सत्ये स्थितो धर्मः

# NEWSLETTER

**CENTRE FOR DISASTER MANAGEMENT & LAW, NATIONAL LAW UNIVERSITY ODISHA**

Contact us-cdml@nluo.ac.in

# Disaster Preparedness in light of COVID 19.

By Kanishka[1]

With the onset of COVID 19, disasters have become mainstream. Gone are the days when disasters were once in a while event which were not seriously taken. In today's time disaster can present itself anywhere in any form. The advent of COVID 19 and the disruption of lives of entire humanity on the globe has once again demonstrated the importance of disaster management. Sadly even when the nation was grappling with the emergence of the pandemic in 2020, it had to face many more disasters. In the beginning locust attack destroyed crops and vegetation in states of Rajasthan and Madhya Pradesh.[2] Second cyclone Amphan in Odisha and West Bengal caused widespread damage to infrastructure and affected lives of millions.[3] Third was issue of floods due to incessant rains in Hyderabad, Kerela and Assam. Fourth was the issue of landslides in the state of Uttarakhand.

On one hand, the nation was in lockdown, economic activity had come to standstill, millions had lost their livelihood. On the other hand the nation had to deal with one disaster after another. India has been facing many disasters over the period of time and the lessons which it had learnt in those disaster came to the rescue of the government in these pressing times. Disaster management is not a one day affair, rather it is part of sustained effort which is both laborious and resource consuming. Over a period of many years, various government have taken steps like passage of disaster management act, setting up of National Disaster Management Authority etc which have equipped the nation to counter the disasters and have also increased the disaster preparedness.

However Disaster Management and Preparedness cannot be a topic of concern for the government and the governmental agencies only. It is true governmental agencies such as National Disaster Relief Force, National Disaster Management Authority are some of the specialized agencies created with the intention of manging disasters and undertaking a detailed study of the disasters. They are the institutions which have the necessary training, skills and resources to undertake rescue, disaster mitigation steps. Yet no government can effectively

---

[1] Kanishka, Research Associate cum Teaching Assistant, National Law University Odisha

[2] Arshi Aggarwal, India under worst locust attack in 27 years: Why you should be concerned, India Today, https://www.indiatoday.in/india/story/locust-attack-in-india-economic-impact-crops-damaged-1682125-2020-05-26

[3] SUPER CYCLONE 'AMPHAN' 2020, National Disaster Response Force, Ministry of Home Affairs, Government of India, https://ndrf.gov.in/operations/super-cyclone-amphan-2020

manage disasters without the active participation of the people. Whether it be disaster panning, evacuation etc, people have to take the lead to manage disasters. A well trained and prepared population is an asset in disaster management.

State of Odisha has been a model in the country when it comes to disaster management. Whether it be the rescue of trapped miners in Meghalaya[4] or lending assistance to other states post disaster[5], the state has been at forefront, proving the mettle of its disaster management apparatus. The state has built its expertise over the years beginning from the catastrophic Super Cyclone of 1999.[6] It is true that the first time the state was caught unawares and preparations were woefully short of what they should have been. But leaning from its mistakes, the state has taken a number of steps that have gone a long way in ensuring that large scale death and destruction are avoided. Whether it be the building of cyclone shelters in coastal areas or the training and development of the personnel managing disasters, state has walked the extra mile. Even United Nations had praised the proactive steps taken by state administration during cyclone Yaas and Cyclone Phailin which saved many lives.[7]

Expansion of disaster management capabilities specially becomes relevant in modern times where the danger of man made disasters has also grown manifold. India is no stranger to man made disasters. The tragedy unfolded by Bhopal Gas Leak is still afresh in the minds of citizen. Due of lack of effective oversight from government, a callous enforcement by state agencies, the onus falls on judiciary to keep a check on the wrongdoings. Incidents like Oleum gas leak case led Supreme Court of India to pass 'doctrine of absolute liability'.[8] Interventions by Supreme Court like ban on felling of trees in Himachal etc go a long way in preventing future disasters. Indian courts as well tribunals such as National Green Tribunal have taken proactive steps in ensuring that environmental laws are followed and infringing agencies are punished.

While there have been some action from authorities, the ground reality in India leaves much to be desired. We face disasters after disasters every day, yet it feels that we fail to learn the lesson

---

[4] Odisha firefighters to help in rescue of miners at Meghalaya, Kalinga TV, https://www.youtube.com/watch?v=EN8hdM3lFVw

[5] Odisha to send ODRAF, Fire Services personnel to West Bengal to carry out restoration works https://www.aninews.in/news/national/general-news/odisha-to-send-odraf-fire-services-personnel-to-west-bengal-to-carry-out-restoration-works20200523191929/

[6] S. R. KALSI, Orissa super cyclone – A Synopsis, Mausam,57,1 (January2006), 1-20, https://metnet.imd.gov.in/mausamdocs/15711_F.pdf

[7] Ashis Senapati, UN praises Odisha CM Naveen Patnaik again for saving lives during Cyclone Yaas, DownToEarth, https://www.downtoearth.org.in/news/natural-disasters/un-praises-odisha-cm-naveen-patnaik-again-for-saving-lives-during-cyclone-yaas-77181

[8] MC Mehta vs Union of India AIR 1987 SC 1086

each time. On paper there is rule of law, there are multiple enforcement agencies like police, forest department etc. However in reality the mafia have dented all measures of environment protection. Whether it be sand mining, timber smuggling, coal mining etc, organized gangs of criminals continue their activities unabated. The attitude of citizen is also a problem. While some issues like stubble burning, air pollution are discussed and action is demanded. Yet there are many disaster in making which are not even acknowledged. For example India is the biggest extractor of ground water in the world.[9] In many states situation has turned grave.[10] The situation can turn catastrophic in case of failure of rains, threatening agriculture and food security of millions. Similarly Himalayan glaciers are melting at an alarming rate. Global warming, combined with pollution and deforestation is playing havoc with the weather and rain pattern in India. Experts have pointed that a heat wave(similar to one India experienced in April 2022) will become a regular occurrence in the post covid world.

It is high time that we wake up to the dangers of disasters. Otherwise large scale death and destruction cannot be prevented. Use of scientific measures and information technology is a must if we want to tackle disasters effectively. Merely reacting to disasters will be of limited help as seen in Bengaluru Floods and Morbi Bridge collapse. If we want to succeed we will have to commit to long term planning and implementation with adequate budgetary allocation from government and active participation from citizen.

---

[9] India Groundwater: a Valuable but Diminishing Resource, The World Bank, https://www.worldbank.org/en/news/feature/2012/03/06/india-groundwater-critical-diminishing
[10] Sukriti Vats, 14% of India's groundwater assessment units over-exploited, 4% critical, says new govt report, The Print, https://theprint.in/india/14-of-indias-groundwater-assessment-units-over-exploited-4-critical-says-new-govt-report/1217090/

**Urgency of a binding legal framework for disaster risk reduction and medical quality management systems: Patient will be the ultimate beneficiary**

By Dr. Nidhi Yadav[11]

"A disaster is a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources. Though often caused by nature, disasters can have human origins"(1). The amalgamation of hazards with vulnerability and the inability to reduce any potential negative consequences of risk results in disaster. Basically, disasters are a common phenomenon throughout the world whether natural or man -made in nature. They continue to strike, mostly without any prior warning and it has been perceived that their incidence is on an increase. Disasters are also getting bigger in terms of their frequency of occurrence, magnitude of impact, complexity in nature and economic impact(2).

**Magnitude of disasters- Global and national level**

**Global level:**

It has been observed that in the second half of the 20th century, around 200 natural disasters have strike in the different parts of the world and these disasters have claimed lives of around 1.4 million people. It has been also reported that losses owing to the natural disasters amount to approximately 20 times higher (in terms of the % of GDP) in the developing nations in comparison to the developed ones. Asia being the biggest continent, has maximum number of deaths due to natural disasters. The origin of natural disasters could be traced back in the history since 430 B.C. this was the time when Typhus epidemic broke in Athens and claimed several thousand lives. The ten deadliest and impact full natural disasters across the world were seen in 1556(3). During this time one earthquake of magnitude 7 on Richter scale had hit the Shaanxi province on 23rd January, it is located in China, the earthquake claimed 8,30,000 lives. The figure 1.1 above depicts that around 78.4% of total disaster related events which occurred around the world belonged to hydro meteorological nature. It also indicates that the incidents of Hydro meteorological nature are on a continuous rise and lead to maximum lost loss of life.

---

[11] Dr. Nidhi Yadav (PhD), Asst. General Manager, Indian Spinal Injuries Centre, New Delhi

**Figure 1.1: Disaster events & Deaths (1900-2001)**(4)
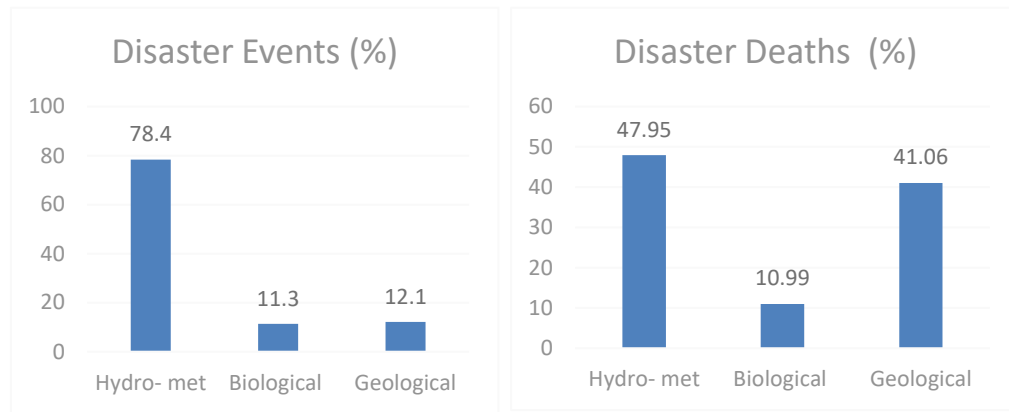


**India level:** India is vulnerable up to a differential degree, to various disaster of both types i.e. natural disasters as well as man-made disasters. The main reason for this high degree of vulnerability is the unique geo-climatic and socio-economic positioning as compared to rest of the countries. Various disasters to which India is vulnerable include disasters related to earthquakes, floods, cyclones, droughts, landslides, forest fires and avalanches etc. Among the 29 states and 8 union territories of India, 27 states are prone to disaster. Among these 27 states, approximately 58.6% of land is prone to earthquakes of moderate to very high intensity; and approximately 40 million hectares i.e. around 12% of land is prone to either floods or river erosion. India has a coastline of 7,516 km, out of which around 5,700 km is prone to cyclones and tsunamis. At the same time 68% of the cultivable land is prone to extreme drought, whereas the hilly region is prone to risk of disasters like landslides and avalanches(5). India is one among the ten countries in the world which are severely disaster-prone in nature. India is prone to disasters primarily due to several reasons related to the factors that include adverse geo-climatic conditions, environmental degradation, topographic features, urbanization, population growth, un-scientific developmental practices, industrialization, etc. These above-mentioned factors either individually or in combination lead to increase in the magnitude and frequency of disasters.

**Vulnerable population (patients and children)**

Vulnerability according to the Oxford Dictionary is the quality or state of being exposed to the possibility of being harm either physically or emotionally it is a complex concept with multiple dimensions in different contacts vulnerability as a universities relatable issue relevant also to health and health care law will be a common thread throughout this article. Vulnerable groups are many like children, women all people caught in circumstances such as cross border conflicts natural disasters irregular and force migration human trafficking indigenous groups PWD is sexual minorities to name just a few.

Young children and women in particular may not only be subject to abuse but also be deprived of opportunities for social economic freedom person with disabilities and sexual minority groups experience stigma and neglect often feeling to reach the optimum development potential because of externalities such as the existing social cultural religious and political structure the socially disadvantage group in resource poor settings of low and middle income countries such as India a rented mole more vulnerable due to inequalities in social structure. In terms of medical care, a vulnerable patient is the one who is dependent for his activities of daily living (ADL) on others. These patients include sedated, unconscious, mentally challenged, physically handicapped, pregnant females, children below 18 years and elderly above 65 years under medical care, patients with language barrier etc. These category of patients need special attention all the time and are more vulnerable to injuries and accidents during their course of treatment. In the event of a disaster evacuation and safety of vulnerable patients become more difficult due to ongoing clinical condition which may limit their decision making, mobilization, understanding and higher dependency on other for fulfilling the basic necessities.

**Global and national commitments in terms of Sendai and Hyogo frame work for DRR.**

**Global level commitments for medical preparedness**

The Hyogo framework: The World Conference on Disaster Reduction was held from 18 to 22 January 2005 in Kobe, Hyogo, Japan, and adopted the "Framework for Action 2005-2015(6): Building the Resilience of Nations and Communities to Disasters this Conference provided a unique opportunity to promote a strategic and systematic approach to reducing vulnerabilities and risks to hazards. It underscored the need for, and identified ways of, building the resilience of nations and communities to disasters."

The Sendai Framework for Disaster Risk Reduction 2015–2030 was adopted in the Third United Nations World Conference on Disaster Risk Reduction, held from 14 to 18 March 2015 in Sendai, Miyagi, Japan(7). The framework aims to achieve remarkable reduction in disaster risk and losses in lives, livelihoods and health. This applies to the economic, physical, social, cultural and environmental assets of the persons, businesses, communities and countries over the next 15 years. The Framework was adopted at the Third UN World Conference on Disaster Risk Reduction in Sendai, Japan, on March 18, 2015.

**National level commitments for medical preparedness**

In India, Disaster management has seen major transformation in terms of its evolution from an activity-based and reactive approach-based setup to a proactive, institutionalized, self-driving modality. The evolution of its institutional structure can be traced back to the Britishers era in which the country has witnessed numerous disasters for instance the famines of 1900, 1905, 1907 & 1943, and earthquake in 1937 in Bihar-Nepal etc. In India, a permanent and institutionalized setup in disaster management began in the 1990s with setting up of a cell called as disaster management cell under the Ministry of Agriculture. This was done in the decade 1990 based on a declaration. This was known as the "International Decade for Natural Disaster Reduction" (IDNDR)(8). After facing numerous natural disasters like Earthquake in Latur in 1993, Landslide in Malpa in 1994, the Super Cyclone in Orissa in 1999 and the Bhuj Earthquake in year 2001, this high-powered Committee was established. This committee had the mandate for drawing up a systematic, holistic and comprehensive approach to ensure disasters management in India. This was considered as a paradigm shift in policy from the relief-based approach via financial support to a holistic and inclusive approach for addressing disaster management issues related to early warning systems, forecasting and monitoring setup for various weather-related hazards etc. A structural flow of information, in terms of warnings, alerts and updates regarding the upcoming hazard, also emerged within this framework. The disaster management framework emerged from the recommendations made in the reports of the committee on the issues related to Disaster Management. This report talked about establishing a separate institutional structure in order to address the disasters and enacting suitable law for institutionalization of the disaster management in India. The report also emphasized on having multi-level links between the related ministries for faster and smoother coordination of work. This institutional structure is also in a state of transition these days. This new setup, following the implementation of the Disaster Management Act 2005(9), is under evolution as on date. The old structure is also simultaneously continuing in India. Hence, both

the structures are coexisting in India at present and running on a parallel mode. The National Disaster Management Authority (NDMA) is established at the centre, followed by having a SDMA at state level which in turn will support the NDMA.

**Disaster Management Act, 2005**

The Disaster Management (DM)(9) Act 2005, provisions for setting up of the National Disaster Management Authority (NDMA) under the Prime Minister (PM), who is the chairperson of this body. As per the act the State Disaster Management Authorities (SDMAs) are established under the Chairmanship of the respective Chief Ministers (CM) and lastly the District Disaster Management Authorities (DDMAs) are provisioned to be established under the leadership of Collectors/District Magistrate/Deputy Commissioners. This Act also asks for constitution of various executive committees. These committees are to be established both at the national and the state levels. It has several other provisions for establishing a research and education body and lead to setting up of the National Institute of Disaster Management (NIDM) for capacity building. In order to ensure quick and effective response to the disaster at the national level it envisioned establishing of the National Disaster Response Force (NDRF).

**Hospital safety guidelines and DRR**

**The National Disaster Management Policy 2009 and role of Hospital Safety guidelines 2016**(2) **in making the hospitals safe from disasters**

The National Disaster Management policy 2009(10), envisions to build a safe and disaster resilient India. The policy aims to achieve this by developing a proactive, multi-disaster oriented, holistic and technology driven strategy by developing a culture of prevention, mitigation, preparedness, and response. The key objectives of this Policy are as follows:

• "Promoting a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education.

• Encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability.

• Mainstreaming disaster management into the developmental planning process.

• Establishing institutional and techno-legal frameworks to create an enabling regulatory environment and a compliance regime.

• Ensuring efficient mechanism for identification, assessment and monitoring of disaster risks.

• Developing contemporary forecasting and early warning systems backed by responsive and fail-safe communication with information technology support.

• Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.

• Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat for ensuring safer living.

• Promoting a productive and proactive partnership with the media for disaster management."

In line with National Disaster Management Policy 2009, the NDMA released its Hospital Safety guidelines in 2016. These guidelines mention the provisions required to be put in place for ensuring that the hospitals or health facilities remain functional in the disaster situations. It is also imperative to consider that the provisions specified in these guidelines are the basic minimum requirements of standards which needs to be complied by the hospitals and healthcare facilities to make themselves disaster resilient. These guidelines are developed with the idea of addressing issues related to both internal and external disasters affecting the hospitals and healthcare facility in the specific region. Implementation of these guidelines for hospitals/healthcare institutions ensures their functionality and continuity of services during as well as immediately after a disaster event".

**Quality management systems in India and its alignment with safety of life: The Quality Council of India**

**Background**

It was post economic liberalization in 1992 that India felt the need to establish its own accreditation. This body was envisioned to establish such mechanism so that Indian products and services become internationally acceptable and given based on the conformity assessment results for India. For the medical and testing laboratories, an accreditation body under the Ministry of Science & Technology was already functional. A committee including stakeholders from various ministries and industries was constituted in order to make suitable recommendations on this matter. The committee worked under the supervision of the Department of Industrial Policy and Promotion. Its recommendations and full report were submitted to the Cabinet in the year 1996. The key recommendations of the committee included

"a dire need for establishing a self-sustaining and autonomous organization jointly by the Government and the industry". Based on the committee recommendations the Quality Council of India (QCI) was established(11). It came up as an autonomous, not-for-profit body under the Societies Registration Act of 1860. The sole purpose of the QCI was to establish an Indian accreditation structure along with thrust in spearheading the nation-wide quality movement, by undertaking a National Quality Campaign. The Quality Council of India was set up with the mission to make nationwide quality a reality. It was only possible by establishing & operating a National Accreditation structure and process. The accreditation process facilitated trade, by establishing equivalence & global acceptance of certification. They ramped up inspection and Testing in the areas of Quality, Environment, Food Safety etc. For these two separate boards were established in the QCI. The first one was National Accreditation Board for Certification Bodies (NABL). This board was responsible for testing and calibration laboratories. The second board was The National Accreditation Board for Hospital & Healthcare Providers (NABH). This board was responsible for accreditation of hospitals and healthcare organization. Later based on the industry acceptance and increase in demand for accreditation QCI also established the National Accreditation Board for Education and training (NABET). QCI closely works with international developmental organization such as FAO of the UN, for spreading the message of quality within and outside the country. QCI also helps the Indian stakeholder to meet international standards by facilitating in national interpretation of private standards and helping in their implementation at ground level.

**Definition of quality and accreditiation**

Philips B Crosby defined it as "Quality is doing the right things right, first time and every time for the right people at the right time." American Society for Quality explains quality as "A subjective term for which each person or sector has its own definition. In technical usage, quality can have two meanings: the characteristics of a product or service that bear on its ability to satisfy stated or implied needs; a product or service free of deficiencies". In the words of Joseph Juran, quality means "fitness for use"; while as per P. Crosby, it means "conformance to requirements." Implementation of quality standards in an organization is considered a demanding task, however in most of the developing countries nations, getting accreditation is frequently used by hospital to assure quality and patient safety.

In the context of healthcare quality, can refer to the medical care quality and the non-medical aspects of service delivery to the consumers of quality, like infection control practices

comprises of medical quality while reducing waiting time for patients, staff communication and attitude comprise of non-medical aspects. Both these aspects are based on the foundation of policies and procedures laid down by the management and their implementation in the organisation. The concept of quality management in healthcare can be understood in several ways. "Quality" can simply be explained as activities undertaken by any that healthcare organization in order to understand and fulfill the needs of its consumers which could be a patient, their attendants, the staff members including the admitting doctor and his team members, the employer, the payer, the vendors or any internal consumers within the organization. The quality of product or service is demonstrated and measured by accreditation process. It can be defined as "A public recognition of the achievement of accreditation standards by a healthcare organisation, demonstrated through an independent external peer assessment of that organisation's level of performance in relation to the standards"(12). Accreditation process has been beneficial to all its stake holders who are involved in this process, but it is well known that he ultimate and biggest benefit of accreditation goes to the patient.

**NABH and Patient safety**

NABH 4<sup>th</sup> edition standards for hospitals are developed by the technical committee of NABH. The standards provide an overarching framework to ensure the hospitals are delivering quality healthcare care to patients. The composition of 4th edition Standards includes ten chapters, 102 standards which are distributed among these ten chapters and lastly 636 objective elements, which are the measurable components on which scoring is done. The 4th edition of NABH standards has its 8th Chapter on Facility Management and Safety, this chapter has 7 Standards and 46 Objective elements(13). The standards laid down in the chapter 8 provide a framework for the hospital to make provisions for safe and secure environment for its occupants. The standards also ask the hospitals to ensure that proactive risk mitigation measures are in place for staff and patient safety. These measures include conducting facility inspection rounds at frequent pre-defined interval, conducting mock drills for various type of emergencies etc. the standards thrust upon taking appropriate measure to provide safe water, uninterrupted electricity supply, pure and tested medical gases and vacuum systems. The organisation should have mechanism for effective management of medical and utility equipment. It also promotes

organisations to work towards measures on being energy efficient, for managing hazardous materials in a safe manner and implement no-smoking policy as per government mandate. The chapter 8 of NABH discusses about structural, non-structural and functional elements related to hospital infrastructure, building condition and construction guidelines, provision of support services, policies and procedures for hospital safety committee, safety plans for various types of emergencies (both natural and man-made) etc. It lays stress on the latent residents that may lead to potential disaster situations when combined with environment hazard and human errors. It also checks about the preparedness of hospital administration and hospital staff in dealing with these emergency situations. The NABH standard implementation ensures that the hospital is imparting training and conducting drills with the hospital staff in order to sensitize and prepared them for the disaster situation. The hospital has to demonstrate its preparedness by means of documented policies and procedures, by having patient and staff safety measures in place all around the hospital. Record of mock drills and staff training also point towards preparedness of hospitals for managing disaster. The commitment of hospital management in this regard is evidenced by resource allocation for this purpose, by the composition and working of Hospital Incident Command system and disaster management committee and the decisions taken by this committee towards hospital safety.

The overall functional status and maintenance of the support services and equipment like HVAC, DG sets, water and Plumbing system, Sewage treatment plant, bio medical equipment, IT infrastructure etc. During an outbreak of infectious respiratory disease like SARS the risk of cross infection increases due to poorly managed HVAC in case the identification and isolation of patients with such diseases is delayed. There are ASHRAE standards 62.1 and 62.2 which are applicable for the indoor air quality and ventilation design system in a built up space. At this point the accreditation standards become the best way to evaluate disaster preparedness of any hospital. However, measuring disaster preparedness of hospitals is not undertaken by the NABH assessment. The assessment team only provides suggestions as per the evidenced based, best practices to improve safety in total and make the hospitals disaster resilience. Moreover, there is no standardized and comprehensive instrument for measuring the disaster preparedness of hospitals, however, there are various instruments that have been developed and are used currently worldwide, and most of the current instruments are situation-specific or one-dimensional. According to the NABH 4th edition standards, the hospital disaster preparedness can be classified under three sub-concepts, these include the aspects related to structural, non-structural, and functional preparedness components of the hospital facility. A

systematic review of literature conducted by Heidaranlu. E et.al 35 (2015) revealed that majority of the tools which were reviewed, were found to deal with structural and non-structural preparedness only. The functional aspect of hospital preparedness was not measured by most of the tools despite its paramount importance. The functional aspect is driven by the human resource of any organization and it comprise of the planning for disasters, ensuring continuity of supplies and business in the wake of disaster and lastly developing a managerial command structure that is well equipped to work effectively under the constrained situations. Continuous preparation and active participation by the hospital staff at all levels is the key to smooth execution of functional aspects of disaster preparedness. Regular training and sensitization of hospital staff and their active participation in mock drills lays down the foundation of functional preparedness of hospital. These activities enhance the knowledge level of staff working at different level and increase their confidence in handling disaster situation. Training and sensitization sessions on disaster management related matters help the staff get acquainted with probable disaster situations and also reduces anxiety among the staff. It improves psychological health of the staff and clarifies the myths and mis-conceptions related to disaster situation. Gradual change in the attitude of staff can be perceived after conducting series of training sessions. When the hospital organizes mock drills for various kinds of disasters the staff actively participate in them and attain hands on experience of handling the situation. The staff learns about team work, coordination and stress management through these mock drills. Training is specifically important for the new staff in the hospital due to their novelty in the system and lack of awareness about hospital policies and protocols. Training instills confidence and increases employee satisfaction in the organization.

**Conclusion and Discussion**

According to the Hospital safety guidelines 2016 given by the National Disaster Management Authority (NDMA), the disaster preparedness and response pose two-fold challenges in front of the hospital authorities. First one is to have an exhaustive Disaster Management Plan for the hospital as per its disaster profile and second challenge is to ensure that this plan is well rehearsed and implementable in nature with minimum lapses. Both these challenges could be jointly addressed in an effective manner by complying with the Licensing and Accreditation requirements related to the hospitals. Compliance to the licensing and accreditation

requirements should be able to make any hospital or health care facility safe and secure from probable disaster situations. A Comparative study of NABH Accredited and Non-NABH Accredited Hospitals in Jaipur, was conducted in 2015. In this study, three NABH accredited private hospitals (Fortis Escorts Hospital, SK Soni Hospital & Apex Hospital) and three Non-NABH accredited private hospitals (Santokba Durlabhji Memorial Hospital, Mahatma Gandhi Hospital & Tagore Hospital) were compared and over 1260 responses were collected. The study found that NABH Accreditation is an effective tool for improving the efficiency and overall effectiveness of the hospital services. These requirements vary according to the type and scope of health facility and also from one state to the other. To ensure the effective and continuous functioning of the disaster preparedness and mitigation measures at any hospital, they be evaluated for the same during accreditation audits. The effective implementation of these guidelines at all levels will reduce the risks to human life and infrastructure. It will also ensure that the hospitals are not only prepared in a better manner but they also start functioning optimally after any disastrous events. This accreditation mechanism uniformly improves the quality of all the areas of hospital services. It also promotes culture of safety in hospital that meet patients need of quality. Its effective implementation helps improve hospital performance and increases patient satisfaction. It also gives a competitive advantage to the hospitals and also boosts the community confidence in hospital service. Kapurkar KS. et al (2015) conducted "a study to assess effectiveness of plan teaching programme on NABH guidelines among newly recruited staff nurses at Krishna Hospital, Karad"(14). The study found among the newly recruited nursing staff approximately 19.4% staff had average knowledge about NABH standards. It also found that around 18% of the nursing staff demonstrated average practice levels with respect to implementation of the NABH guidelines. The difference in the Knowledge and Practice score of the participant staff was also found to be highly significant. Mudedla, S Tej et.al (2014) conducted a similar study on "Knowledge and awareness of standard precautions among health care workers was conducted at Nizam's Institute of Medical Sciences, Hyderabad". The study was designed to assess the knowledge and awareness among heath care workers regarding standard precautions. The study participants include doctors, nurses and technicians working in the hospital. Around 180 healthcare workers including doctors, medical technicians and nurses participated in the study. The study found that doctors scored highest in Knowledge at 63% followed by technicians at around 57% and nurses at 40%. The knowledge and awareness levels were found to have had significant difference among the participant groups of health care professionals ($P = 0.031$). The role of gender was found in significant w.r.t knowledge and awareness about standard precautions ($P > 0.05$)

It means the hospitals will be available and be able to respond to the medical needs of the affected community. It is also known that the hospitals are also at equal risk of disaster as per there hazard profile and need to deliver healthcare in the eventuality of disaster, secondly hospital safety and disaster preparedness are an integral part of Safe Hospitals. The hospital administration cannot ignore the importance of proactive preparation and practice for effectively managing disasters and minimizing the loss of life. The involvement of hospital staff in managing disaster is greatly affected by the level of commitment of hospital administration. Although quality accreditation in hospitals is just more than one-and-a-half-decade old concept for Indian hospitals but it greatly affects disaster preparedness in hospitals and has the potential to bring palpable changes in the elements related to procedural, structural, non-structural and functional preparedness in hospitals. It is therefore recommended that implementation of these guidelines and Disaster Management Act (DMA) 2005 should be on the priority of accreditation and licensing bodies. Since NDMA does not have any assessment and monitoring mechanism of its own they can collaborate with Quality Council of India and NABH for ensuring implementation of Hospital Safety Guidelines and DMA 2005 in the hospitals across India. The key aspects of disaster management which should be evaluated during accreditation, are detailed as follows.

A. **Disaster preparedness measures:** These are the measures undertaken by the hospitals to effectively respond to disasters. They shall be evaluated and accredited for the same. The assessment team should evaluate the Disaster Management Plan of the hospitals with respect to the following:

1. "Coordination and Management (including the Hospital Incident Response System)

2. Information, Communication and Documentation

3. Safety and Security

4. Human Resource Planning and Management

5. Logistics and Supply (of medicines, equipment, blood and blood products, medical

gases, transport facilities, linen, food, etc)

6. Financial Management

7. Continuity of Essential Services

8. Triage

9. Surge Capacity and Medical Response

10. Post Disaster Recovery

11. Patient Handling

12. Volunteer Involvement and Management

13. Area Level Networking of Hospitals

14. Coordination and Collaboration with Wider Disaster Preparedness Initiatives"

Having NABH assessment focus on hospital safety will serve as a stepping stone in

strengthening and development of the necessary institutional mechanisms needed to ensure high safety standards at hospital level. This will be followed by development and issuance of the necessary policies, guidelines and ministerial directives to enforce safety in hospitals. This will further lead to upgradation of the licensing and accreditation parameters in order to achieve high safety standards for hospitals. This will finally lead to mainstreaming of hospital safety parameters in such a way that "safe and functional hospitals" will become a natural by-product of the health sector in India.

**Reference**

1.      Ministry of Home Affairs G. National Policy on Disaster Management. 2009.

2.      Government of India. National Disaster Management Guidelines, Hospital Safety. Delhi; 2016.

3.      Pan American Health Organisation. Safe Hospitals A Collective Responsibility A Global Measure of Disaster Reduction [Internet]. Available from: www.paho.org/disasters

4.      International Federation of Red Cross and Red Crescent Societies. World Disaster Report 2010. 2010.

5.      GOVERNMENT OF INDIA MINISTRY OF HOME AFFAIRS.

6.      UNISDR. Hyogo Framework for Action 2005-2015. 2005.

7.      Nations Office for Disaster Risk Reduction U. Sendai Framework for Disaster Risk Reduction 2015 - 2030.

8.      Ministry of Home affairs. Disaster Preparedness In India in Public Accounts Committee. 2016.

9.      DM_act2005 (1).

10.     MINISTRY OF HOME AFFAIRS G. National Disaster Management Policy. 2009.

11.     National Accreditation Board for Hospitals & Healthcare Providers (NABH) [Internet]. Constituent Board of Quality Council of India. 2022 [cited 2022 Apr 22]. Available from: https://nabh.co/

12.     Crossing the Quality Chasm: A New Health System for the 21st Century. 2001.

13.     David SamuelNJ, Valas S. National Accreditation Board for Hospitals and Healthcare Providers (NABH) Standards: A review. Current Medical Issues. 2017;15(3):231.

14.     Kapurkar KS, Jagadale SA, Babar RV. TO ASSESS EFFECTIVENESS OF PLAN TEACHING PROGRAMME ON NATIONAL ACCREDITATION BOARD FOR HOSPITALS AND HEALTH CARE PROVIDERS (NABH) GUIDELINES AMONG NEWLY RECRUITED STAFF NURSES AT KRISHNA HOSPITAL, KARAD. J Evol Med Dent Sci. 2015 Dec 22;4(103):16830–4.

# The COVID-19 Crisis As A Disaster

By Priti Singh[12]

**Abstract**

The Disaster Management Act of 2005 played a huge role during the time of COVID-19. It has been used in handling disasters in a more efficient way. There are organizations at the National, State, District, as well as in Local levels in order to ensure effective and smooth functioning. The Central Government and NDMA have extensive power under the DM Act. Regardless of any laws in force, the Central Government may offer any directives to any authority wherever in India on disaster management. The DM Act grants the NDMA and the federal government a great deal of authority. So much so that, regardless of any laws in existence, the Central Government may direct any authority wherever in India to assist in disaster management. It was crucial to stop the spread of COVID-19.

---

[12] Priti Singh, Second Year, National Law University Odisha

According to the United Nations, a disaster is "a major disturbance of a society's functioning that results in widespread human, material, or environmental damage and beyond the capacity of the affected society to deal using its own resources."[13]

The first biological calamity affecting all of India, COVID-19, is being managed by the nation's judicial and constitutional authorities. The 2005 Disaster Management Act was used to impose the lockdown (DM Act). Although the Indian Constitution is silent on the topic of "disaster," Entry 23 of the Concurrent List of the Constitution's "Social Security and Social Insurance" serves as the legal foundation for the DM Act. It is also possible to make particular laws using Concurrent List Entry 29, "Prevention of the extension from one State to another of infectious or contagious diseases or pests affecting mankind, animals, or plants."[14]

**Provisions of the Act**

The Act's goal is to handle disasters, which includes developing capacity, coming up with mitigation techniques, and much more. This Act also names the Ministry of Home Affairs as the nodal ministry in charge of overseeing the nation's comprehensive disaster management. The Act also includes provisions for monetary systems, such as the establishment of funds for disaster relief and other urgent situations.[15]

The Constitution and the legislation frequently go unnoticed in the haste to address the Covid dilemma. The Constitution's power distribution gives careful consideration to how the federal, state, and local governments should function.

However, the existing statutory framework, which only includes the Epidemic Act of 1897, is insufficient. A state government has the authority to enact laws and other interim measures as needed. However, not all of the regulations related to this power have been filed in any of the High Courts.

---

[13] C.E. Pratap, *Disaster Management and Law - A Human Rights Perspective*, LAWYERS CLUB INDIA (Feb. 19, 2012), https://www.lawyersclubindia.com/articles/disaster-management-and-law-a-human-rights-perspective-4497.asp.

[14] M.P. Ram Mohan & Jacob P. Alex, *COVID-19 and the ambit of the Disaster Management Act*, THE WEEK, (Apr. 26, 2020, 5:11 PM), https://www.theweek.in/news/india/2020/04/26/covid-19-and-the-ambit-of-the-disaster-management-act.amp.html.

[15] PNBS, *Disaster management Act 2005: Provisions & Punishment | Explained*, (Jun. 6, 2021), https://newsonair.com/2021/06/06/disaster-management-act-2005-provisions-punishment-explained-2/.

Courts have been advised that the Disaster Management Act of 2005 (DM Act), post-independence constitutional-era legislation, must be added to this statute, however, this law has also not been adequately examined. This legislation focuses on accidents such as building collapses, landslides, avalanches, cyclones, earthquakes, floods, and cyclones.[16]

**The ambit of the Disaster Management Act, 2005**

The DM Act's legislative goal was to "ensure the efficient management of catastrophes." The Prime Minister serves as the Chairman of the National Disaster Management Authority (NDMA), which was established under the Disaster Management Act (DM Act) as the key node for coordinating disaster management. The NDMA establishes policies, plans, and recommendations for disaster management (S.6). Similar to this, high-functioning officials staffed State, District, and Local level Disaster Management Authorities. These organisations are all intended to collaborate.

The "Guidelines on Management of Biological Catastrophes, 2008" is one of 30 Guidelines that the NDMA has created so far on a variety of disasters. Biological disasters and health emergencies are covered in great detail in the 2019 National Disaster Management Plan. The Union and State governments are conducting their COVID-19 containment efforts within this broad legal framework.

The DM Act gives the Central Government and NDMA a wide range of authority. The Central Government may give any instructions to any authority anywhere in India to help or assist in disaster management, regardless of any laws in effect (including overriding powers) (Ss 35, 62 and 72). The Union Ministries, State Governments, and State Disaster Management Authorities must all comply with any such directives issued by the Central Government and NDMA (Sections 18(2)(b), 24(1), 36, 38(1), 38(2)(b), 39(a), and 39(d), among other provisions).

The prime minister may use all of the NDMA's authorities to accomplish all of these things (Section 6(3)). This guarantees that the choices are supported by sufficient political and constitutional weight.

---

[16] The Hindu Businessline, *Courts and covid. Medical disasters and the role of law*, WWW.THEHINDUBUSINESSLINE.COM, (May 10, 2021, 08:47 AM), https://www.thehindubusinessline.com/opinion/medical-disasters-and-the-role-of-law/article34521886.ece/amp/.

According to NDMA's Order dated 24-03-2020, the nationwide lockdown was implemented under the DM Act in order to "take steps for establishing social separation so as to prevent the spread of COVID-19." (S 6(2)(i)). The Ministry of Home Affairs, which has administrative jurisdiction over disaster management (S. 10(2)(l)), published further directives on the same day.

NDMA/SDMA are required to offer a "minimum standard of relief" to catastrophe victims in order to lessen social suffering (Ss. 12 and 19), including assistance with debt repayment or the granting of new loans with favourable terms (S. 13).[17]

Advisory committees are also envisioned by the DM Act. Even while the governments retain overall authority, the Act decentralises it by allowing for both macro and micromanagement of a crisis. The DM Act detests the central government's power is consolidated. Even the State Government or the Central Government cannot usurp the authority that this law creates and establishes exclusively for them.

The need calls for prompt interactions, conversations, visits, and inspections to learn about and obtain an understanding of local conditions in every State and district. Courts are not allowed to replace, much less dismiss, and take over the authority of those whose powers are granted under a complex matrix of authorities. The national, state, and district plans' mitigation and prevention strategies are to the best of the court's ability enforced and put into action.

The phrase "reasonable limits" is used on purpose in the Constitution. Only reasonable limits may be imposed while limiting the rights that are granted in order to combat the epidemic. In cases of specific breaches or excess, the courts may indeed consider whether the limits are appropriate. As a result, although the DM Act may permit actions to be done to stop the disease from spreading further, the officials cannot disregard the Constitution. They may use criminal legislation, but not at the expense of constitutional liberties.

It's also important to consider how other laws interact with one another. According to the Maharashtra Nursing Homes Registration Act of 1949, nursing homes which may include maternity homes or surgical homes but are not necessarily full-service hospitals are regulated

---

[17] M.P. Ram Mohan & Jacob P. Alex, *COVID-19 and the ambit of the Disaster Management Act*, THE WEEK, (Apr. 26, 2020, 5:11 PM), https://www.theweek.in/news/india/2020/04/26/covid-19-and-the-ambit-of-the-disaster-management-act.amp.html.

and subject to inspection. It is not possible to impose a requirement that all maternity homes and nursing homes offer beds for Covid patients. A nursing facility could be positioned in the middle of a residence. Forcing the admittance of Covid patients could end badly.[18]

**Punishment Clause**

The NDMA and the central government are given enormous power by the DM Act. So much so that the Central Government may give orders to any authority anywhere in India to help and contribute to disaster management, regardless of any laws in force. Such instructions must be followed to avoid breaking the law.

11 chapters and 79 sections make up the Act. Additionally, "Offenses and Penalties" is the topic of Chapter 10 of the Act. Anyone who disobeys orders is subject to penalty under Section 51, which includes up to a year in prison, a fine, or both. Anyone who makes fraudulent claims to receive relief assistance is subject to a fine and a sentence of roughly two years in prison, according to Article 52.[19]

Anyone who spreads misleading information regarding a disaster's severity is subject to a one-year prison sentence or a fine under Article 54. These two sections of the statute, Articles 52 and 54, have become more significant in recent years. This is due to the recent influx of COVID news and updates on social media sites, which often do not verify the veracity of the information.

**Conclusion**

In this article, I discussed the Disaster Management Act of 2005 which was extremely important during COVID-19. It has been used to better effectively manage disasters. To ensure efficient and effective operation, organizations exist at the national, state, district, and local
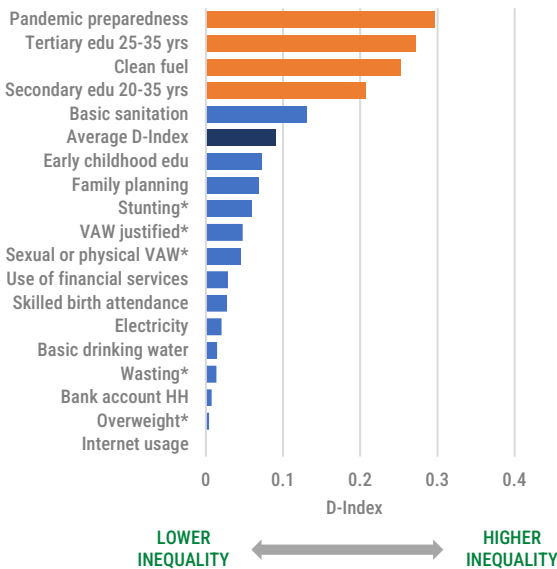
---

[18] The Hindu Businessline, *Courts and covid. Medical disasters and the role of law*, WWW.THEHINDUBUSINESSLINE.COM, (May 10, 2021, 08:47 AM), https://www.thehindubusinessline.com/opinion/medical-disasters-and-the-role-of-law/article34521886.ece/amp/.

[19] PNBS, *Disaster management Act 2005: Provisions & Punishment | Explained*, (Jun. 6, 2021), https://newsonair.com/2021/06/06/disaster-management-act-2005-provisions-punishment-explained-2/.

levels. The DM Act gives the Central Government and NDMA a wide range of authority. Regardless of any legislation now in effect, the Central Government may give any instructions for disaster management to any authority wherever in India. The NDMA and the federal government are given a lot of power under the DM Act. So much so that the Central Government may order any authority anywhere in India to aid in disaster management, regardless of any existing legislation.

## REDUCING INEQUALITY IN ALL ITS FORMS IS AT THE HEART OF THE 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

### DISSIMILARITY INDEX (D-INDEX)



Horizontal bar chart, top to bottom:
- Pandemic preparedness
- Tertiary edu 25-35 yrs
- Clean fuel
- Secondary edu 20-35 yrs
- Basic sanitation
- Average D-Index
- Early childhood edu
- Family planning
- Stunting*
- VAW justified*
- Sexual or physical VAW*
- Use of financial services
- Skilled birth attendance
- Electricity
- Basic drinking water
- Wasting*
- Bank account HH
- Overweight*
- Internet usage

X-axis: D-Index (0, 0.1, 0.2, 0.3, 0.4)

LOWER INEQUALITY ←→ HIGHER INEQUALITY

SOURCE: DHS 2020
NOTE: STANDARD ANALYSIS WITH 636,698 OBSERVATIONS. INTERNET USAGE IS NOT SHOWN DUE TO DATA UNAVAILABILITY.
* TO KEEP THE SAME INTERPRETATION AS FOR OTHER POSITIVELY DEFINED INDICATORS (OPPORTUNITIES), THE ABSENCE OF THE BARRIER IS CALCULATED.

### IN INDIA, INEQUALITY IS HIGHEST IN
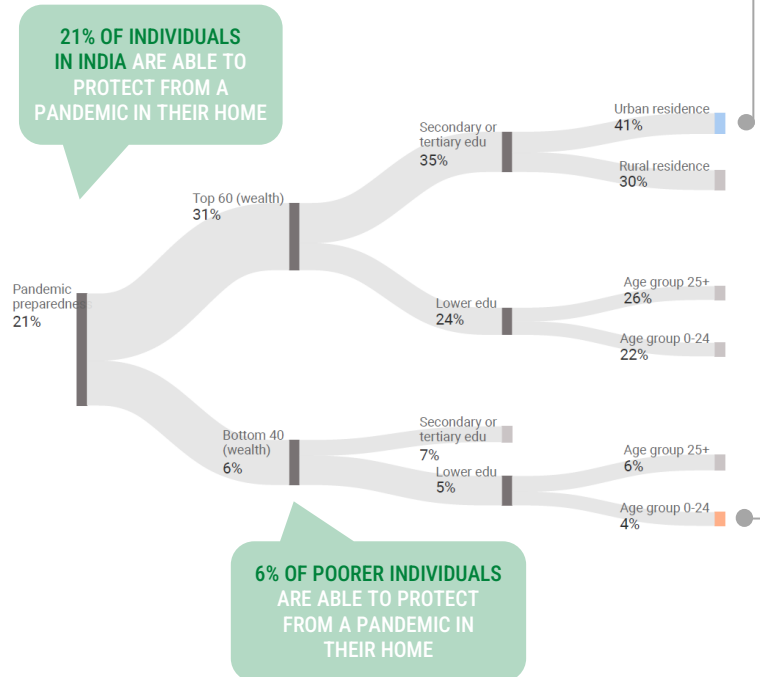
PANDEMIC PREPAREDNESS

TERTIARY EDUCATION

CLEAN FUELS

**ONLY 4% OF POORER INDIVIDUALS UNDER 25 YEARS OF AGE WITH LOWER EDUCATION** ARE ABLE TO PROTECT FROM A PANDEMIC IN THEIR HOME COMPARED TO **41% OF RICHER INDIVIDUALS WITH SECONDARY OR TERTIARY EDUCATION IN URBAN AREAS**

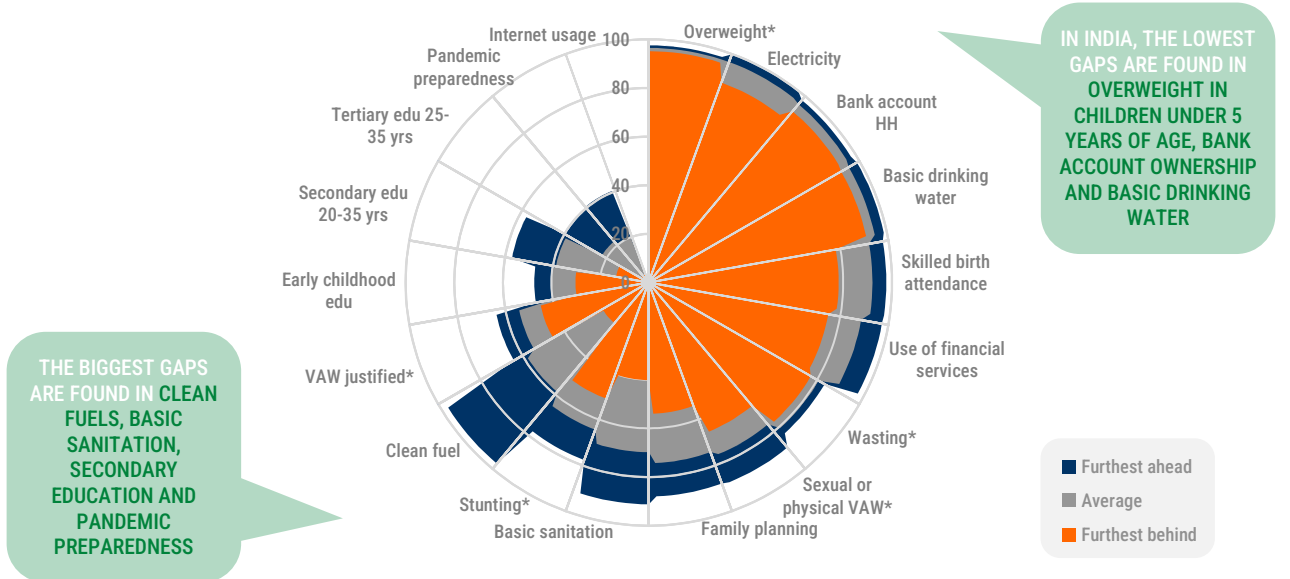### CLASSIFICATION AND REGRESSION TREE (CART) IN PANDEMIC PREPAREDNESS



21% OF INDIVIDUALS IN INDIA ARE ABLE TO PROTECT FROM A PANDEMIC IN THEIR HOME

Pandemic preparedness 21%
- Top 60 (wealth) 31%
  - Secondary or tertiary edu 35%
    - Urban residence 41%
    - Rural residence 30%
  - Lower edu 24%
    - Age group 25+ 26%
    - Age group 0-24 22%
- Bottom 40 (wealth) 6%
  - Secondary or tertiary edu 7%
  - Lower edu 5%
    - Age group 25+ 6%
    - Age group 0-24 4%

6% OF POORER INDIVIDUALS ARE ABLE TO PROTECT FROM A PANDEMIC IN THEIR HOME

SOURCE: DHS 2020
NOTE: STANDARD ANALYSIS WITH 2,834,297 OBSERVATIONS

## GAPS IN ACCESS TO OPPORTUNITIES OR PREVALENCE OF BARRIERS BETWEEN THE FURTHEST BEHIND AND THE FURTHEST AHEAD GROUPS



IN INDIA, THE LOWEST GAPS ARE FOUND IN **OVERWEIGHT IN CHILDREN UNDER 5 YEARS OF AGE, BANK ACCOUNT OWNERSHIP AND BASIC DRINKING WATER**

THE BIGGEST GAPS ARE FOUND IN **CLEAN FUELS, BASIC SANITATION, SECONDARY EDUCATION AND PANDEMIC PREPAREDNESS**

Chart categories: Overweight*, Electricity, Bank account HH, Basic drinking water, Skilled birth attendance, Use of financial services, Wasting*, Sexual or physical VAW*, Family planning, Basic sanitation, Stunting*, Clean fuel, VAW justified*, Early childhood edu, Secondary edu 20-35 yrs, Tertiary edu 25-35 yrs, Pandemic preparedness, Internet usage

Legend:
- Furthest ahead
- Average
- Furthest behind

SOURCE: DHS 2020
NOTE: STANDARD ANALYSIS WITH 636,698 OBSERVATIONS. THE ORANGE BAR REPRESENTS THE AVERAGE RATE OF THE FURTHEST BEHIND GROUP. THE BLUE BAR REPRESENTS THE AVERAGE RATE OF THE FURTHEST AHEAD GROUP. THE GRAY BAR IS THE AVERAGE RATE OF THE POPULATION, BY WHICH OPPORTUNITIES AND/OR BARRIERS ARE SORTED. INTERNET USAGE IS NOT SHOWN DUE TO DATA UNAVAILABILITY.
* TO KEEP THE SAME INTERPRETATION AS FOR OTHER POSITIVELY DEFINED INDICATORS (OPPORTUNITIES), THE ABSENCE OF THE BARRIER IS CALCULATED.

## MANY PEOPLE ARE **LEFT BEHIND** IN ACCESS TO OPPORTUNITIES
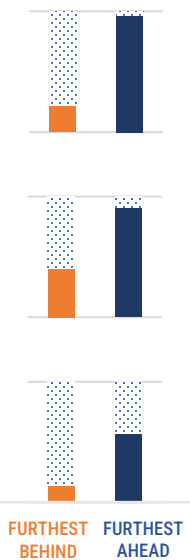
**22% OF POORER HOUSEHOLDS WITH LOWER EDUCATION** HAVE ACCESS TO CLEAN FUELS COMPARED TO **97% OF RICHER HOUSEHOLDS WITH TERTIARY EDUCATION IN URBAN AREAS**

**40% OF POORER HOUSEHOLDS WITH LOWER EDUCATION** HAVE ACCESS TO BASIC SANITATION COMPARED TO **91% OF RICHER HOUSEHOLDS WITH TERTIARY EDUCATION IN URBAN AREAS**

**14% OF POORER WOMEN** HAVE COMPLETED SECONDARY EDUCATION COMPARED TO **57% OF RICHER MEN IN URBAN AREAS**

FURTHEST BEHIND    FURTHEST AHEAD

# Business Standard

# Extreme heat waves may break human survivability limit in India: World Bank

**Soon India may become one of the first places in the world to experience heat waves that break the human survivability limit, a World Bank report said**

**IANS | New Delhi   December 08, 2022** Last Updated at 00:17 IST



*Women cover their faces with scarves to protect themselves from the heat on a hot summer day, in New Delhi (Photo: PTI)*

Extreme heat waves are increasing with alarming frequency across India in the past few decades and soon the country may become one of the first places in the world to experience heat waves that break the human survivability limit, a World Bank report said.

The reportm titled "Climate Investment Opportunities in India's Cooling Sector", said that severe heat waves are responsible for thousands of deaths across the country, where higher temperatures are arriving early and staying for far longer periods.

"In April 2022, India was plunged into the grip of a punishing early spring heat wave that brought the country to a standstill, with temperatures in the capital, New Delhi, topping 46 degrees Celsius. The month of March, which witnessed extraordinary spikes in temperatures, was the hottest ever recorded," it said.

The World Bank report further cautioned that rising heat across India can hit economic productivity, observing that 75 per cent of India's workforce or 380 million people depend on heat-exposed labour, at times working in potentially life-threatening temperatures.

"By 2030, India may account for 34 million of the projected 80 million global job losses from heat stress associated productivity decline," the report said.

The World Bank further said that lost labour from rising heat and humidity could put up to 4.5 per cent of India's GDP at risk by the end of this decade.

--IANS

ans/vd