment

The information flow between different actors involved in the relief work relied on ad-hoc networks, posing challenges for organisations in understanding the needs. Some of the key challenges faced by organisations included:

1. Duplication of beneficiaries, leading to same individuals served by many organisations.

2. Incorrect mapping between beneficiaries and the type of relief.

3. Mismatch between the demand and supply of relief.

4. Difficulty in identifying beneficiaries and their relief requirements in isolated, far flung areas.

5. Issues in identification as certain people did not have state issued ID cards.

6. Lack of clarity on logistics management and information on the lockdown rules.

7. Lack of coordination between different actors.

8. People were fearful and anxious about being approached due to the infectious nature of COVID-19.

9. Volunteers expressed fear and anxiety, as overcrowding posed dangers of contagion.

Analysis of relief efforts

Mapping the landscape of relief

While different activities all over the state were ground to a halt, diverse groups were affected in different ways, and vulnerable groups faced multitudes of hardships. NGO's responded by providing relief operations, whose breadth and scope varied. They ranged from providing cooked food, rations, and personal protective equipment to counselling services. NGO's played a key role in ameliorating some of the harsh consequences of the mitigation measures. Further, as the State Government started providing relief to different communities, coordination and collaboration with the State Government became crucial to ensure that efforts were not duplicated, and the on-ground view NGO's informed the State Government's relief efforts.

Responses to disasters, in the form of mitigation efforts, relief and rehabilitation depend on the ability to plan, prepare and build capacity. The situation posed by COVID-19 pandemic and nationwide lockdown varies

from existing literature on disaster management, mitigation, relief, and rehabilitation in the following fronts:

1. Precedence: The nature of the pandemic and the mitigation strategy adopted (nationwide lockdown) did not have any precedence in the Indian context or across the globe. While previous pandemics such as SARS, H1N1 and Ebola had a global spread and response, the bans on air travel, screening and location specific shutdown had helped mitigate and contain the effects.

2. Information flow challenges: In case of most disasters, the primary issue is lack of situational awareness caused by the loss of regular channels of information flow. For instance, during floods, cyclones, monsoons, earthquakes, it is often observed that the communication towers and lines (along with power and electricity systems) are damaged or irreparable that leads to an inability to communicate and create a situational awareness. However, in this case, the physical infrastructure for communication flow remained unaffected. There were awareness campaigns conducted about the disease spread and prevention measures. However, flow

of information regarding many rules that governed the lockdown were ambiguous in terms of their scope and processes created to enforce them.

3. Interruption in supply chains: Often, disasters lead to disruption in supply chains either by loss of stock or the inability to transport the required aid to a specific region. In the context of a nationwide lockdown, while stock was available, the flash requirement across the country coupled with the inability to use traditional supply lines created a peculiar case for providing relief.

4. Duration: The nature of the pandemic and the duration of the lockdown was atypical to most relief efforts in the context of typical disaster management processes and protocols.

Given the restrictions in the movement of people, goods, and services during the lockdown, there were different types of relief requested that required appropriate responses, ranging from food to calls to address domestic violence. A summary of the types of relief is provided in Table 2.

Table 2

Types of requests for relief

Type of request	Relief required
Food	Cooked food
	Dry rations
Healthcare	Medicine
	Healthcare consultation
	Personal hygiene and sanitation
	Visit to healthcare centre/travel assistance to visit healthcare centre
Travel assistance	Healthcare centres
	Specific locations for students
Abuse	Addressing child abuse and violence, domestic abuse, sexual violence
Communication	Request for mobile currency recharge, charging batteries, etc.
Fuel	Requests for cooking fuel, etc.

The following section will discuss the different kinds of beneficiaries served by the NGOs in the state, and the different kinds of relief provided, both in terms of the range of relief activities provided and the challenges in the logistics of providing relief.

Beneficiaries

The urban poor, mainly migrant workers, were immediately affected in the aftermath of the lockdown. Table 3 below lists different informal workers, vulnerable and marginalised groups, and other groups of people who received relief.

Table 3

Various vulnerable groups catered to by organisations

Key	Value	Category
1	Devadasis	Informal workers
2	Domestic workers	Informal workers
3	Farmers	Informal workers
4	Hospital patients	Local residents
5	SHGs and urban poor	Local residents
6	Others – Migrants	Migrants
7	Abuse - Domestic/Sexual/Child	Vulnerable and marginalised groups
8	Orphans	Vulnerable and marginalised groups
9	Pastoralists/Nomads	Vulnerable and marginalised groups
10	People in extremism affected areas	Vulnerable and marginalised groups
11	Students	Vulnerable and marginalised groups
12	Those without access to govt. services	Vulnerable and marginalised groups
13	Sanitation workers, Health workers, Police staff, Government staff	Frontline workers

Out of the 232 organisations interviewed, majority of the organisations (85 per cent) focused their relief efforts towards the vulnerable and marginalised groups. Around 64 per cent of organisations interviewed served local residents and 68 per cent served informal workers. More than half of the organisations interviewed (55 per cent) focused their relief efforts towards the migrant communities. Only 21 per cent of the organisations extended their relief efforts towards the front-line workers, and 2 per cent provided care to animals.

Food and rations

Cooked Food

With the sudden announcement of the lockdown, the immediate need was provisioning of food across the state. People including migrant workers who had lost their jobs, and students who were stranded away from their homes, were identified as the most vulnerable, as they were unable to procure food. Of the 232 organisations part of the study, 115 were involved in providing relief in the form of cooked food.

Various non-government organisations and volunteers stepped up to provide cooked food to different groups of people. Organisations that were involved in providing relief efforts included trade associations, educational institutions, NGOs, local clubs, volunteer groups, religious trusts, elected representatives among others.

Spectrum of relief

The quantum of food provided was mostly reported in the following forms:

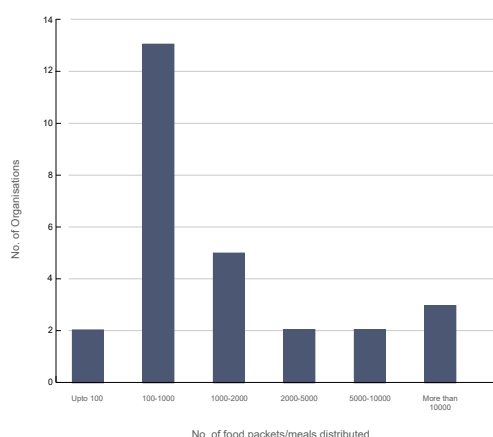
1. Number of food packets/meals distributed.
2. Number of families served.
3. Number of individuals served.

(Some large-scale organisations were able to track the quantity of food per each packet in terms of its weight (kilograms) however this was not followed by a majority of organisations.)

In terms of the number of food packets served during the lockdown, it ranged between 5 to 30 per day to more

Figure 9

Number of food packets/meals distributed

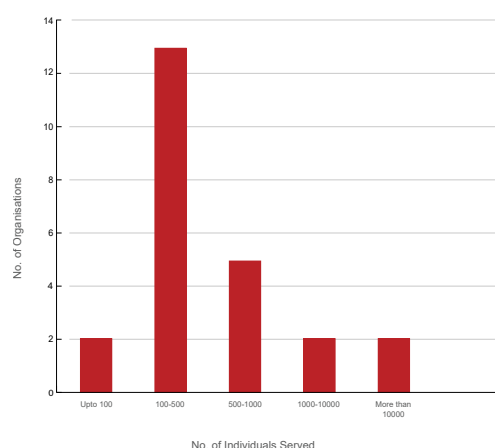


than 100,000 per day. On an average, organisations distributed between 100 to about 1 lakh meals daily, depending on their size and demand.

In terms of the number of families and individuals served, it ranged between 100 to 15,000 persons per day respectively. Among the 115 organisations that served cooked food, the maximum number served was by Jai Bharath Mata Seva Samiti in Kalaburagi, who distributed food to 5,000 families every day. Most organisations served cooked food to 100-500 individuals per day, as can be seen in Figure 10 below.

Figure 10

Number of individuals served



It was found that at least two meals a day were provided (usually lunch and dinner), at the same locations serving the same groups of people. However, in order to ensure that food distribution was geographically diverse, a few organisations provided different meals to people in different parts of the town, that is, lunch in one area while dinner was provided to people in another area.

Procurement

Supply chain of food required procurement of food grains, vegetables and other ingredients essential for cooking. In most cases food was prepared in designated kitchens. These included function halls, convention centres, dharamshalas or large grounds such as empty plots, playgrounds, etc. (Dharamshala or hotel or ashram or Nursing Home, etc., are used only for temporary stay or stay in transit.) Large organisations and religious organisations formed community kitchens. Establishments that were already preparing large quantities of food such as hotels, restaurants and canteens volunteered their services to prepare food. In each of these

cases, local shops, markets and wholesale shops were used to procure the main ingredients. For example, the required materials were procured from the METRO store and the APMC yards. METRO Cash & Carry is a German multinational wholesale chain, owned by Metro AG. Agricultural Produce Market Committee (APMC) for a given state maintains yards where farmers bring agricultural produce to be auctioned off. This is a set up as a means to safeguard farmers from price exploitation.

Apart from large kitchens, individual home kitchens were also used to prepare food. The prepared food had to be distributed as soon as possible as it had a short shelf-life and had to be consumed soon and could not be stored without refrigeration. Small neighbourhood volunteer organisations distributed tea and snacks by sourcing materials from local tea shops in their area.

Distribution

The distribution of food varied based on the size of the organisation, location of the kitchens and the type of beneficiaries. Broadly two models emerged for distributing cooked food:

1. Dine-out option: distribution of food in designated locations or locations where there was demand identified (or food was requested by a large community).
2. People came to a location to get access to food.

The first mode, where cooked food was distributed by transporting it to areas where the beneficiaries were located was the most preferred, since physical distancing could be maintained. In most cases kitchens operated by large foundations prepared and gave food packets to other NGOs to distribute. For instance, Prestige group of builders and developers, sent food packets on a daily basis, which were distributed by the Maa Welfare Association in Bangalore.

In order to transport cooked food, NGOs and volunteers used their own vehicles. Light-freight vehicles were also rented for the same purpose. Organisations involved in large scale operations were able to engage trucks, and professional drivers and fleet operators provided in-kind access to trucks or cars. In case of dine-in, religious organisations and trusts prepared food and distributed to people of all faiths.

However, storage was not an option for cooked food. As a result, any unused food would be wasted. The distribution and availability of cooked food as a first response was seen as crucial compared to marginal wastages that occurred due to lack of communication. The wastages reduced as volunteers adapted and were able to better communicate and coordinate among themselves. Furthermore, as the type of relief switched to providing dry rations some of the shortcomings of distribution of cooked food were avoided.

Changing patterns of demand for cooked food

As storage was not an option for cooked food, any unused food would be wasted. The distribution and availability of cooked food as a first response was prioritised over marginal wastages that occurred due to lack of communication. The wastages reduced as volunteers adapted and were able to better communicate and coordinate among themselves. Furthermore, as the type of relief switched to providing dry rations some of the shortcomings of distribution of cooked food were avoided.

Dry rations

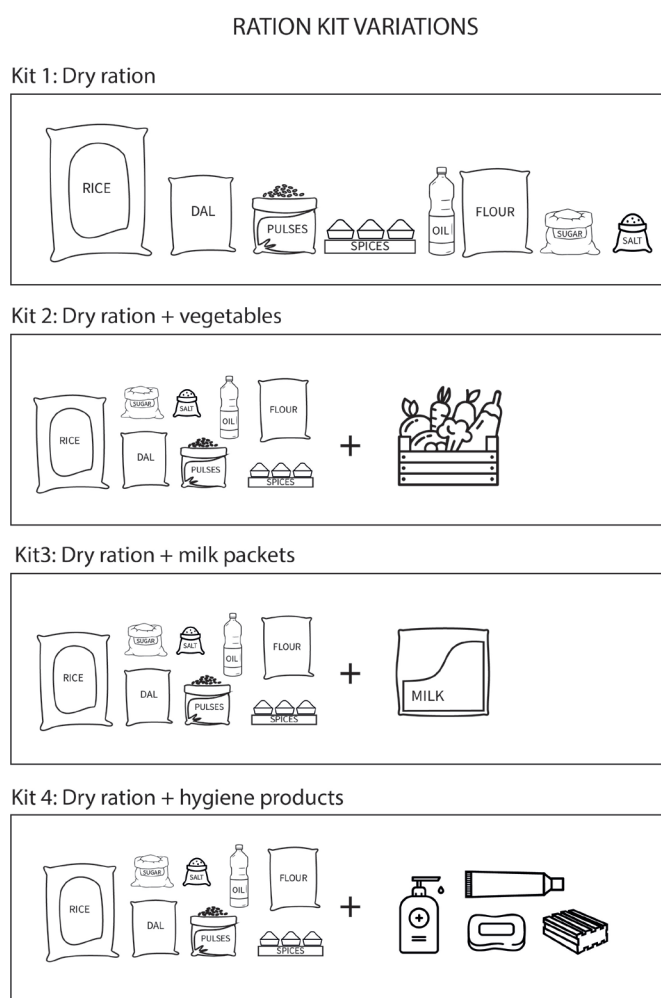
As the lockdown was extended, and based on the feedback from the beneficiaries, NGOs and volunteers realised that providing dry rations was better than providing cooked food as it helped to:

1. Allow larger quantum of materials to be stored and distributed,
2. Reduce the number of times people need to assemble in crowded places,
3. Allow people to prepare and eat food according to their convenience,
4. Modify the rations with supplementary requirements or diet preferences.

This initiative was complemented by government interventions providing additional rations through the PDS scheme. In order to optimise distribution of relief materials and time, volunteers reached out to people who did not have access to government rations due to their migrant status or their location. The base kit of dry rations mainly consisted of food grains such as rice, and wheat flour along with pulses, dal, oil, sugar and salt along with spices. However, the base kit underwent variations based on the cultural, location and dietary requirements of the beneficiaries. In some rural areas (and in urban area) vegetables were also added to the kits. In some cases, volunteers also included hygiene products such as masks, soaps, toothpaste and sanitary napkins. In terms of size, the ration kits catered from one week to one-month worth of supplies (refer to Figure 11).

Figure 11

Different kinds of dry ration kits



Customization of dry kit rations

Providing dry rations was a sustainable option in the long run as immediate needs were met in the initial relief operations. Storage, packaging, transport and supply was easier with dry ration kits. Most organisations had created a base kit of rice, wheat flour, pulses, dal, oil, sugar, spices and tea or coffee. These kits underwent substantial modifications based on the cultural, location and dietary requirements of the beneficiaries.

Disruption and lack of public networks for social protection

Many organisations provided ration kits catered between 100 and 2000 households. Similarly, the number of families they reached was upto 2000, while two organizations reached a much larger number. This indicates the lack or disruption of formal, government supply chains to reach out to the smaller households and individuals who are in need of social protection.

Spectrum of relief

Due to the urgency and nature of relief operations, it was found that many organisations did not completely document their relief efforts. Out of the 232 organisations interviewed, 159 stated that they served dry rations. Overall, information about the relief efforts undertaken by different organisation were collected along the two main parameters,

1. Ration kits provided.
2. Number of families or individuals provided with ration.

The number of dry ration kits provided during the lockdown ranged from 50 kits to a maximum of 600,000 kits. Most organisations provided around 101-500 kits. The number of families catered ranged from 24 families to 4,000 families, with an average of about 500 families.

Figure 12
Number of kits distributed

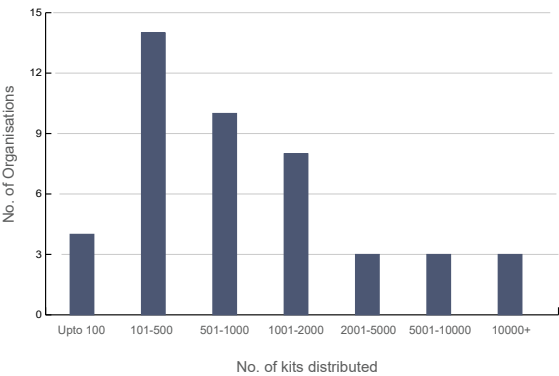
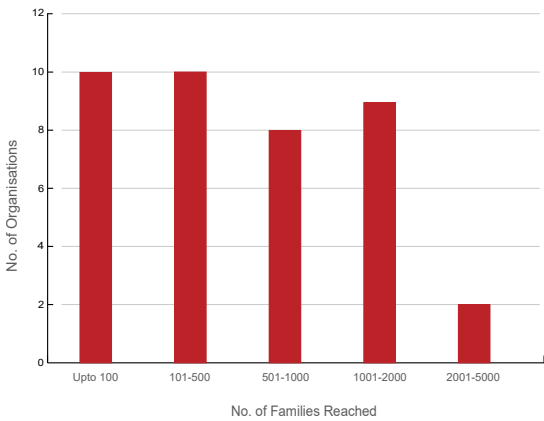


Figure 13
Number of families reached



Procurement

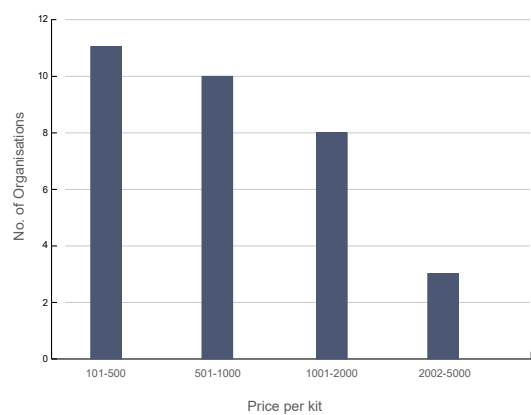
In terms of procurement, four main categories are identified:

1. Local and individual shops: included ration shops and supermarkets, from where small and medium sized organisations bought the relief materials.
2. Wholesale Traders: included vendors who dealt with large quantities of food-grains, such as rice mills, METRO Cash and Carry stores among others.
3. Agricultural department: APMC Yards and Food Corporation of India (FCI).
4. Farmers

The period of lockdown saw direct purchase of grains and vegetables from the farmers and Farmers Producer Organisations (FPOs). For instance, in Bijapur, a rural society helped around 100 farmers find a market for

their produce. The farmers were paid directly by the organisations. All rations that were procured needed to be packed, stored and distributed to the beneficiaries. Organisations had to identify locations for storage and find volunteers. However, it was stated that lack of storage was one of the major constraints for scaling of operations. Packaging of the kits were done by the volunteers (members and employees) of different associations and groups. In some of the cases, the vendors sourcing the ration packed the kits themselves and provided it to the volunteers for distribution.

Figure 14
Price per kit

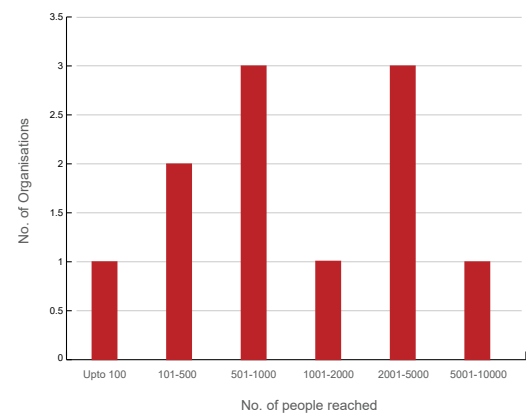


Distribution

Similar to the distribution of cooked food, two modes were used for distributing dry rations including:

1. Distribution at designated sites.
2. Door to door distribution.

Figure 15
Number of people reached



Distribution at specific sites involved beneficiaries collecting the kits from designated collection points such as schools, offices, police grounds among others. In these instances, care was taken to maintain physical distancing. In order for safe and systematic distribution of kits, time slots were allotted for the beneficiaries to avoid crowding, maintaining 10 to 15-minute gap between the arrivals for collection and serving few people at a particular time.

In case of door to door delivery, volunteers distributed the kits to households using their own vehicles (two-wheelers or four-wheelers) or walking to specific locations. For instance, Nisarga Gramin Abhivrudhi catered to the slums and rural area in Gulbarga by walking and distributing the ration kits. Commercial vehicles such as trucks or tempos were used depending on the number of kits that had to be delivered. For instance, READS a local NGO employed truck drivers for carrying out the distribution process in Koppal district.



Healthcare

NGOs who were already working with communities, by helping them provide access to healthcare before the lockdown, recognised that supply of medicines could become a challenge due to the lockdown, especially for those who were already suffering from other diseases. During the interviews it was found that medicines related to high blood-pressure, hypertension, diabetes, Tuberculosis (TB), among others were distributed to those needing them. Medical help also included arranging of dialysis treatments by either taking them to hospitals or organising home visits by nurses.

Overall, it was found that NGOs distributed medicines to a range of 105 to 4500 people. Further, they also persuaded local pharmacists to donate medicines or

help procure some of them. The medicines were then distributed along with the ration kits, whenever people requested them. One of the volunteer organisations in Bangalore paid local pharmacist to distribute medicines to those who requested them at their counter. In case of rural areas, communities had volunteers who travelled to nearby towns and procured the required medicines on request, along with other essential items.

In addition to medicines, many NGOs and volunteers arranged for transporting the elderly and other patients who needed treatment for dialysis in cities across the state. Volunteers arranged private vehicles for these trips. For instance, a society in Hassan helped shift dialysis patients to other hospitals. However, due to the shutting down of OPDs in many hospitals, many reported that people were facing difficulties in accessing healthcare for the non-COVID-19 patients.

Economic relief provided by the Government of Karnataka, India

The government provided economic relief in the study period through direct financial support, insurance coverage, waivers, and support to sell stocks. The compensations ranged from a one-time payment to specific employment groups, a compensation or insurance for state employees to a direct bank transfer. Apart from a waiver for weavers, waivers and concessions were not specifically targeted. Lastly, farmers as a group, were provided support through stock purchase, usage of government owned infrastructure and subsidies for purchase.

Economic relief

The outbreak of COVID-19 pandemic and the resultant lockdown had a major impact on the economy. This in turn affected the supply and demand of goods and services. With the loss of jobs in both the formal and the informal sectors, and migrants returning from urban centres to rural areas there was an immediate requirement for providing assistance and supporting livelihood for the vulnerable groups.

Relief in terms of direct economic aid at scale was undertaken by the Government, while the NGOs predominantly focused on providing in-kind relief as described earlier. Specific economic support was provided by the Government through direct financial support, insurance coverage, waivers, and support to sell stocks. Some of

the key steps undertaken by the Government of Karnataka for providing economic relief included:

Compensation

1. A one-time payment of INR 5,000 was provided to those affected by the COVID-19 crisis including daily wage labourers, auto and taxi drivers, among others. INR 1.45 billion was sanctioned for the purpose.
2. A compensation/insurance of INR 3,000,000 was announced for the families of drivers and conductors of the state public transport in the event of their death from COVID-19 during their service.
3. A compensation of INR 25,000 per hectare, limited to a maximum of one hectare, was provided for horticultural farmers.

4. Under the 'Weaver Samman Yojana' (Nekarara Sammana Yojane), the state government provided INR 2,000 directly to the bank account of the handloom weaver through DBT (Direct Benefit Transfer).

5. INR 2,000 was provided to the 1.58 million registered building workers through DBT. Further, an additional amount of INR 3,000 was transferred to building workers through DBT. The cost estimated for this activity was INR 16.12 billion.

Waivers and concessions

1. Monthly fixed charges on electricity bills for MSMEs was waived for two months and for large scale industries, payment of fixed charges was deferred without penalty and interest for a period of two months.

2. The Government announced a INR 1.09 billion 'Weavers Loan Waiver' scheme. A reimbursement benefit was provided for the weavers who had repaid their loan amount between Jan-Mar, 2019.

3. For electricity consumers of all categories the Government announced incentives and concessions to those who paid the bills within the stipulated time; by reducing interest on the amount for delayed payment; incentives for those who paid bills in advance and provided opportunity to pay in instalments.

Support for farmers

1. The Government announced that under the 2019-2020 'Central Government Assisted Price Program' to buy quality chickpea (Bengal Gram) at the rate of INR 4,875 per quintal, and purchased a total of 143,390 metric tonnes from farmers in Dharwad, Belagavi, Gadag, Vijayapura, Kalabugi, Yadgir, Bidar, Raichur, Chitradurga, Bagalkote, Koppal, Bellary, and Davangere.

2. The Government announced approval for sale of flowers, fruits and vegetables from Karnataka Milk Federation (KMF) outlets in order to help farmers sell their stocks.

3. The Department of Animal Husbandry and Fisheries notified the purchase of grains to prepare animal fodder at the rate of INR 1,760 per quintal. The purchase would be made for a period of 1 year.

In few cases NGOs contributed directly to economic relief. For instance, Raksha Foundation from Bangalore donated INR 100,000 to the PM-CARES Fund; a Muslim Orphanage provided cash donations of INR 1,000 to widows and orphaned children of 500 families; and

Bharat Scouts and Guides, Raichur gave a donation of INR 650,000 to the District Collector's Office.

Other relief measures

1. Provision of shelter: Based on the interviews, it was found that four organisations worked in providing shelter to migrants, labourers and daily wage workers, street vendors, destitute, people suffering from mental health issues, homeless, among others. The shelter provided by the organisations ranged from provisioning for 30 people to 500 families. Shelter was provided by either repurposing existing structures or by paying rent on behalf of the communities.

2. Recreational relief for children: The study found that at least 10 organisations focused on supporting children by providing them toys, clothes, counselling about the situation among others. 65 organisations reported providing toys. These organisations included orphanages, educational institutions, NGOs, local clubs and volunteer groups, religious trusts, elected representatives and so forth.

3. Drinking water: Access to drinking water was a critical issue reported during the crisis. At least nine organisations interviewed stated that they distributed free drinking water, either in the form of packets or through tankers to the local residents. They were mostly reported from urban areas.

4. Legal assistance: Various studies reported that victims of domestic abuse found themselves at greater risk of violence due to the strict imposition of lockdowns, across the country. In Kolar, an NGO empanelled with the district legal services authority, brought on board paralegal volunteers to help provide legal assistance to survivors of domestic violence.

5. Funerals: Due to the sudden increase in daily deaths as well as the risks associated with conducting funerals, managing deaths during the lockdown became a significant challenge. In order to address this, a foundation in Raichur conducted training programmes for local residents on how to obtain permissions, conduct funerals while wearing PPEs.

6. Awareness: Based on the interviews, it was found that 56 organisations were involved in spreading awareness about COVID-19 disease to local population including need for physical distancing proper use of masks and so forth. Door to door visits, distribution of pamphlets, banners in public places, multimedia content through TV, Radio and social media, and announcements through loud-speakers and vehicles using loud-speakers were



employed to create awareness.

Challenges in providing relief

The organisations providing relief during the lockdown faced different challenges in providing relief in a timely manner. These challenges came up at different stages, from obtaining financial support; sourcing of relief materials, packaging and storing, distributing relief among others. Broadly, the challenges are classified as those related to the flow of resources (funds, relief material, and so forth), or to the flow of information (communication and coordination between different actors). In order to understand the gaps and plan responses strategies to address them, it is imperative to analyse these challenges.

Some of the key challenges faced by volunteers providing food, rations and medicines included:

1. Inconsistent demand for information: Although NGOs and volunteers were able to conduct quick surveys and establish a baseline for assessing the demand for relief, there were many instances where information for

demand was either not available or inconsistent. For instance, it was found that the daily demand for food varied a lot and the demand locations were inconsistent, leading to duplication of efforts.

2. Distribution of passes and vehicle availability: Due to the strict lockdown, only people with passes issued by the city police were allowed to travel during the curfew. This hindered the relief efforts as vehicles and volunteers were frequently stopped. In addition, lack of freight transport further constrained the distribution of rations, as the scale of the operation demanded bigger freight vehicles and a larger fleet.

3. Access to funds: Based on the interviews it was found that most of the volunteers used their own personal and family networks to raise funds. And the lack of larger and sustained financial resources prevented the relief efforts from scaling.

4. Risks to volunteers: Due to the large crowds, maintaining physical distancing during distribution of relief materials posed a huge risk and challenge for the volunteers as they needed to deliver relief on a daily basis.

In some cases, it was reported that volunteers were victims of hooliganism by local strongmen.

Coordination of relief efforts

In times of disasters, the Government is mandated to perform a significant role in providing relief to those affected. Further, it also has to ensure that people continue to have access to basic services and entitlements to prevent material or psychological distress. This is critical as the fundamental rights to movement, livelihoods, education and free expression are at stake.

The Government, with its vast array of resources and administrative power, has the ability to make the relief efforts more efficient, while the NGOs with their intimate knowledge of ground realities and local networks, are critical to ensure the last mile is covered in a timely manner. We came across various points of communication between the government and CSOs during the lockdown such as identification of those in need, sourcing of material, distribution, and transportation of material and persons. While there were many instances of successful cooperation, there were also number of challenges that had to be overcome during the interactions. These points of cooperation and constraints occurred at various stages of relief provision. This section discusses different ways in which they interacted with each other during the relief efforts.

Mechanism for coordination

Under the 'Committee to Coordinate with CSOs/NGOs, Private Sector and International Organisations for Covid-19 Response-Related Activities', Government of Karnataka set up a control room to facilitate coordination between different stakeholders engaged in the relief operation. People reached out to the control room through calls, SMS, email, WhatsApp messages seeking relief. The control room would then forward requests to the concerned authorities and/or to the CSOs/NGOs to provide relief. It also coordinated the donations (monetary and in-kind) received, to ensure it is directed towards those in need. Further, the control room started maintaining an inventory of relief received in-kind across three warehouses. Donations were received from BBMP, Child Rights Trust and Young India, CII, among others. The relief items included dry ration kits, hygiene kits, water bottles, nutrition kits among others.

Stages of coordination

In Karnataka, both the Government and civil society organisations immediately undertook the task of providing

relief to ameliorate the adversity faced by various vulnerable groups. For instance, the Department of Labour, Government of Karnataka, provided relief by sourcing food and dry rations through various sources such as commercial kitchens, community and civil society organisations and through CSRs for the stranded migrant labour, construction workers, and those in need in the city of Bangalore. The department set-up a multi-lingual helpline number "155214", for food requests. The logistics for the food operations were undertaken by the Home Guards, Civil Defence Force, volunteers from the Trade Unions and individual volunteers.

Of the 232 organisations interviewed, 46 organisations successfully collaborated with different arms of the state government on various aspects of providing relief. The NGOs and the Government worked at different levels (city, district, and village-levels) to coordinate and provide relief.

Coordination for situational awareness

In the initial stages of providing relief, there is an imperative need for sharing information regarding the relief required, identifying those in need, and preventing duplication. The Government adopted various strategies to co-ordinate with different NGOs to fulfil the need for providing relief.

1. Coordination in cities: At the city level, information regarding relief (quantity, beneficiaries) received by the government was provided to NGOs who then undertook the task of providing relief. The Department of Information and Public Relations coordinated with NGOs both through their 'Corona Warrior' programme and directly with support from the Department of Women and Child Development, BBMP in case of Bangalore, and the local police.

2. Coordination at the district-level: At the district level, the District Collector's office was the key agency to co-ordinate relief efforts. The coordination process involved a Nodal Officer, appointed for COVID-19 relief work and entrusted with the responsibility of coordinating between the NGOs and the Government. A WhatsApp group was created to coordinate, avoid duplication and regularly share information on relief.

3. Coordination at the village-level: At the village-level, the Gram Panchayats coordinated with NGOs to facilitate provisioning of relief by sharing information of those who had returned back to the village.

As the Government and NGOs forged networks to share information and to coordinate relief efforts, many

challenges stemmed from such ad-hoc networks. Recurring issues included, information not tallying with the ground realities, closing of information loop, lack of trust and standardisation among others. For instance, over 15 NGOs stated that even though they tried to reach out to various government departments in order to provide assistance, they did not receive any response from the concerned officials. The government's coordination team stated that they were unable to respond to all requests for assistance or collaboration due to high volume of information and workload.

Coordination for logistics support

Many NGOs operating at a localised level needed help to source relief material that are not easily available to them. Due to the lockdown, many restrictions were put in place by the government including prohibition of inter-district travel, imposition of curfews, prohibiting assembly of large groups among others. Such restrictions made it difficult for NGOs to provide relief in a timely manner. The government stepped in to provide logistical support, funds, source and store relief material, distribution and so forth. The DC office and the Rural Development and Panchayat Raj department provided limited funds to ensure timely food, milk, dry food, and juice packets for distribution. The police department played a

crucial role in terms of coordinating movement of materials, managing crowds during distribution of relief. However, there were issues related to coordination due to the lack of clarity regarding the rules that governed the interface between the Government and the NGOs. For instance, it was reported that procurement from Food Corporation of India was challenging. Also, many NGOs found transporting relief materials during lockdown challenging due to frequent stopping of vehicles and volunteers by the police. Further, the rules governing the passes issued for transportation was unclear, hindering coordination and relief efforts. For instance, while passes were issued covering certain areas and not for adjoining areas, which made it difficult to travel. Vehicles were often impounded by the police even when the organisation had necessary permission for transport.

Coordination to spread awareness about COVID-19

NGOs worked closely with the Government to spread awareness among the public about the pandemic, maintaining health and sanitation, create awareness, provide details of empanelled hospitals, sensitisation programs for people returning to villages from cities among others.



Challenges faced by the Government

Various government departments provided relief based on the information available to them prior to the lockdown and based on additional requests for the same through own helplines and local officials. However, lack of strong social security net in India meant the government departments had to rely on the NGOs to work together to provide relief to those in need. In traditional disaster response, there are established chains of information and material flows. In this context, however, all channels of material flow were disrupted since the crisis is not limited to certain geographic region and there were no established protocols for information flow. As a result, the state faced many challenges in coordinating with civil society organisations in real-time. Some of the key challenges faced by them included:

1. **Preparedness and planning:** Traditional disasters and mitigation measures have detailed plans and SoPs available. Due to the novel nature of the mitigation measures employed in case of Covid-19, the state departments had no prior experience to draw from and interact with the NGOs for providing relief. This challenge also made it difficult to plan the supply chain for relief material.

2. **Situational awareness:** Due to the unplanned nature of the mitigation measure employed, the government departments lacked situational awareness to provide relief effectively. Different departments had different lists of organisations who were providing help in relief provision. This led them to depend on NGOs to be able to understand the need and requirements for distribution of relief.

3. **Techno-centric approach:** A tech-first approach during relief provision and operations resulted in challenges for many government departments and NGOs. This ranged from problems with respect to lack of ways to validate requests, inability to understand the lack of social protection and issues surrounding spurious information.

Policy ecosystem

In this section, we will discuss the existing policy framework within which disaster responses in India are referred, with reference to the pandemic. We mainly look at issues related to food security, livelihoods and employment and review laws related to them. In the final section, we shall discuss how changes to the existing systems of governance can help address people's needs better by exploring linkages between the existing framework of laws/policies and models of local governance enumerated under the Constitution.

Review of Legal Framework

1. Disaster Management Act, 2005

The Government of India, in order to address issues from COVID-19 pandemic invoked the Disaster Management Act, 2005. Under the act, disaster is defined as, “a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man-made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area” (The Disaster Management Act, 2005). The act, was originally enacted for the purpose of dealing with issues related to natural disaster such as floods, earthquakes, among others. The Ministry of Home Affairs, Government of India in March 2020 declared COVID-19 as a notified disaster under the law (India Declares Coronavirus Outbreak as a Notified Disaster, 2020) and as a result, the National Executive Committee issued guidelines to the states directing them to take measures against the pandemic under Section 11 of the Act (Order No. 40-3/2020-D Dated 24/03/2020, Ministry of Home Affairs, Government of India, 2020; Order No. 40-3/2020-DM-I(A), Ministry of Home Affairs, Government of India, 2020).

2. Epidemic Diseases Act, 1897

The Epidemic Diseases Act (1897) is a Central law, enacted in the aftermath of the bubonic plague. Sections 2 and 2A of the Act allows the governments to take measures if there is threat of or an outbreak of a dangerous epidemic disease (Section 1A, The Epidemic Diseases Act, 1897; Section 2, The Epidemic Diseases Act, 1897). Further, it allows the governments to prescribe temporary regulations for the public if they deem the existing laws are insufficient (The Epidemic Diseases Act, 1897). Based on this the state governments have the power to promulgate regulations. In March 2020, the Government of Karnataka was the first state to invoke the provisions in the Epidemic Diseases Act and notify ‘The Karnataka Epidemic Diseases, COVID-19 Regulations, 2020’ (Order No. HFW 54 CGM 2020, Government of Karnataka, 2020) where regulations were set out to control and prohibit those activities that seemed as threat to the society. Eventually, Government of Karnataka ceased the operation of these regulations when it passed the Ordinance described below.

3. Karnataka Epidemic Diseases Ordinance, 2020

In response to instances of attack or obstructions to health workers on COVID-19 duty, the centre passed an ordinance amending the Epidemic Diseases Act, 1897 (The Epidemic Diseases (Amendment) Ordinance,

Ministry of Health, Government of India, 2020). A similar ordinance was introduced by the Government of Karnataka after attack on public officials involved in COVID-19 duty in Padarayanapura in Bengaluru on April 19, 2020 ('K'taka Passes Ordinance to Punish Those Attacking COVID-19 Frontline Warriors', 2020).

The Governor of Karnataka promulgated the Karnataka Epidemic Diseases Ordinance in April 2020, under the guidelines issued by the centre. Section 4 of the ordinance adds more details of the powers of the Deputy Commissioners and Municipal Commissioners to regulate the movement of people, restrict congregation and prescribe norms (The Karnataka Epidemic Diseases Ordinance, 2020).

4. A Note on Travel Restrictions and Police Permissions

At the state level, the chairperson of the State Executive Committee, set up under the Disaster Management Act, 2005, is conferred with the power to issue guidelines on lockdown measures and to direct agencies to implement the same. Since the promulgation of the Karnataka Epidemic Diseases Ordinance, 2020, commissioners at the district or municipality level have been given the powers to regulate or restrict movement of people and goods. Further, the district administration has been empowered to issue orders under Section 144, Code of Criminal Procedure prohibiting the assembly of 5 or more persons (Section 141, The Indian Penal Code, 1860; Section 144, The Code Of Criminal Procedure, 1973).

All the above regulations provide the basis for implementing movement restrictions, and the police department was assigned the responsibility to implement the orders.

Review of Policy Framework

This section reviews the various policies, programs and welfare schemes implemented by the governments (viz., food security, livelihood and employment among the vulnerable households among others) and its implication on the vulnerable groups.

1. Food Security

a. Public Distribution System (PDS)

The Public Distribution System is a food security programme of the Government of India under the National Food Security Act, 2013, and jointly implemented by both the state and central government. While the central government is responsible for the procurement, storage, transportation, and bulk allocation of food grains to the state governments (implemented through the Food

Corporation of India), the state government is responsible for the identification of beneficiaries, issuing of ration cards, functioning of Fair Price Shops. There are 20010 active Fair Price Shops in Karnataka covering around 14.8 million households (Food, Civil Supplies & Consumer Affairs Department, Government of Karnataka, n.d.).

b. Indira Canteens

The Government of Karnataka launched the Indira Canteen Scheme in 2017, to make Bengaluru 'hunger-free', by providing food at highly subsidised cost to the economically disadvantaged sections of the society. Every year, the state provisions budget for the operation and maintenance of the canteens (INR 1 billion in 2017-18 and INR 1.45 billion in 2018-19). Bengaluru has 198 Indira Canteens, with one canteen provided in each ward, serving 150,000 meals per day (Indira Canteen, n.d.).

c. Mid-Day Meals

The Mid-day Meal Scheme is a joint programme of the Central and State governments, wherein all primary and upper primary students in public schools are provided with hot, cooked meal during school hours. The scheme is covered under the National Food Security Act, 2013, which also specifies the nutritional standards (Schedule II of the Act) to be followed during the provisioning of the mid-day meals. On an average 2,412,156 children in primary and 1,596,079 children in upper primary have availed the mid-day meal scheme in Karnataka during the year 2019-20 (F. No.3-2/2020 Desk (MDM) (Part-1), Ministry of Human Resource Development, Government of India, 2020). Annually, the state and the centre provides assistance for provisioning of meals under this scheme. The estimated budget requirement for 2020-2021 is INR 9.287 billion including provisioning of mid-day meals during summer vacation as a one-time measure due to COVID-19 (F. No.3-2/2020 Desk (MDM) (Part-1), Ministry of Human Resource Development, Government of India, 2020).

Impact due to COVID-19

The above policies are the major avenues to ensure food security, providing access to both dry rations as well as cooked food in Karnataka during normal times. However, during the lockdown where all public schools were shut down, school going students were not provided with mid-day meals (Gatty & Rathee, 2020). While Indira Canteens provided free cooked food during the initial phase of lockdown, it was later reversed (Karpagam, 2020). As a result, migrant workers, who had lost their jobs and those unable to travel back to their hometowns, were the hardest hit as they could not afford to purchase food. Although PDS shops were permitted to provide rations to all card holders, includ-

ing families above poverty line, those without physical cards were denied such rations (Mounika, 2020). During interviews, it was reported that most NGOs focused on providing cooked meals and dry rations to migrant workers since they were highly dependent on them for their food source. In order to identify those in need of food and to further streamline the process of delivering it, the Department of Labour, Government of Karnataka, set up an hunger helpline (155214) on March 28, 2020 (Bhat, 2020; COVID-19 Information Portal, Government of Karnataka, n.d.). Yet during the interviews there were many complaints about unfulfilled requests. One of the main reasons was lack of data on the people who needed the help.

2. Livelihoods and Employment

a. *National Rural Employment Guarantee Scheme (NREGS)*

The National Rural Employment Guarantee Scheme (NREGS) is a rural employment guarantee scheme where an adult member of every household, volunteer to do unskilled manual work is ensured 100 days of paid labour in a year. The scheme mandates that if work is not provided within 15 days, the person will have to be paid an unemployment allowance. This provision of allowance is crucial to support livelihood and provide economic security to the vulnerable groups during their period of unemployment. In 2019-20, 57.4 million people had sought work under the scheme and as of July 13, 2020, out of 55.5 million households who have sought work, 47.8 million households have been provided work under this scheme (Mukherjee, 2020).

b. *Essential Services Maintenance Act (ESMA) and Essential Commodities Act*

The Essential Services Maintenance Act (ESMA, 1968) and Essential Commodities Act (1955) are two main laws that allow governments to define certain services and commodities as essential. The main objective of these acts is to ensure the uninterrupted availability of essential services and commodities identified during the times of crises. Electricity and water supply, health services, public transport are defined as essential services under the Karnataka Essential Services Maintenance Act, 2013 (The Karnataka Essential Services Maintenance Act, 2013).

The different schemes and laws discussed in the previous section aims to ensure livelihood generation and protection through employment guarantee and service provisioning, during critical times. However, during the lockdown all economic activities was prohibited, apart from a few essential services such as water and electricity supply, health services, home deliveries of essential items among others. Since public transport had been

shut down, many employed in industries and workplaces that were not deemed 'essential' lost their jobs. On the other hand, continuation of services such as the home delivery of food, groceries, medicines meant that employees had to continue to work despite the risks of pandemic. Further, as most states ceased work under the NREGS, fewer people were employed under the scheme compared to the last 7 years (Agarwal, 2020). But as the lockdown continued and migrant workers were able to return to their homes, work resumed and many of them sought employment under NREGS. However, the surge in demand for work under NREGS, has led to many challenges including delayed payments, delay in issuing new job cards, insufficient remuneration for workers, among others.

Linkages between 73rd/74th Amendments and Disaster Management Laws

The 73rd and 74th amendments (The Constitution (Seventy-Fourth Amendment) Act, 1992; The Constitution (Seventy-Third Amendment) Act, 1992) to the constitution of India recognises local governments and its importance in both rural and urban areas. The amendment created formal institutions to organise themselves as panchayats, block level organisations, zilla panchayats, resident welfare associations, urban local bodies and so forth. The local bodies decide budgets and means to implement different rules and regulations according to their local contexts. Therefore, proper functioning of these agencies is crucial to mobilise facilities and services during disasters and to create linkages to support people with their basic needs and requirements.

During emergencies, NGOs in general deliver aid, raise awareness and steer people towards government programs and schemes, assess initial demand for material of resource including food and ration, drinking water, medical needs among others. In most cities local NGOs establishes baseline information on those who need assistance by working with local authorities and municipalities. This is later expanded by providing support in the form of resources and liaison with the state government. The NGOs are able to coordinate with each other due to their network and the trust they had built with the communities.

In case of rural areas, communities have extensive local level government that can organise and work efficiently. For example, it was found that the local groups in rural areas contacted local district administration, block officer or the police in case of emergency. Further, while the administration organises themselves to coordinate, volunteers, NGOs and local communities often monitor the operation and are also instrumental in spreading

awareness. In other words, NGOs, and local organisations in rural areas, like the Resident Welfare Associations (RWAs), and ward sabhas are key to organise faster response times. In case of the pandemic, clear communication as well as the measures to be taken must be worked out with the community leaders and the local panchayats. It is suggested that such organisations need to be strengthened with the ability to maintain information and to provide logistical support for volunteers and NGOs, and to liaise with local administration to provide situational awareness and to help in delivering aid. The local bodies must be empowered to allow for such coordination among the actors involved in

providing relief. At the state level, different departments need to coordinate with district administration who in turn will discuss with local government leaders to collect information, deliver services, and to coordinate efforts. Timely updates and continuous engagement with communities would help build trust.



3 SDGs AND COVID-19

The pandemic and the resultant lockdowns have inadvertently impacted the social, and the economic aspects of the society, particularly the most vulnerable communities. As discussed in the earlier chapters, the crisis has clearly exposed and exacerbated the inherent inequalities in our social fabric and the precarious social and financial conditions, especially of migrant population. In addition, the cascading effects of lockdown on access to education, violence against women, food security and poverty are still unfolding.

As the diverse impacts of the ongoing pandemic continues to unfold, it is clear that its effects will be felt for many years to come. For instance, it is estimated that the pandemic has resulted in an economic loss of over INR 30 lakh crores or 450 Billion USD which is an estimated 13.5% of the nation's GDP (Shukla, 2020), while the country's unemployment rate reached 27.1% in the month of April 2020 leaving over 120 million Indians jobless (Nanda, 2020). However, with the easing of restrictions on business and industries and increased activities under the MGNREGA schemes have led to economic recovery and increase in employment rate to pre-lockdown levels.

It is evident that the ambit of influence of the pandemic extends beyond the health crisis and the true scope of impact and recovery can be delineated and captured under an integrated framework that factors health, social, environmental and economic securities and is rooted in an inclusive approach to development. The UN-Sustainable Development Goals provides a framework that offers an inclusive approach to develop strategies for an economic, environment and socially inclusive development plans.

Sustainable Development Goals

The UN-Sustainable Development Goals (SDG) with 17 goals, 169 targets and 232 indicators offers a blueprint to understand the impact of Covid-19, and provide a road map for recovery by understanding the complex challenges, interdependencies and the spill over effect of the ongoing pandemic.

Under the ambit of achieving SDGs by 2030, India has

adopted and aligned its development priorities with the SDGs goals. Government of India (GoI) through NITI Aayog has undertaken significant steps in bolstering its commitment to the SDGs by developing a composite Index for ranking the states based on its SDG performance, and presented it in the form of a digital dashboard. Many states have drafted an indicator framework based on the National Indicator Frameworks by Ministry of Statistics and Programme Implementation (MoSPI). However, the ongoing crisis has shifted the focus and priorities of the states and has had an adverse impact on meeting its SDGs.

The following figures capture the scale of impact due to the pandemic on the SDG goals, and provides an overview of the various social and economic measures adopted by the Central Government to mitigate the impacts of the pandemic.

Figure 16

Impact of COVID-19 on SDG 1: End poverty in all its forms everywhere

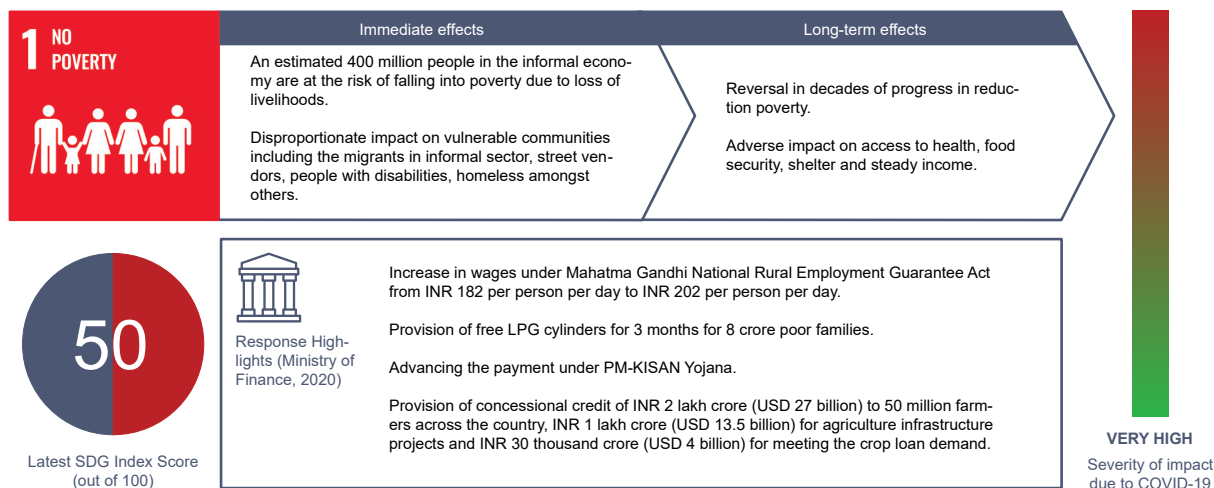


Figure 17

Impact of COVID-19 on SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

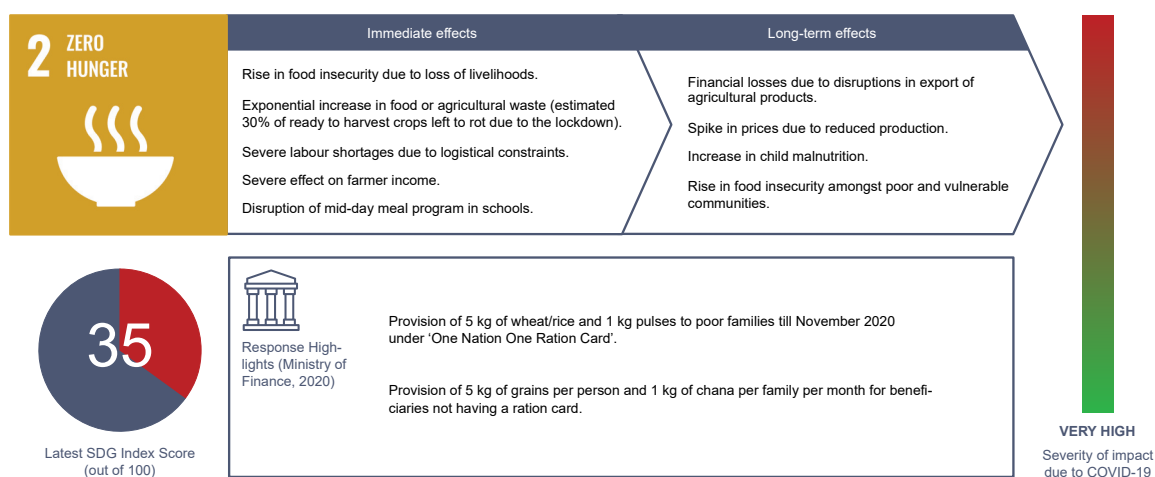


Figure 18

Impact of COVID-19 on SDG 3: Ensure healthy lives and promote well-being for all at all ages

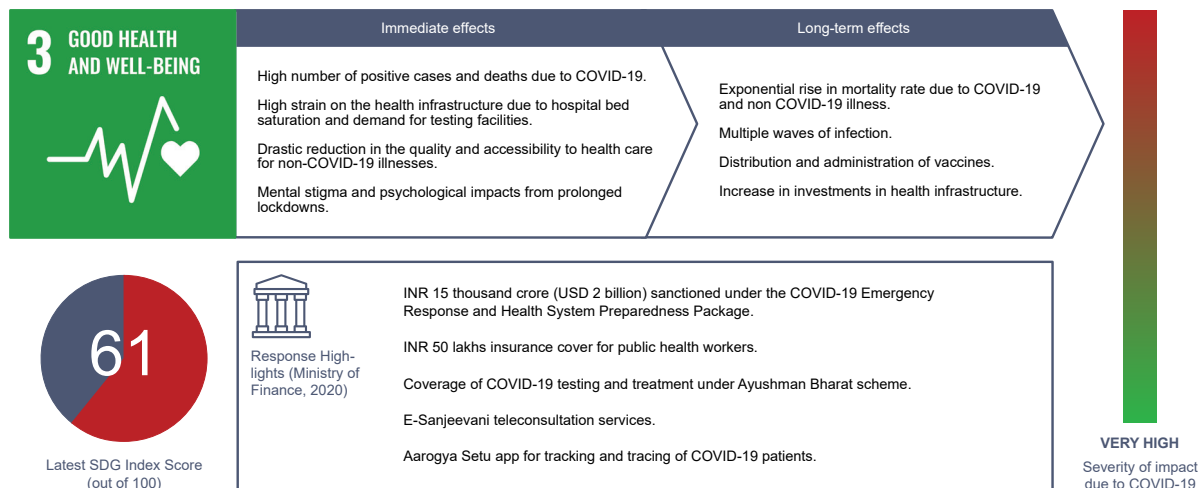


Figure 19

Impact of COVID-19 on SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

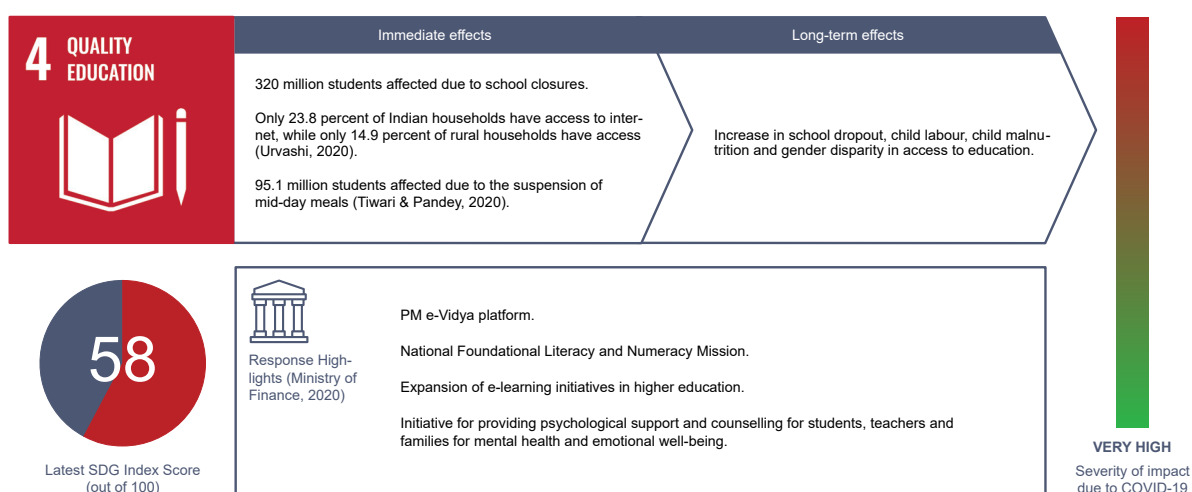


Figure 20

Impact of COVID-19 on SDG 5: Achieve gender equality and empower all women and girls

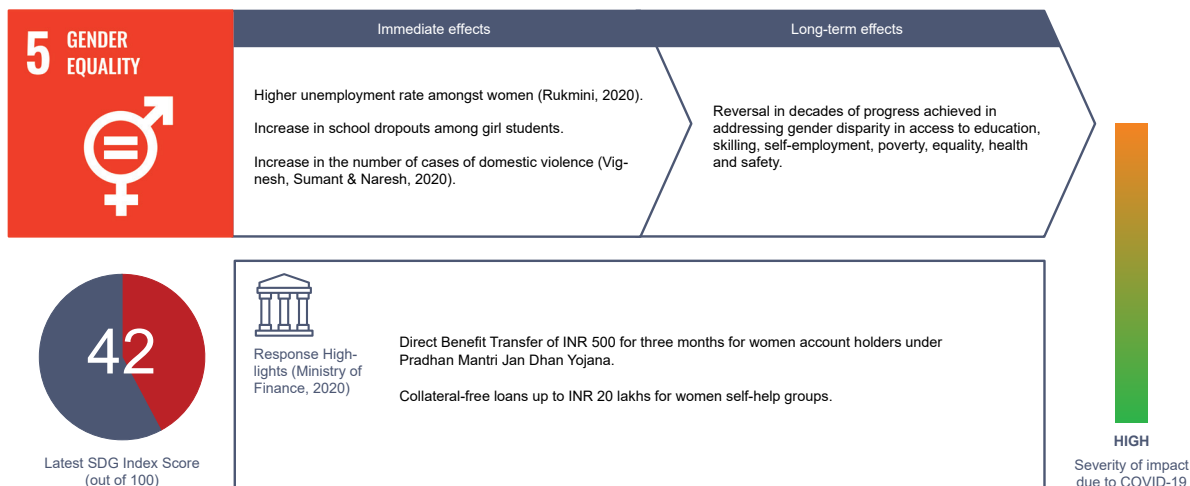


Figure 21

Impact of COVID-19 on SDG 6: Ensure availability and sustainable management of water and sanitation for all

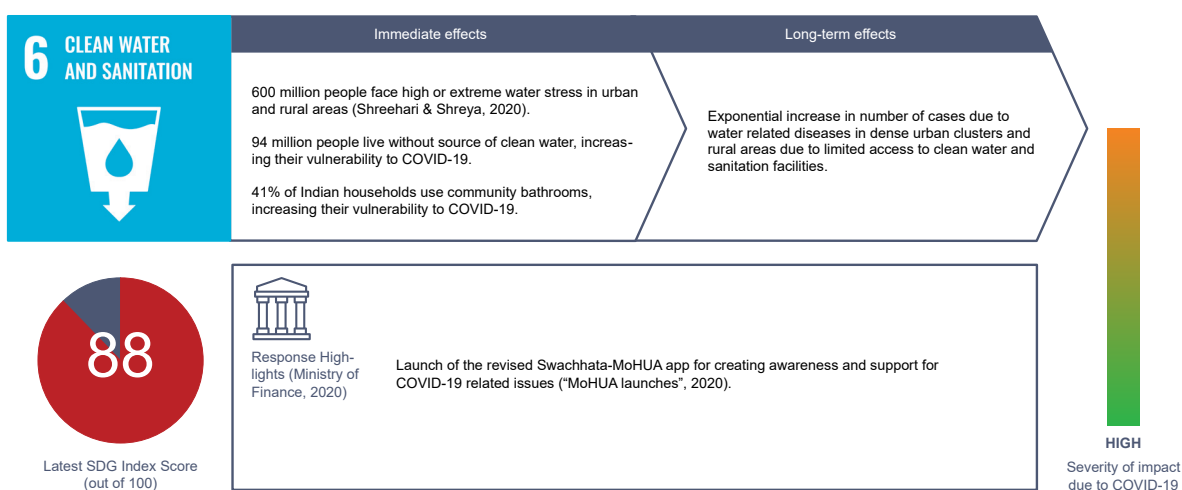


Figure 22

Impact of COVID-19 on SDG 7: Ensure access to affordable, reliable, sustainable and modern energy for all

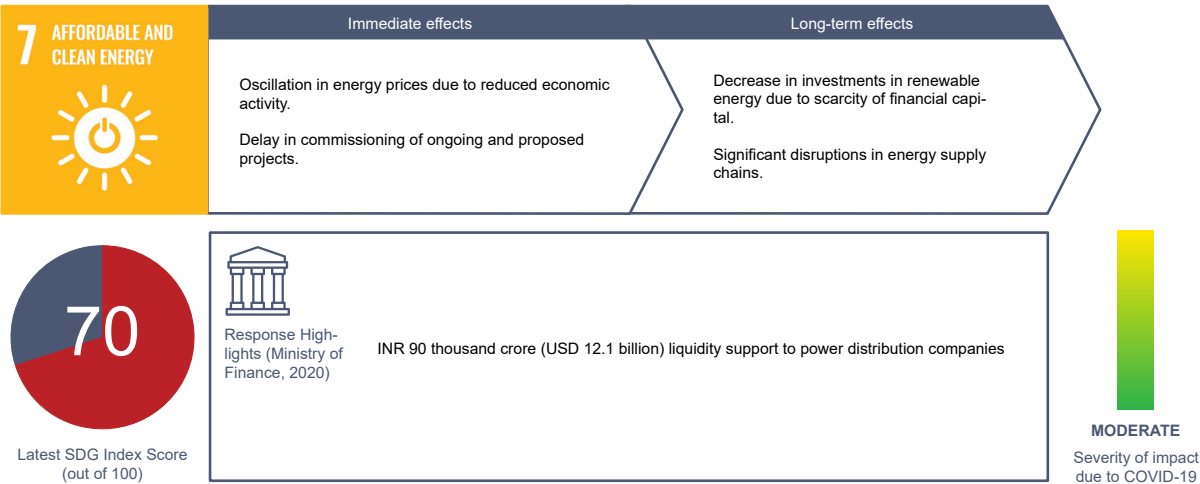


Figure 23

Impact of COVID-19 on SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

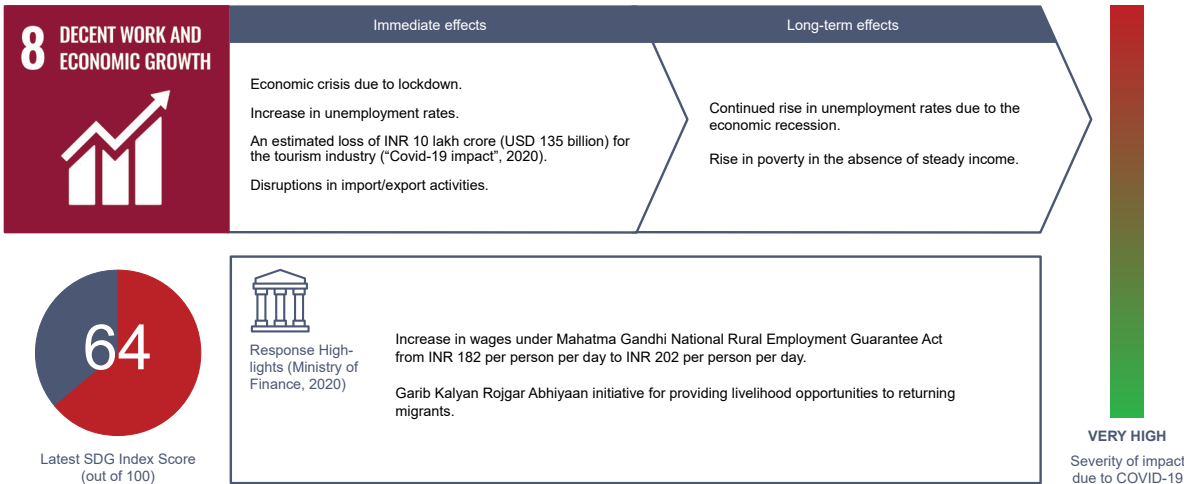


Figure 24

Impact of COVID-19 on SDG 9: Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation

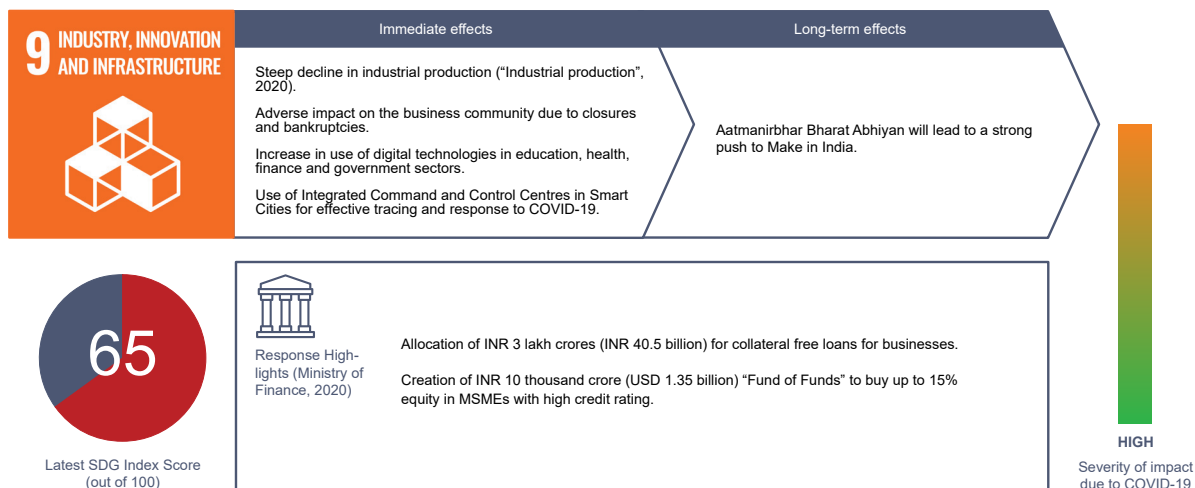


Figure 25

Impact of COVID-19 on SDG 10: Reduce inequality within and among countries

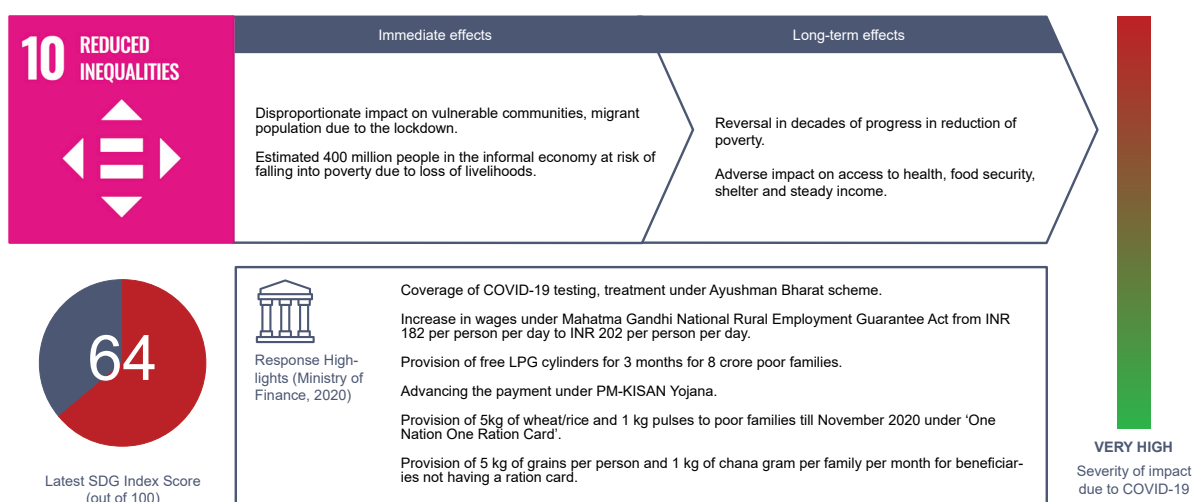


Figure 26

Impact of COVID-19 on SDG 11: Make cities and human settlements inclusive, safe, resilient and sustainable

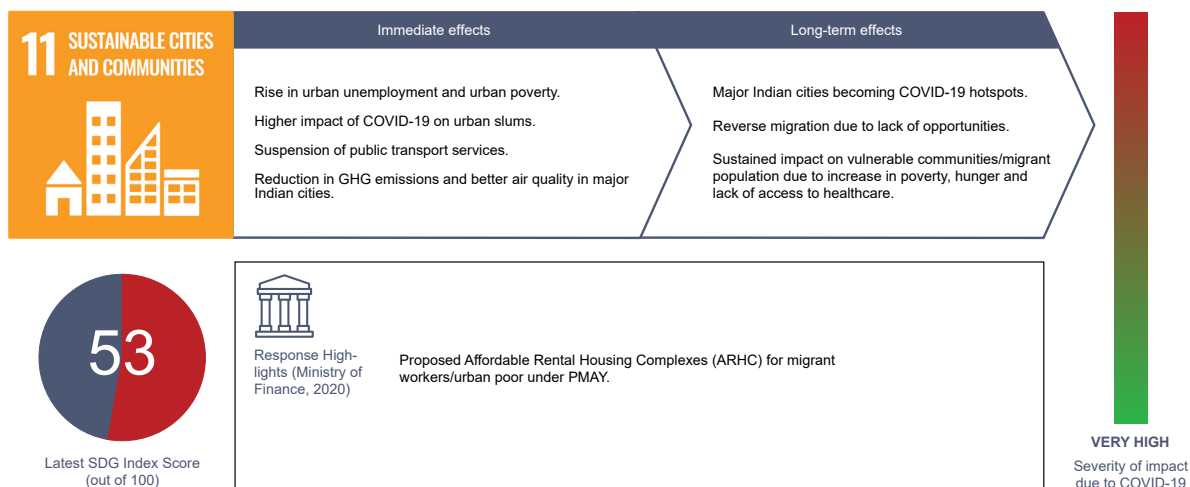


Figure 27

Impact of COVID-19 on SDG 12: Ensure sustainable consumption and production patterns

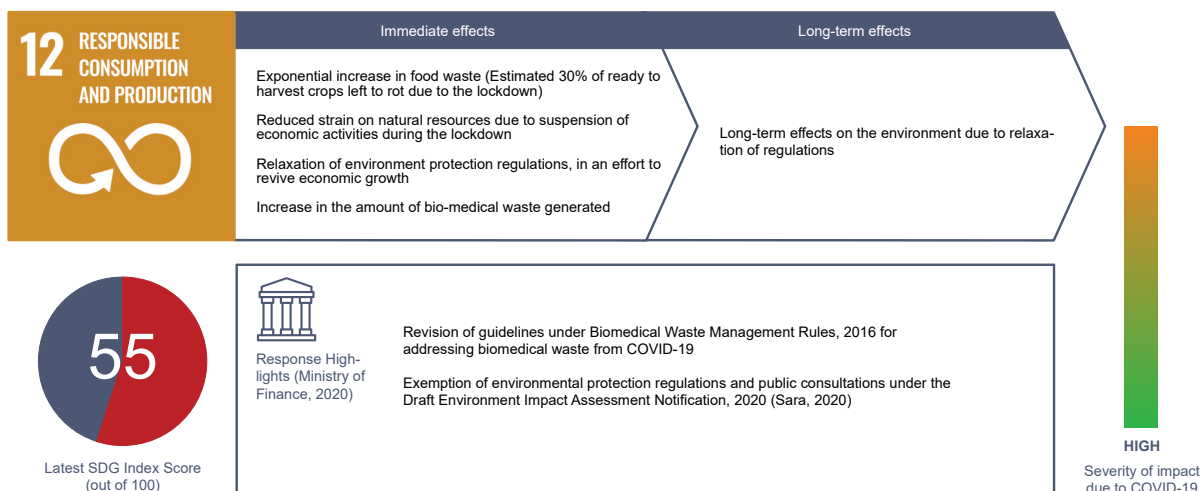


Figure 28

Impact of COVID-19 on SDG 13: Take urgent action to combat climate change and its impacts

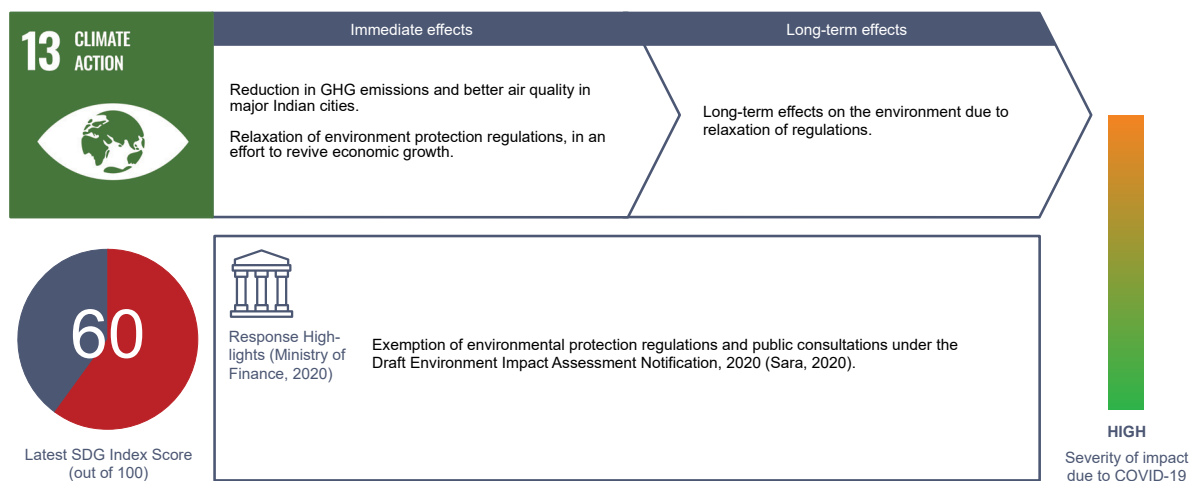


Figure 29

Impact of COVID-19 on SDG 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

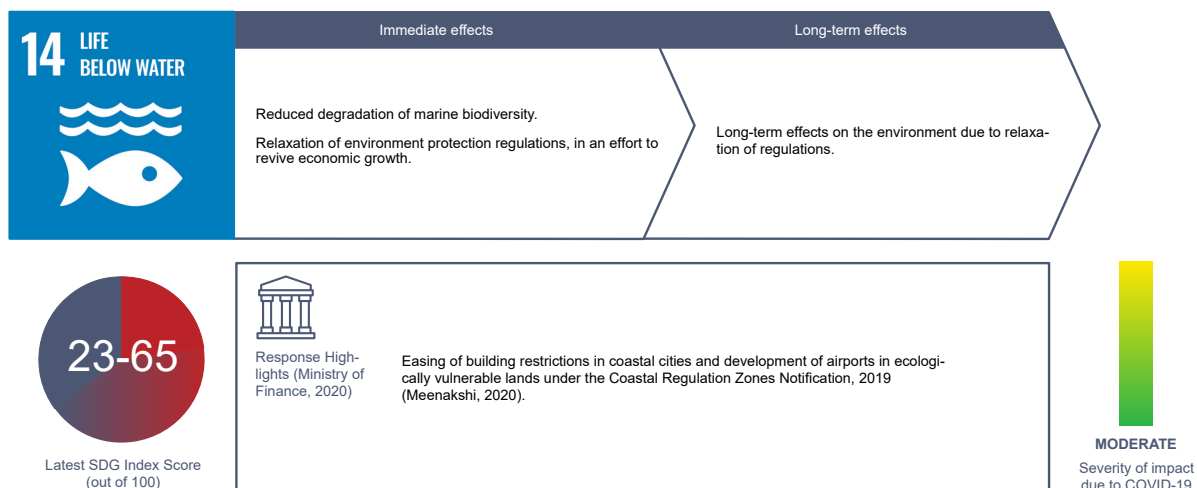


Figure 30

Impact of COVID-19 on SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

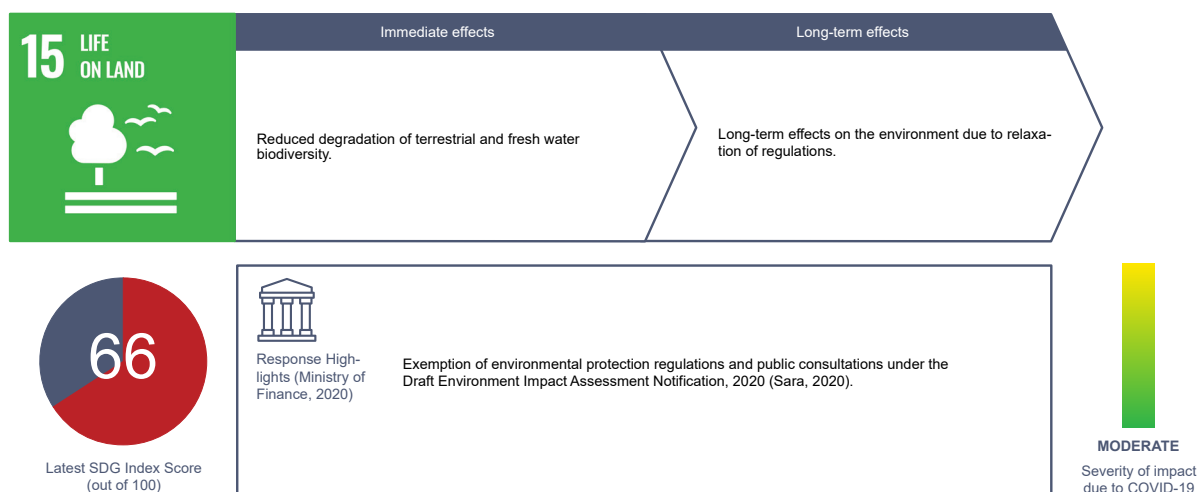


Figure 31

Impact of COVID-19 on SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

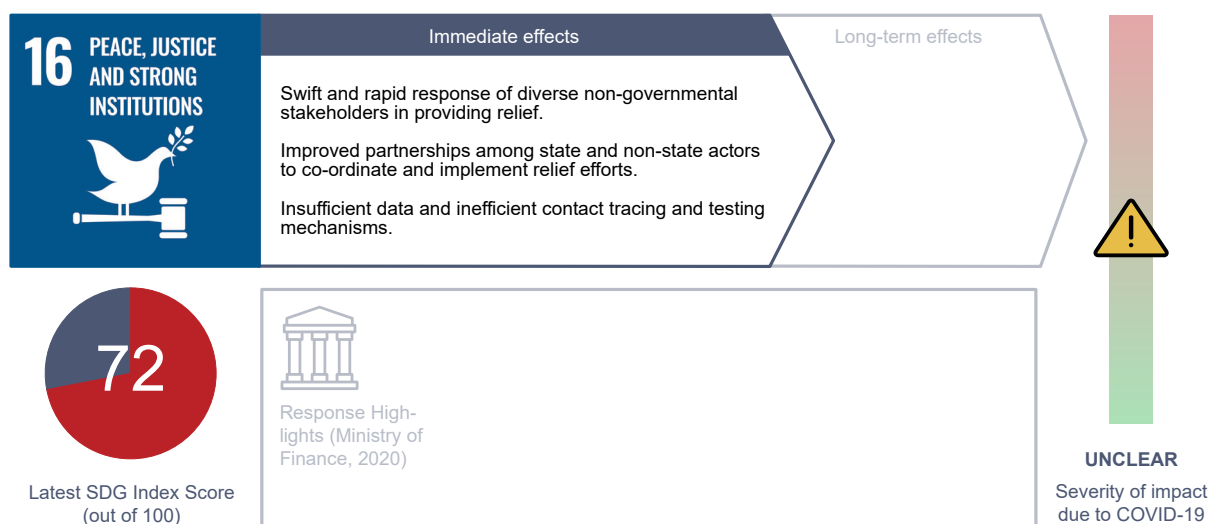
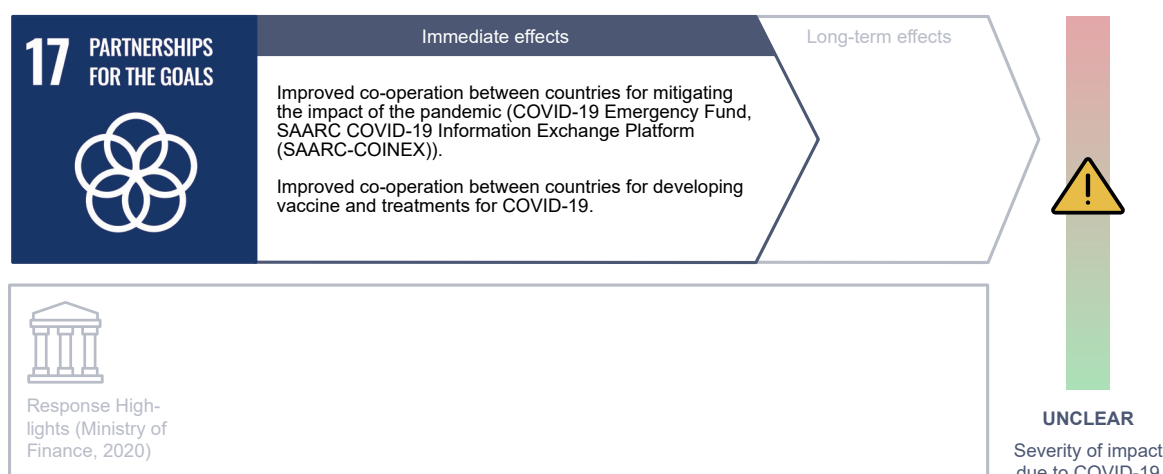


Figure 32

Impact of COVID-19 on SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development



As is clear from the figures above, the pandemic is likely to have a profound and lasting impact on achievement of the SDGs. The pandemic has reversed decades of progress achieved by India in the social and economic development. In particular, SDG 1 (No poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and well-being), SDG 4 (Quality Education), SDG 8 (Decent work and Economic growth) and SDG 10 (Reduced Inequalities) are negatively impacted. Given the evolving nature of the crisis, the flow-on effects of the impact on other SDGs is difficult to predict at this point. Though the pandemic managed to bring some positive impact on SDGs, especially SDG 12 (Responsible consumption and production), SDG 13 (Climate Action), SDG 14 (Life below water) and SDG 15 (Life on land), this could be short-lived and will revert back to reality once the economic activities resume full-scale and restrictions due to lockdown comes to an end. On the other end, the relaxation of environmental regulations to hasten economic recovery is a sign of worry and will have high negative impacts in the long term.

According to estimates (“India needs”, 2020), India needs an investment of USD 2.64 trillion dollars to meet the SDG goals by 2030. While the number is exorbitant, the amount of economic and social stimulus packages unrolled in the last few months clearly proves that the government has the political will to step up and deal with

complex challenges.

The relevance of SDGs during the crisis is further justified by its core underlying principles of:

Leave no one behind

‘Leave no one behind’ is the central premise of the SDG 2030 agenda, and it pledges “to reach the furthest behind first”. In order to achieve equitable recovery from the pandemic, it is imperative to understand the challenges faced by the most vulnerable and address their concerns in order to build resilient health, social and economic systems.

Local leadership

The diverse nature of the impacts from the pandemic cannot be addressed by the one size fit all policies, particularly, in the current scenario, where each city, is facing its own set of challenges from the pandemic. Through localisation, SDGs recognises the importance of adapting and translating the indicators based on city-specific programs, policies and measures, thus emboldening the role of local government in fighting the pandemic.

Institutional partnerships

The response to the pandemic, at its core, requires

an unprecedented level of co-ordination, transparency and accountability across government, civil society, academia and businesses. The SDGs, especially SDG 16 and 17 are the lingua franca that provides the basis for forging new institutional partnerships in meeting the targets.

Interdependencies

Besides the impact on health, the challenges that have stemmed from the pandemic so far in terms of poverty (SDG 1), food security (SDG 2), education (SDG 4), gender (SDG 5), water and sanitation (SDG 6), liveli-

hoods (SDG 8), living conditions (SDG 11) have been comprehensively covered under the SDG framework. The pandemic has provided an opportunity to revisit the state's approach to SDGs and develop strategies in post-crisis planning that would adapt a systemic and inclusive methodology in its quest to build sustainable communities.

SDGs: A lighthouse for COVID recovery

As India transitions into post-COVID-19 planning, achieving SDG targets are crucial for a holistic and inclusive recovery. It is vital to understand the response and relief to COVID-19 is intertwined and has direct impact on achieving the SDG goals. India, which is ranked at 117 with a score of 61.9 out of 100 in the global SDG Index 2020, is challenged in achieving the targets and the pandemic will only exacerbate the vulnerabilities and make the road to recovery, a lot harder. SDGs offers an essential and invaluable framework to build back better.

4 WAY FORWARD

The main objective of the study is to document the various challenges from the COVID-19 pandemic, the nature of relief efforts undertaken by the state and non-state actors in Karnataka, and analyse the various methods adopted by the different stakeholders in providing relief. The examination of the information and material flow provided insights to understand the extent and strength of preparedness and collaboration between different actors. The report concludes by providing recommendations for institutionalising collaborations between the state and non-state actors.

Disaster relief operations are discussed as a partnership between two kinds of actors, those providing humanitarian aid and those working on the logistics for providing relief. Various studies argue that these roles are mutually exclusive. But in the case of relief measures undertaken in Karnataka to mitigate the effects of the COVID-19 pandemic and the attendant lockdown, the study observed that state and non-state actors created ad-hoc networks undertaking both roles (humanitarian and logistics). This section examines the nature of networks formed, interaction between the actors, information and material flow, among others.

1. Information flow

During disasters, loss of regular channels of information flow makes it challenging to identify those in need of relief, kind of relief, and the 'situational awareness'

required to provide timely and adequate relief. In case of the COVID-19 pandemic and the attendant lockdown, the challenges in information flow stemmed from the challenges in creating, maintaining, and managing ad-hoc networks. Therefore, creating SOPs is not only critical but imperative for effective flow of information required for planning.

2. Material flow

In case of natural disasters such as floods and cyclones, the challenge in material flow results from either loss of stock of relief material or from being unable to reach the location to provide relief. During the lockdown, although the stock of relief material was available, the challenges stemmed from imposing restrictions on traditional supply-chain routes, additional clearances required for transport of material and so forth.

3. The intangibles

The costs of interaction between different actors during a disaster not only include tangibles, measured in time, and material resource requirements, but also includes organisations' ideals, goals, and willingness to engage. Given that different actors involved in the relief operate based on different philosophies it was vital to build trust between them.

Recommendations for future relief measures

1. *Developing Standard Operating Procedures (SOPs)*
2. *Responsive feedback networks*
3. *Trust-building measures*
4. *Better inter-departmental coordination*
5. *Use of context-sensitive technology: Ensuring privacy and safety*
6. *Strengthening local governance and decentralized decision making*
7. *Including Healthcare in Basic Services to Urban Poor (BSUP)*
8. *Incorporating strategies for replication and leveraging ecosystem memory*

Recommendations from the study

In the following section, we provide key recommendations based on the study to inform both the broader policy context that sets the stage for future relief measures, as well as institutional preparedness for any future disasters.

Recommendations to improve institutional preparedness

1. Developing Standard Operating Procedures (SOPs)

The key issue that was consistently flagged by the Government and civil society organisations was related to information flow, and guidelines for interaction. In cases where such practices existed due to the historical nature of cooperation and collaboration (often informal and in rural areas), relief was provided more efficiently than in large urban areas.

Mechanisms for interaction are usually evolved over a period of time from continued engagement and establishing guidelines and protocols to be followed during disasters would facilitate effective relief operations. Such procedures should incorporate the flow of information, vetting of information, participatory planning of relief, clarity on roles of different stakeholders, handling of relief material, design of decentralised distribution systems amongst others. It would be prudent to co-create SOPs based on inputs from different stakeholders involved in providing relief and lessons learnt from the recent experience.

2. Responsive feedback networks

During disasters, situational awareness is key to providing relief. Key developments on the ground and the evolving nature of requirements mandates the need to collect such requirements, triage the requests into suitable categories of requirements and provide the last mile connectivity. The conditions of lockdown and the pandemic have demonstrated that such knowledge, ability and last-mile connectivity are functionally the domain of various civil society organisations. NGOs with their situational awareness can help in ensuring that the measures taken by the Government reaches the people in need, and also provide feedback on the ways in which the relief operations can be improved upon. It is argued that the efficacy of relief operations is greater in cases where feedback is consistently sought, and the process is updated. Such a feedback mechanism is dependent on officials in-charge and needs to be systematically introduced for all departments involved in relief.

However, given the intensive nature of relief operations, it is crucial that the feedback mechanisms are not intrusive to the operations themselves. And therefore, it is recommended that the feedback mechanism employ a dual pronged approach of periodic in-depth sessions (weekly or fortnightly based on the need) discussing details, and an on-demand approach with a dedicated official responsible for reaching out to NGOs and available for instantaneous feedback. In case of using remote conferencing facilities, as in the case of COVID-19, it is prudent to setup multiple incident command centres and a central co-ordination group for future cases.

3. Trust-building measures

When different stakeholders who have not worked with each other come together to create ad-hoc networks during disaster relief efforts, pre-existing perceptions and biases could either pose challenges or strengthen the degree of trust between them. For instance, it is often noticed that due to the lack of trust between local government and communities, information is not shared voluntarily and with ease. Therefore, trust-building efforts to combat prevalent societal prejudices and biases helps in mitigating challenges between different stakeholders during relief operations.

Various activities carried out by the Government can be leveraged to create trust between the departments and other non-state actors involved in providing relief. Such measures would create a platform for sustained collaboration and smoother relief operations. Such trust-building activities include the following measures:

- a. Incorporating feedback and follow-up mechanisms, helps stakeholders involved in the relief operations to increase the efficacy of their operations. Such measures play an important role in increasing trust between various stakeholders.
- b. Establishing an open network of aid providers, relief workers, responsible state departments build greater transparency and increase trust amongst the stakeholders.
- c. Facilitating a collaborative framework through smaller projects and interactions and building on the value created during COVID-19 relief operations would become crucial to the success of future operations.
- d. Crediting and highlighting the success of operations increases the morale of the participating groups and organisations and ensures greater continuity.

While the roles of civil society and government bodies are complementary in the context of disaster relief operations, it is crucial to note that for a long-term sustainable cooperation it is prudent to create a coordination body by involving members from both sides.

4. Better inter-departmental coordination

Due to the nature of mitigation measure employed, multiple agencies of the Government were involved in relief efforts. It is imperative to ensure that holistic relief is provided by the Government to reduce hardships and provide relief optimally. However, a consistent challenge faced by civil society organisations during relief operations is coordinating with multiple arms to the Government. In order to provide relief, interaction involving various arms of the government including, local government officials, state departments responsible for procuring and distributing relief material and local police amongst others, are involved. A single-window clearance mechanism to ease operations of businesses would be a good model to ensure greater coordination.

5. Use of context-sensitive technology

The ever-expanding solutions in the form of dashboards, mobile app-based services (ranging from clearances to delivery of services) provides an opportunity to optimise provision of relief. While the role of technology to aid disaster relief operations is well documented, the pandemic in India highlighted a few key issues that included lack of access to technology, data gaps, lack of policy on data being collected, which created a challenge for stakeholders involved in the relief operations.

In the context of COVID-19 and the lockdown, the use of mobile phones, social media platforms such as Facebook, Twitter and messaging platforms such as Telegram, WhatsApp became crucial for collecting and circulating requests for relief. However, requests for relief were often duplicated across all platforms and posed a challenge for organisations in prioritising their activities due to limited resources. Additionally, due to increased participation of many first-time volunteers in relief operations, norms of privacy and safety were often violated. Names, contact information, religion and caste, locations of people who required relief were available on public fora. This resulted in violation of their privacy, and led to multiple instances of forced evictions, harassment and public shaming. It is therefore important to make considerable efforts in training and building awareness to address the issues involved in relief operations.

The pandemic has showcased the use of various ICTs for collecting information for relief requests. However, there was lack of consistent effort to implement data-driven decision making. DRO (Disaster relief operations) as mentioned earlier, can benefit from the use of decision support systems in the area of logistics and operations, information vetting, coordination between relief workers and in last-mile connectivity. It is important to note that such ICT mechanisms are not always useful, as in most disasters ICT mechanisms are the first to

fail and relief operations often rely on amateur (HAM) and satellite radio.

Recommendations to inform the broader policy context

1. Strengthening local governance and decentralized decision making

A key outcome during the relief operations carried out during the lockdown, is the visible differences between areas that had strong local governments complemented by a strong civil society involvement and those that lacked well-functioning local governments. Therefore, empowering local decision-makers reduces turnaround time during disasters and ensures that relief is provided in a timely manner. By providing infrastructure at the local level, in the form of facilities for healthcare, food provisioning, grievance redressal, financial capacity and disaster management capabilities and functional administrative offices reduces pressure on centralised systems.

2. Healthcare in Basic Services to Urban Poor (BSUP)

The previous efforts to improve BSUP has had a positive impact in the region. However, three key challenges remain, including healthcare, sanitation and nutrition. The lockdown highlighted the lack of access to nutrition, affordable and quality healthcare facilities and lack of sanitation. The rapid deployment of testing and use of mobile health clinics provide an indication to the possibility of expanding and including healthcare facilities for the urban poor. The pandemic has accelerated the need to reimagine shelter and sanitation that are critical to ensure right to life.

Strategies for replication

The study on the relief operations during the COVID-19 pandemic highlights the various challenges including diversity in protocols adopted for collaboration, use of technologies, strategies for collecting and disseminating information and materials based on location (urban, district-level, village-level) and relief required (cooked food, dry rations, medicines, and so forth). In order to make the information and material flow more efficient between actors, strategies should be designed by including:

1. Tools and methods for streamlining the flow of information and materials.
2. Contextual need with flexibility and portability across needs.
3. Adopting principles of co-creation to ensure greater ownership.

In order for the Government and civil society organisations to co-create SOPs for coordination in the time of disasters, there are several tools that can help in developing context-appropriate SOPs, based on local situation and constraints. Such tools include games to design and test SOPs as well as computer-based simulations that layers in data on resources, geographical constraints, and roles of different actors to plan and coordinate during disasters. These tools and methods need to be incorporated within capacity building exercises at various levels of governance.

Conclusion

The COVID-19 pandemic and the nationwide lockdown imposed to mitigate the pandemic disproportionately affected the most vulnerable in India. The relief operations undertaken during the time unravelled the complexities inherent in the term 'vulnerability'. In order to understand and appropriately respond to vulnerable groups and their needs, the relief operations undertaken could not adopt a 'one size fits all' approach. The relief operations had to respond to people with different kinds of vulnerabilities, and to ensure that all people had access to basic services and entitlements to prevent material or psychological distress.

In mapping the relief operations undertaken by non-governmental organisations in Karnataka during the COVID-19 pandemic, the recurring theme that emerged was decentralisation (or lack thereof). Contrary to the conventional wisdom that a hierarchical flow of information is most efficient during disasters, the observations from the study demonstrated how decentralised networks for information proved to be resilient and provided greater utility to relief workers. The distributed nature of resource flow in the relief operations suggested that the robustness of such a distributed system offers immense potential to develop as a model for collaboration for future relief operation. Similarly, determining the depth of 'situational awareness', is critical for understanding who needs what kind of relief so that timely and effective relief operation can be implemented. The NGOs had intimate knowledge of on-the-ground realities and had established local networks that were critical to ensure the last mile was covered adequately.

Overall, the collaboration between different arms of the Government, coordinating with a decentralised network of NGOs, based on distributed hub and spoke model, emerged as an optimal model for providing relief. It is crucial to formalise the ad-hoc networks of actors involved in providing relief by strengthening coordination and adopting protocols and processes to influence local hub and spoke networks. The adoption of Standard Op-

erating Protocols co-created by the Government along with NGOs can help make the information and material flows more efficient. Further, a non-intrusive feedback mechanism with multiple command centres and central coordination would enable the distributed hub and spoke model to be more adaptive and responsive to the dynamic and changing needs on the ground.

In order to build capacity for stronger decentralised processes amongst local actors, democratic infrastructure in terms of local governance needs to be rapidly strengthened. Empowering local governments with financial resources and decision-making power would strengthen the infrastructure for public services (for healthcare, food provisioning, grievance redressal, financial capacity and disaster management capabilities) and also create democratic pathways for citizens to participate and strengthen governance systems. Such local, decentralised decision-making capabilities must be complemented with improved citizen participation and adopting context-sensitive technology. As observed in many regions across the state, such efforts to create resilient and adaptive networks could be instrumental in mitigating future disasters.

REFERENCES

- Agarwal, K. (2020, May 1). COVID-19 Lockdown: In April, MGNREGA Work Crashed to Lowest in 7 Years. *The Wire*. <https://thewire.in/labour/covid-19-lockdown-mgnrega>
- Arakal, R. A. (2020, July 21). Covid-19 Bengaluru status check: Half of Karnataka's coronavirus cases, deaths are from the capital. *The Indian Express*. <https://indianexpress.com/article/cities/bangalore/covid-19-bengaluru-karnatakas-coronavirus-cases-deaths-6513514/>
- Azim Premji University; Centre for Advocacy and Research (CFAR); Gauri Media Trust. (2020). *Azim Premji University COVID-19 Livelihoods Survey*.
- Bealt, J., Camilo, J., Barrera, F., & Mansouri, S. A. (2016). Collaborative relationships between logistics service providers and humanitarian organizations during disaster relief operations. *Journal of Humanitarian Logistics and Supply Chain Management*, 6(2), 118–144. <https://doi.org/10.1108/JHLSCM-02-2015-0008>
- Bhat, P. (2020, April 19). Hunger helpline inadequate: Migrant workers in Bengaluru appeal for food, ration. *The News Minute*. <https://www.thenewsminute.com/article/hunger-helpline-inadequate-migrant-workers-bengaluru-appeal-food-ration-122893>
- Census of India Website: Office of the Registrar General & Census Commissioner, India. (2011). <https://censusindia.gov.in/2011census/migration.html>
- Choi, T. M., Wallace, S. W., & Wang, Y. (2016). Risk management and coordination in service supply chains: Information, logistics and outsourcing. *Journal of the Operational Research Society*, 67(2), 159–164. <https://doi.org/10.1057/jors.2015.115>
- Covid-19 impact: Loss forecast for India's tourism sector doubles to Rs 10 lakh crore, says FAITH. (2020, May 5). *Financial Express*. <https://www.financialexpress.com/lifestyle/travel-tourism/covid-19-impact-loss-forecast-for-indias-tourism-sector-doubles-to-rs-10-lakh-crore-says-faith/1949030/>
- COVID-19 Information Portal, Government of Karnataka. (n.d.). Retrieved 9 March 2021, from <https://covid19.karnataka.gov.in/english>
- F. No.3-2/2020 Desk (MDM) (Part-1), Ministry of Human Resource Development, Government of India, (2020). *Food, Civil Supplies & Consumer Affairs Department, Government of Karnataka*. (n.d.). Retrieved 9 March 2021, from https://ahara.kar.nic.in/fcsstat/Stat_uid_reg_mob.aspx
- Gatty, H. R., & Rathee, P. (2020, June 23). Poor in Bengaluru unsure of next meal during COVID-19 lockdown; low quality PDS ration, absence of mid-day meals contributed to food insecurity. *Firstpost*. <https://www.firstpost.com/india/poor-in-bengaluru-unsure-of-next-meal-during-covid-19-lockdown-low-quality-pds-ration-absence-of-mid-day-meals-contributed-to-food-insecurity-8516971.html>
- India declares coronavirus outbreak as a notified disaster. (2020, March 14). <https://www.livemint.com/news/india/india-declares-coronavirus-outbreak-as-a-notified-disaster-11584184739353.html>
- India needs \$2.64 tn investment to meet SDGs by 2030: Report. (2020, January 21). *Economic Times*. <https://>

- economictimes.indiatimes.com/news/economy/indicators/india-needs-2-64-tn-investment-to-meet-sdgs-by-2030-report/articleshow/73492931.cms
- Indira Canteen. (n.d.). Retrieved 29 March 2021, from <https://bbmp.gov.in/indiracanteen.html>
- Industrial production declines 16.6% in June. (2020, August 11). *Times of India*. <https://timesofindia.indiatimes.com/business/india-business/industrial-production-declines-16-6-in-june/articleshow/77485895.cms>
- K'taka passes Ordinance to punish those attacking COVID-19 frontline warriors. (2020, April 23). *The Economic Times*. <https://health.economictimes.indiatimes.com/news/policy/ktaka-passes-ordinance-to-punish-those-attacking-covid-19-frontline-warriors/75308852>
- Kapucu, N. (2007). Non-profit response to catastrophic disasters. *Disaster Prevention and Management: An International Journal*, 16(4), 551–561. <https://doi.org/10.1108/09653560710817039>
- Karpagam, D. S. (2020, April 6). Govt decision to stop free food from Indira Canteens is heartless. *Citizen Matters*. <https://bengaluru.citizenmatters.in/coronavirus-lockdown-bengaluru-indira-canteens-free-food-nutrition-poor-dry-rations-hunger-helpline-43985>
- Martin, E. C., Nolte, I., & Vitolo, E. (2016). The Four Cs of Disaster Partnering: Communication, Cooperation, Coordination and Collaboration. *Disasters Journal*. <https://doi.org/10.5465/AMBPP.2014.13532abstract>
- Meenakshi, K. (2020, February 29). India's 2019 coastal regulation law ignored 90% of the objections made to the draft. *Scroll*. <https://scroll.in/article/954402/indias-2019-coastal-regulation-law-ignored-90-of-the-objections-made-to-the-draft>
- Ministry of Finance. (2020). <https://covid19.india.gov.in/document-category/ministry-of-finance/>
- MoHUA launches revised Swachhata app. (2020, April 9). *The Hindu BusinessLine*. <https://www.thehindubusinessline.com/news/mohua-launches-revised-swachhata-app/article31298530.ece>
- Mounika, A. S. (2020, April 21). How the Karnataka government is handling food distribution during the lockdown. *The News Minute*. <https://www.thenewsminute.com/article/how-karnataka-government-handling-food-distribution-during-lockdown-123045>
- Mukherjee, S. (2020, July 15). Over 55 million households demand work under MGNREGA this year so far. *Business Standard*. https://www.business-standard.com/article/economy-policy/over-55-million-households-demand-work-under-mgnrega-this-year-so-far-120071400372_1.html
- Nanda, P.K. (2020, May 5). India's unemployment rate climbs to 27.1%, 121.5mn out of work: CMIE. *Mint*. <https://www.livemint.com/news/india/india-s-unemployment-rate-climbs-to-27-1-121-5mn-out-of-work-cmie-11588683100926.html>
- Order No. 40-3/2020-D dated 24/03/2020, Ministry of Home Affairs, Government of India, (2020).
- Order No. 40-3/2020-DM-I(A), Ministry of Home Affairs, Government of India, (2020).
- Order No. HFW 54 CGM 2020, Government of Karnataka, (2020).
- Rukmini, S. (2020, June 11). How covid-19 locked out women from jobs. *Scroll*. <https://www.livemint.com/news/india/how-covid-19-locked-out-women-from-jobs-11591772350206.html>
- Sanderson, D. (2017). Oxford Research Encyclopedia of Natural Hazard Science Collaboration and Cross-Sec-

tor Coordination for. *Oxford Research Encyclopedia of Natural Hazard Science*, November 2017.

<https://doi.org/10.1093/acrefore/9780199389407.013.178>

Sara, S. (2020, August 11). Explained: The Curious Case of India's Draft EIA Notification 2020. *The Quint*.

<https://www.thequint.com/explainers/explained-the-curious-case-of-india-draft-environment-impact-assessment-notification-2020>

Section 141, *The Indian Penal Code*. (1860). <https://indiankanoon.org/doc/1542085/>

Section 144, *The Code Of Criminal Procedure*. (1973). <https://indiankanoon.org/doc/930621/>

Section 1A, *The Epidemic Diseases Act*. (1897). https://www.indiacode.nic.in/show-data?actid=AC_CEN_12_13_00021_189703_1523337650143§ionId=43586§ionno=2&orderno=2

Section 2, *The Epidemic Diseases Act*. (1897). https://www.indiacode.nic.in/show-data?actid=AC_CEN_12_13_00021_189703_1523337650143§ionId=43587§ionno=2A&orderno=3

Sheu, J. B. (2007). Challenges of emergency logistics management. *Transportation Research Part E: Logistics and Transportation Review*, 43(6), 655–659. <https://doi.org/10.1016/j.tre.2007.01.001>

Shreehari, P. & Shreya, R. (2020, June 11). As India Fights COVID, 50% Households Share A Water Source, 41% Share Toilets. *India Spend*. <https://www.indiaspend.com/as-india-fights-covid-50-households-share-a-water-source-41-share-toilets/>

Shukla, A. (2020, May 26). COVID-19 caused economic loss of Rs 30.3 lakh crore; Maharashtra, Tamil Nadu worst-hit. *New India Express*. <https://www.newindianexpress.com/business/2020/may/26/covid-19-caused-economic-loss-of-rs-303-lakh-crore-maharashtra-tamil-nadu-worst-hit-report-2148164.html>

Tatham, P., Spens, K., & Kovács, G. (2017). The humanitarian common logistic operating picture: a solution to the inter-agency coordination challenge. *Disasters*, 41(1), 77–100. <https://doi.org/10.1111/disa.12193>

The Constitution (Seventy-fourth Amendment) Act, (1992). <https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india-seventy-fourth-amendment-act-1992>

The Constitution (Seventy-third Amendment) Act, (1992). <https://www.india.gov.in/my-government/constitution-india/amendments/constitution-india-seventy-third-amendment-act-1992>

The Disaster Management Act, (2005).

The Epidemic Diseases (Amendment) Ordinance, Ministry of Health, Government of India, (2020). <https://prsin-dia.org/billtrack/the-epidemic-diseases-amendment-ordinance-2020>

The Epidemic Diseases Act, (1897).

The Karnataka Epidemic Diseases Ordinance, (2020).

The Karnataka Essential Services Maintenance Act, (2013). https://www.indiacode.nic.in/bit-stream/123456789/7626/1/25_of_2015_%28e%29.pdf

Thomas, A. S., & Kopczak, L. R. (2005). From Logistics to Supply Chain Management: The Path Forward in the Humanitarian Sector. *Fritz Institute*, 1–15.

Tiwari, S. & Pandey, S. (2020, June 8). The fallout of India's lockdown on child malnutrition will be felt long after the Covid-19 crisis. *Scroll*. <https://scroll.in/article/964033/the-fallout-of-indias-lockdown-on-child-malnu->

[trition-will-be-felt-long-after-the-covid-19-crisis](#)

Urvashi, S. (2020, May 14). COVID-19 in India: Education disrupted and lessons learned. *Brookings*. <https://www.brookings.edu/blog/education-plus-development/2020/05/14/covid-19-in-india-education-disrupted-and-lessons-learned/>

Vignesh, R., Sumant, & S. Naresh, S. (2020, June 24). Domestic violence complaints at a 10-year high during COVID-19 lockdown. *The Hindu*. <https://www.thehindu.com/data/data-domestic-violence-complaints-at-a-10-year-high-during-covid-19-lockdown/article31885001.ece>

World Health Organization. (2020). <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen>

ANNEXURE

List of participating organisations for the study

1. Abhyudaya
2. Aditya Jayapurja Prasanna Trust
3. Al Ansaar Trust
4. Al Nazir Educational and Charitable Trust Regd.
5. Al-Ansar Welfare Trust
6. Alum Agarbathi Works
7. Ambedkar Yuva Sena
8. AMFY Educational & Charitable Trust, Kalaburagi
9. Anahat Foundation
10. Angavikalara Graminabhiruddi Haagu Shikshana Samste, Basapura
11. Annaiah Education and Empowerment Trust
12. APR Charitable Trust
13. Arunodhay Trust
14. Asare Angavikalara Kshemabhivruddhi And Grameenabhivruddhi Samsthe, Shirahatti
15. Asha Foundation, Chikballapur
16. Ashakiran Rural Development Society (R), Chikkamugadur
17. Ashraya Charitable Trust
18. Ashraya Seva Trust
19. Ashwini Charitable Trust
20. Avek Viswaseva Trust
21. Ayesha Jyothi Educational Welfare & Charitable Trust
22. Bajarangi Friends Circle
23. Belaku Mahila Sangh (R), Dharwad
24. Bengaluru Metropolitan Round Table 44 Trust
25. Bharat Scouts And Guides, Raichur
26. Bharat Sevalal
27. Bharath Samaj Sevak Foundation
28. Bijapur Integrated Rural Development Society (BIRDS)
29. Birds Organisation
30. Budha Rural Development Society [BRDS]
31. Capuchin Krishik Seva Kendra
32. Carmel Charitable Trust
33. Chaitanya Rural Development Society, Haveri
34. Child Empowerment Foundation Of India (Bal Utsav)
35. Chulha Chauki Da Dhaba Pvt. Ltd
36. Citizens Forum
37. Civil Defence
38. Consumer Rights Education And Awareness Trust
39. CRY Child Rights
40. Darideepa Seva Team
41. Don Bosco Social Service Centre, Bidar
42. Dr. MGR Charitable Trust
43. Drasti Foundation
44. Education For All (EFA) Foundation (R), Raichur
45. Fullinfaws College
46. Fushion Youth Sports And Cultural Academy Trust (R)
47. G K Institute Of Technology
48. Gayaka Grameen Vidya Sanstha

49. Gnana Sagar Education and Culture Association
50. Gnanajyoti Educational and Charitable Trust
51. Grace
52. Grameena Mahila Abhivruddi Shikshana Samsthe (GRAMS)
53. Green, Raichur
54. Group of Volunteers/ Sneha Deepa Trust
55. Guru Nanak Mission Trust, Hubballi
56. HANDS
57. Hands of Hunger
58. HARK Citizens Forum Trust
59. Harsha Rural and Urban Development Society, Kalaburgi
60. Hasiru Dala
61. Headstreams
62. Hongirana Charitable Trust
63. Hongirana Taluka Hiriya Nagarikara Nagarikiyara Hagu Vayovrudhara Kshemabhivrudhi Sangh
64. HRS
65. Huma Women Minorities Rural Development Society and Trust
66. Human Aid Welfare and Charitable Trust, Gulbarga
67. Humanitarian Relief Society, Gurappanapalya
68. Humanitarian Relief Society, Mangaluru
69. Humanitarian Relief Society, Raichur
70. Humanitarian Relief Society, Udupi
71. Humanitarian Relief Society, Tumakuru
72. Ibbani Foundation
73. Indian Red Cross Society, Mandya
74. Indian Red Cross Society, Raichur
75. Indian Red Cross Society, Tumakuru
76. Individual, Mercy Mission
77. Inner Wheel Club, Koppal
78. International Forum for Anti-Corruption
79. ISKCON
80. Islamic Information Centre, Kesare
81. Jago Raichur Jago
82. Jai Bharath Mata Seva Samiti
83. Jain International Trade Organisation, Shankarapuram
84. Jain International Trade Organisation, Kundalahalli
85. Jain Youths Association, Chitradurga
86. Jammath Ulla
87. Janadhani Seva Trust
88. Janaraksha Rural Development Trust
89. Jaya Bharata Mate Nagara Mattu Grameena Seva Abhivrudhi Samsthe
90. Jeevodaya Institute for Social Awareness Research And Human Development
91. Jewellers Association, Bangalore, And Gujarati Sanakwari Jain Sangh
92. Jumma Masjid Trust Board
93. Kala Sankula Samsthe
94. Kalpa Trust
95. Kannada Janapada Shikshana Samsthe
96. Karnataka Health Promotion Trust (KHPT)
97. Karnataka Integrated Development Services, Dharwad
98. Karnataka Unani Welfare Foundation Trust (KUWFT)
99. Karnataka Vikalachetanara Savasthe, Chikballapura
100. Karnataka Warriors Sports Club, Koppal
101. Katti Marappa Temple Trust
102. KIDS Organisation
103. Koppal Nagara Abhirudhi Samiti (R), Koppal

104. KSFR Foundation, Kalaburagi
105. Kudumashri 4g Education For Disabled And Welfare Organisation (R), Kushtagi
106. Sambhava Foundation
107. Let's Be The Change
108. Lions Club, Kolar
109. Lions Club, Raichur
110. Lions Club, Murdeshwar
111. Maa Welfare Association
112. Mahila Vruthi Shishakana And Abhivrudhi Sangha
113. Majlis Khidmat E Millat Hyd & Kar Region, Gulbarga
114. Manasa Samagra Graminabhiruddhi Socity, Kuknoor
115. Manavta Seva Samiti, Manvi
116. Manuvikasa
117. Margadarshi Society, Sedam
118. Matrushakti Grameen & Nagarabhiruddhi Samsthe Bilagi
119. MISWA Foundation, Belgaum
120. Mother Teresa Seva Santhe (R), Gulbarga
121. Multi-Purpose Organisation for Training, Health, Education And Rehabilitation (MOTHER)
122. Namal Education Society
123. Namaskar Samaja Seva Samiti
124. National Anti-Crime and Human Rights Council of India, Bengaluru
125. National Anti-Crime and Human Rights Council of India, Kolar
126. Navodaya Educational & Environment Development Service (NEEDS)
127. Navsahyog Foundation
128. Needbase India
129. Nenapu Grameena Abhivrudhi Hagu Tarabeti Samsthe, Gadag
130. Nettur Technical Training Foundation
131. New Zubair Colony Development Committee, Gulbarga
132. Nisarga Gramin Abhivrudhi Saves Society
133. Noble Educational & Charitable Trust
134. North Karnataka Jesuit Educational And Charitable Society
135. NTTF College
136. OSK Federation Of India.
137. Patil Foundation
138. Plastics For Change India Foundation
139. Poor Childrens Trust
140. Raamsenaa Karnataka, Mangalore
141. Raimer Tutorials (Karnataka Kranti Seva)
142. Raksha Foundation
143. Ramkrishna Ashram Mutt
144. REACH
145. READS Ballari, Koppal Dist
146. Renuka Education And Welfare Society (R)
147. Rescue Mission Charitable Trust
148. Revolution Minds
149. Robert Bosch Engineering
150. Rotaract Club, Kumta
151. Rotary Club, Honnavar
152. Rotary Club, Gulbarga
153. Rotary Club, Kalburgi
154. Rotary Club, Bengaluru
155. Rural Minority Education Society, Kavati, Belgaum District.
156. Sachin Nagar Mattu Grameena Abivruddi Samsthe, Lingasugur
157. Samarth Grameenabhivrudhi Samsthe, Vijayapur
158. Sankalp Samsthe

159. Shakthi AIDS Tadehattuva Mahila Sangha, Gokak
160. Shambai Education Society, Kalburgi
161. Shivasai Catering
162. Shree Kudala Sangameshwara Vidya Abhivrudhi Samsta (R), Bevoor
163. Shree Paramanand Rural Development Society, Vijayapur
164. Shree Shridhar Swamy Vidya Vardhak Sangh (R)
165. Shree Swami Vivekananda Seva Samste (R), Kinnal
166. Shree Swastik Women Youth And Rural Development Society
167. Shreematha Seva Trust (R)
168. Shri Bhutanath Rural Development Service Society, Neeralakeri
169. Shri Devi Mahila Swa Sahay Sewa Sang
170. Shri Vasantha Social Activist
171. Shriyanka Education And Rural Development Trust
172. Shubhodaya Seva Samsthe
173. Smally's Resto Cafe
174. SMILE Organisation
175. SNEHA-Society
176. Social Human Society, Raichur
177. Society For Informal Education And Development Studies (SIEDS)
178. Solomon Church
179. Soukhya Samrudhi Samsthe, Kolar
180. Soukhya Sanjeevini Samsthe, Chikballapur
181. Spirulina Foundation
182. Spoorthi Foundation, Tadasa
183. Spurthi Foundation, Yadgir
184. Sree Guru Samarth Foundation, Raichur
185. Sri Byraveshwara Youth And Integrated Association
186. Sri Channabasavaswamy Yuvakara Sangha CBS Gunj Ganesh Group, Gangavathi
187. Sri Daneshwariseva Samsthe (R)
188. Sri Digambar Jain
189. Sri Renuka Yellamma Devi Trust
190. Sri Venkateshwara Technical And Rural Educational Trust, Gudibande, Chikballapur Dist.
191. Sri Ajithanatha Jain Sangha
192. Srusti Swayam Seva Samsthe (R)
193. St.Gregorios Dayabhavan
194. STARD (Society For Tribal and Rural Development)
195. Stephen Square Merchants
196. Subhashchandra Bose Karyapade, Sirsi
197. Sujay Educational & Welfare Society
198. Sukanya Mahila Seva Sangha Mahagoan, Kalaburagi
199. Sunbird Trust
200. Surabee Mahila Mandali (R)
201. Swashakthi Abhivruddi Samsthe
202. Swatantrya Horatagara Bhagatsingh Abhimani Balaga, Gadag
203. Teed Trust
204. The Lifeline Foundation Trust
205. The Muslim Orphanage
206. True Light International Trust (India)
207. Umeed Foundation Education & Charitable Trust , Kalaburagi
208. United Vision Foundation
209. Unity Kendra Multipurpose Social Welfare Forum
210. Valmiki Swabhimani Sangha
211. Vanasiri Rural Development Society, Ranebennur
212. Vathsalya Charitable Trust
213. Vignan Educational Society

- 214. Vikas Seva Samsthe
- 215. Vikasa Rural Development Organisation, Kolar
- 216. Vikasana Rural Development & Educational Society, Koppal
- 217. Vimal Bhandari, S/O B.G.Bhandari, K.P. West
- 218. Vimukthi Vidya Samsthe
- 219. Vinita Rural And Urban Development Agency, Raichur
- 220. Vinootana Shikshana Seva Samsthe (R)
- 221. Vishwapatha Samsthe (R), Sindhanur
- 222. Vizianagaram Educational And Social Changes Chorale Trust
- 223. WINGS Foundation
- 224. World Mission
- 225. Youvashakti Samaja Seva And Rural Development Society, Bidar
- 226. Yuva Foundation
- 227. Yuva Foundation Association

Note: Names of five organisations have been withheld upon request for anonymity.

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