

DISASTER MANAGEMENT AND IMPACT OF COVID

Mrs. Deepti Singh, Associate Professor, Avinash Degree College, Himayat Nagar

Mr. Adarsh Dayal Singh, Student

Abstract: The Student has been undertaken to study the various types of Disaster Management and the impact of Covid in the present scenario. The World is facing a giant issue in the form of Covid and it needs to be fought against. This study includes the various groups affected by Covid and measures undertaken by the Government authorities to fight against it.

Keywords: Disaster Management, Disaster Management Cycle, COVID-19, Pandemic.

Introduction

What is Disaster Management?

One of the biggest challenges of disaster, or emergency, management is the need to be prepared for a wide range of contingencies. A good place to begin a discussion of disaster management is by considering what constitutes a disaster.

Defining Disaster

According to the International Federation of Red Cross and Red Crescent Societies: “More people are becoming vulnerable to disasters or are forced to cope with acts of violence, financial crises and growing uncertainty, often without adequate support from their governments.” Disasters can be either natural or human-made events and can include pandemics, technological disasters or environmental cataclysms.

Disaster types include the following:

- Earthquakes
- Tornadoes
- Hurricanes
- Pandemics
- Volcano eruptions
- Wildfires
- Floods
- Mass shootings
- Acts of terror
- Nuclear explosions

- Chemical emergencies

Cascading disasters in India during the Pandemic period, reinforce the need for effective and ethical leadership across all sectors and levels of government–

1. Cyclone Nisarga: In June, cyclone nisarga struck the western coast of the country making landfall in Maharashtra. At least 6 were reported dead with more than 12,440 acres of land left severely damaged. Originating in the Arabian sea, Nisarga was the second cyclone to strike the Indian Continent within 2 weeks of Cyclone Amphan. With a wind speed of 110km/hr Nisarga became the strongest storm to strike the state in the month of June since 1891. State Government estimated the damage caused by Nisarga at over Rs. 6000 crores. The cost of recovery was estimated at around Rs. 1100 Crores.
2. Locust Attack: Between 2019 and 2020, India witnessed one of its worst locust attacks in decades. Outbreaks of the insect attack in decades. Outbreaks of the insect attack were reported from Gujarat, Rajasthan, Maharashtra, Madhya Pradesh, Punjab, Haryana and Uttar Pradesh. The locust entered India from Iran and Pakistan. In 2020, the first swarms were spotted in January in Gujarat's Banas-kantha district, which shares a border with Pakistan's desert areas. In May, Rajasthan and Madhya Pradesh were severely affected by locust swarms measuring a km wide, a worst locust attack in 27 years. In June, millions of locust swarmed on a massive scale in Gurgaon, Delhi-NCR region, making it look like a sand storm. The locust plague originated in East Africa in 2019 and affected as many as 23 countries through April 2020. When periods of heavy rainfall follow periods of relative drought, solitary desert locust emerge to feed on new growth foliage and lay eggs in the newly moist soil, which prevents them from drying out and enabling their population growth.
3. Cyclone Nivar: In late November, Cyclone Nivar struck southern India with severe impact in Tamil Nadu, Puducherry and Andhra Pradesh while rains were also reported in Sri Lanka. Nivar made its landfall over Tamil Nadu between Puducherry and Chennai close to Mahabalipuram. 8 People were reported dead in Andhra Pradesh. As many as 1,12,000 people were affected and 2294 houses were damaged and 6133 homes were left stranded. In Andhra Pradesh, the administration estimated a loss over Rs.500 crores. In Tamil Nadu more than 1 lakh people were evacuated and were sheltered in 1000 relief centres. In Puducherry, state administration estimated initial loss in agriculture and other sectors at Rs 400 crores. Over all, Nivar caused damages worth more than Rs. 4000 crores.
4. Cyclone Burevi: In December, Cyclone Burevi made landfall in Sri Lanka before heading to Tamil Nadu, Kerala and Puducherry. The Cyclone caused at least 11 deaths and 5 people were reported missing. Crops damage was also reported in several areas.
5. Kerala Floods: In August, Kerala recorded heavy rainfall in the monsoon season resulting in at least 22 casualties. This was the 3rd consecutive year where Kerala reeled under the floods. A red alert was issued in 3 districts of Wayanad, Kozhikode and Idukki. While an orange alert was issued in 5 other districts. The flood also led to a plane crash in which 18 people were reported dead. The Air India Express Flight 1344 had crashed due to the flooding of the Calicut airport runway and bad visibility. The state authorities estimated the loss to property, livestock and agriculture at Rs. 19000 crores.

6. Assam Floods: Heavy rainfall and flooding of the Brahmaputra River in May came at a heavy cost for Assam with casualties widespread of destruction of property and agriculture. The flood in Assam this year affected more than 50 lakh people. As per records, as many as 123 people lost their lives in the floods while 26 died due to landslides. More than 1.5 lakh people had to seek refuge in camps as residents in 5474 villages suffered flooding. The flooding began just before harvest season and caused destruction to more than 2,67,203 hectares of crops and more than 45000 domesticated animals were either forced to flee or were abandoned. While North east India is known for receiving heavy rainfall. In the past few years flooding has become more severe.
7. Hyderabad Floods: In October, the South Western Coast received heavy rainfall due to a deep depression in North Indian Ocean affecting several states and Union Territories like Puducherry, Andhra Pradesh, Telangana, Kerala, Maharashtra and Karnataka. Hyderabad experienced 32cms of record-breaking torrential rain creating flash floods. Rainfall reached over 110 mm in parts of Hyderabad, with heavier rainfall amounts outside the city. The Flash Floods led to casualties across states. At least 2 deaths were reported in Vijayawada, 50 people died in different parts of Telangana, including 19 in Hyderabad. In Maharashtra, 27 people were reported dead. Telangana administration estimated damages to cost Rs.5000 crores. A few days later, a second cyclone killed 2 more people in Hyderabad affecting more than 37000 families.
8. Oil and Gas leak in Assam: In May one of the wells at Oil India Limited, Bagh Jan Oilfield in Tinsukia district, Assam started leaking resulting in a blowout. The subsequent fire that started mid 2020 was reported to be burning till November. It started when the well no.5 at OIL started leaking natural gas and a few days later the well caught fire. The oil and gas leak resulted in two deaths, large scale local evacuations and environmental damage to the nearby Dibru-Saikhowa National Park. In January, centre had exempted all oil and gas firms conducting exploratory drilling from legal requirements for environmental clearance. Prior to the leak, in 2020, the region had also witnessed protest after the central government authorised OIL to explore the area under Dibrusaikhowa National Park for hydro-carbons.
9. Glacier burst: It has caused flooding in Chamoli District in Rishi Ganga, Dhaulti Ganga and Alak Nanda rivers. The flood caused structural damage to the Tapovan Hydro-electrical Power Dam Project and the adjacent tunnel.

Managing Disasters

Specifically, disaster management is about organizing and directing resources to cope with a disaster and coordinating the roles and responsibilities of responders, private sector organizations, public sector agencies, non-profit and faith-based organizations, volunteers, donations, etc. The ultimate goal of the disaster-management leader is to minimize the event's impact, something that involves preparedness, response, recovery and mitigation.

The 5 Stages of the Disaster-Management Cycle

When properly implemented, the disaster-management cycle can lessen the impact of a catastrophic event. It can also incorporate the policies and emergency responses needed for a full, expedited recovery. The cycle involves the following five stages:

1. Prevention

The best way to address a disaster is by being proactive. This means identifying potential hazards and devising safeguards to mitigate their impact. Although this stage in the cycle involves putting permanent measures into place that can help minimize disaster risk, it's important to acknowledge that disasters can't always be prevented.

Prevention involves scenarios such as the following:

- Implementing an evacuation plan in a school, for example, showing teachers how to lead students to safety in the event of a tornado or fire
- Planning and designing a city in a way that minimizes the risk of flooding, for example, with the use of locks, dams or channels to divert water away from populous areas

2. Mitigation

Mitigation aims to minimize the loss of human life that would result from a disaster. Both structural and nonstructural measures may be taken.

- A structural measure means changing the physical characteristics of a building or an environment to curb the effects of a disaster. For example, clearing trees away from a house can ensure that dangerous storms don't knock down the trees and send them crashing into homes and public buildings.
- Nonstructural measures involve adopting or amending building codes to optimize safety for all future building construction.

3. Preparedness

Preparedness is an ongoing process in which individuals, communities, businesses and organizations can plan and train for what they'll do in the event of a disaster. Preparedness is defined by ongoing training, evaluating and corrective action, ensuring the highest level of readiness.

Fire drills, active-shooter drills and evacuation rehearsals are all good examples of the preparedness stage.

4. Response

Response is what happens after the disaster occurs. It involves both short- and long-term responses.

Ideally, the disaster-management leader will coordinate the use of resources (including personnel, supplies and equipment) to help restore personal and environmental safety, as well as to minimize the risk of any additional property damage.

During the response stage, any ongoing hazards are removed from the area; for example, in the aftermath of a wildfire, any lingering fires will be put out, and areas that pose a high flammability risk will be stabilized.

5. Recovery

The fifth stage in the disaster-management cycle is recovery. This can take a long time, sometimes years or decades. For example, some areas in New Orleans have yet to fully recover from Hurricane Katrina in 2005. It involves stabilizing the area and restoring all essential community functions. Recovery requires prioritization: first, essential services like food, clean water, utilities, transportation and healthcare will be restored, with less-essential services being prioritized later.

Ultimately, this stage is about helping individuals, communities, businesses and organizations return to normal or a new normal depending on the impact of the disaster.

When people bid adieu to 2019 and welcomed 2020 with a joyful heart, no one imagined that this year shall be regarded as one of the catastrophic years for not just India but the whole world. From the deadliest vires known to mankind to locust attack, from floods and landslides in several states to plane crash, this seems like the year that humans were always warned of.

Covid-19, the deadliest vires that the human kind has ever witnessed, started from China's Wuhan city in December 2019. First case surfaced in Kerala's Thrissur District in January end when a student studying in Wuhan University returned to India. He was part of the group of Indian citizens that were airlifted from China. In February, Kerala declared Covid-19 as a state calamity. In February end, India conducted the final aircraft from Wuhan bringing back 759 Indians.

In March, India started screening all international passengers across the airports and WHO also declared Covid-19 as a pandemic. On March 12, India reported its first death. A 76-year-old man from Karnataka's Kalburgi District became the first victim of the vires. The same day, India also banned the entry of foreigners for a month and suspended all visas.

On March 25, Prime Minister Narendra Modi announced a nation-wide lockdown till April 14, which was further extended till May 3. On May 1st the Union Government announced that the lock down has been extended till May 17th. By Mid-May, India with over 85000 cases surpassed China's total number of cases reported. On May 17th the lockdown was further extended till May 31.

After 75 days of lockdown and with over 2.5 lakh cases and 7200 deaths, India started re-opening the country in a phased manner from June 8th.

The impact of the COVID-19 pandemic is drastically changing the lives of people, including the lives of young people. Schools and universities have closed, exams and events postponed, the usual health information services are limited, socializing with friends and wider family is highly discouraged and, in some places, even punishable. Living in these circumstances can be tough for young people for their social, physical and mental wellbeing.

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year.

Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. Informal economy workers are particularly vulnerable because the majority lack social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families. For most, no income means no food, or, at best, less food and less nutritious food.

The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets. The pandemic has decimated jobs and placed millions of livelihoods at risk. As breadwinners lose jobs, fall ill and die, the food security and nutrition of millions of women and men are under threat, with those in low-income countries, particularly the most marginalized populations, which include small-scale farmers and indigenous peoples, being hardest hit.

Millions of agricultural workers – waged and self-employed – while feeding the world, regularly face high levels of working poverty, malnutrition and poor health, and suffer from a lack of safety and labour protection as well as other types of abuse. With low and irregular incomes and a lack of social support, many of them are spurred to continue working, often in unsafe conditions, thus exposing themselves and their families to additional risks. Further, when experiencing income losses, they may resort to negative coping strategies, such as distress sale of assets, predatory loans or child labour. Migrant agricultural workers are particularly vulnerable, because they face risks in their transport, working and living conditions and struggle to access support measures put in place by governments. Guaranteeing the safety and health of all agri-food workers – from primary producers to those involved in food processing, transport and retail, including street food vendors – as well as better incomes and protection, will be critical to saving lives and protecting public health, people's livelihoods and food security.

In the COVID-19 crisis food security, public health, and employment and labour issues, in particular workers' health and safety, converge. Adhering to workplace safety and health practices and ensuring access to decent work and the protection of labour rights in all industries will be crucial in addressing the human dimension of the crisis. Immediate and purposeful action to save lives and livelihoods should include extending social protection towards universal health coverage and income support for those most affected. These

include workers in the informal economy and in poorly protected and low-paid jobs, including youth, older workers, and migrants. Particular attention must be paid to the situation of women, who are over-represented in low-paid jobs and care roles. Different forms of support are key, including cash transfers, child allowances and healthy school meals, shelter and food relief initiatives, support for employment retention and recovery, and financial relief for businesses, including micro, small and medium-sized enterprises. In designing and implementing such measures it is essential that governments work closely with employers and workers.

Countries dealing with existing humanitarian crises or emergencies are particularly exposed to the effects of COVID-19. Responding swiftly to the pandemic, while ensuring that humanitarian and recovery assistance reaches those most in need, is critical.

Now is the time for global solidarity and support, especially with the most vulnerable in our societies, particularly in the emerging and developing world. Only together can we overcome the intertwined health and social and economic impacts of the pandemic and prevent its escalation into a protracted humanitarian and food security catastrophe, with the potential loss of already achieved development gains.

We must recognize this opportunity to build back better. We need to develop long-term sustainable strategies to address the challenges facing the health and agri-food sectors. Priority should be given to addressing underlying food security and malnutrition challenges, tackling rural poverty, in particular through more and better jobs in the rural economy, extending social protection to all, facilitating safe migration pathways and promoting the formalization of the informal economy.

We must rethink the future of our environment and tackle climate change and environmental degradation with ambition and urgency. Only then can we protect the health, livelihoods, food security and nutrition of all people, and ensure that our 'new normal' is a better one.

Older Persons

Older persons are particularly susceptible to the risk of infection from COVID-19, especially those with chronic health conditions such as hypertension, cardiovascular disease and diabetes.

Older persons are not just struggling with greater health risks but are also likely to be less capable of supporting themselves in isolation. Although social distancing is necessary to reduce the spread of the disease, if not implemented correctly, such measures can also lead to increased social isolation of older persons at a time when they may be at most need of support.

The discourse around COVID-19, in which it is perceived as a disease of older people, exacerbates negative stereotypes about older persons who may be viewed as weak, unimportant and a burden on society. Such age-based discrimination may manifest in the provision of services because the treatment of older persons may be perceived to have less

value than the treatment of younger generations. International human rights law guarantees everyone the right to the highest attainable standard of health and obligates Governments to take steps to provide medical care to those who need it. Shortages of ventilators, for example, necessitate the adoption of triage policies and protocols based on medical, evidence-based and ethical factors, rather than arbitrary decisions based on age. In this context, solidarity between generations, combating discrimination against older people, and upholding the right to health, including access to information, care and medical services is key.

Persons with Disabilities

Even at the best of times, persons with disabilities face challenges in accessing health-care services, due to lack of availability, accessibility, affordability, as well as stigma and discrimination. The risks of infection from COVID-19 for persons with disabilities are compounded by other issues, which warrant specific action: disruption of services and support, pre-existing health conditions in some cases which leave them more at risk of developing serious illness or dying, being excluded from health information and mainstream health provision, living in a world where accessibility is often limited and where barriers to goods and services are a challenge, and being disproportionately more likely to live in institutional settings.

General individual self-care and other preventive measures against the COVID-19 outbreak can entail challenges for persons with disabilities. For instance, some persons with disabilities may have difficulties in implementing measures to keep the virus at bay, including personal hygiene and recommended frequent cleaning of surfaces and homes. Cleaning homes and washing hands frequently can be challenging, due to physical impairments, environmental barriers, or interrupted services. Others may not be able to practice social distancing or cannot isolate themselves as thoroughly as other people, because they require regular help and support from other people for every day self-care tasks.

To ensure that persons with disabilities are able to access to information on COVID-19, it must be made available in accessible formats. Healthcare buildings must also be physically accessible to persons with mobility, sensory and cognitive impairments. Moreover, persons with disabilities must not be prevented from accessing the health services they need in times of emergency due to any financial barriers

Youth

Many governments have called on youth to embrace the effort to protect themselves and the overall population. Youth are also in a position to help those who are most vulnerable, and to aid in increasing public health social awareness campaigns among their communities. Thus, youth are critical to limiting the virus's spread and its impact on public health, society, and the economy at large.

In terms of employment, youth are disproportionately unemployed, and those who are employed often work in the informal economy or gig economy, on precarious contracts or in the service sectors of the economy, that are likely to be severely affected by COVID-19.

More than one billion youth are now no longer physically in school after the closure of schools and universities across many jurisdictions. The disruption in education and learning could have medium and long-term consequences on the quality of education, though the efforts made by teachers, school administrations, local and national governments to cope with the unprecedented circumstances to the best of their ability should be recognized. Many vulnerable youth such as migrants or homeless youth are in precarious situations. They are the ones who can easily be overlooked if governments do not pay specific attention, as they tend to be already in a situation without even their minimum requirements being met on health, education, employment and well-being

Families

The Impact of the Pandemic on Family Life Across Cultures is an international research study led by Dr. Anis Ben Brik, distinguished and acknowledged expert in Social Policy and Sustainable Development, LSE alumnus, now Associate Professor at Hamad Bin Khalifa University College of Public Policy in Qatar explores the effects of the coronavirus pandemic on family life across cultures. Twenty-one researchers from 40 countries across five continents are participating in this study. Eighteen partners are also contributing to this work. UNDESA is part of the project, sharing other participants' vision and priority for the life and work of the home



Indigenous Peoples

Indigenous peoples are particularly vulnerable at this time due to significantly higher rates of communicable and non-communicable diseases, lack of access to essential services, absence of culturally appropriate healthcare, and if any, under-equipped and under-staffed local medical facilities.

The first point of prevention is the dissemination of information in indigenous languages, thus ensuring that services and facilities are appropriate to the specific situation of indigenous peoples, and all are reached.

The large number of indigenous peoples who are outside of the social protection system further contributes to vulnerability, particularly if they are dependent on income from the broader economy – produce, tourism, handicrafts and employment in urban areas. In this regard, Governments should ensure that interim financial support measures include indigenous peoples and other vulnerable groups.

Indigenous peoples are also seeking their own solutions to this pandemic. They are taking action and using traditional knowledge and practices as well as preventive measures – in their languages

Sport is a major contributor to economic and social development. Its role is well recognized by Governments, including in the Political Declaration of the 2030 Agenda, which reflects on “the contribution sports make to the empowerment of women and of young people,

individuals and communities, as well as to health, education and social inclusion objectives.”

Since its onset, the COVID-19 pandemic has spread to almost all countries of the world. Social and physical distancing measures, lockdowns of businesses, schools and overall social life, which have become commonplace to curtail the spread of the disease, have also disrupted many regular aspects of life, including sport and physical activity. This policy brief highlights the challenges COVID-19 has posed to both the sporting world and to physical activity and well-being, including for marginalized or vulnerable groups. It further provides recommendations for Governments and other stakeholders, as well as for the UN system, to support the safe reopening of sporting events, as well as to support physical activity during the pandemic and beyond.

To safeguard the health of athletes and others involved, most major sporting events at international, regional and national levels have been cancelled or postponed – from marathons to football tournaments, athletics championships to basketball games, handball to ice hockey, rugby, cricket, sailing, skiing, weightlifting to wrestling and more. The Olympics and Paralympics, for the first time in the history of the modern games, have been postponed, and will be held in 2021

The domestic pharma market turnover in India has reached Rs. 1.4 lakh crores (equivalent to \$ 20.03 billion) in 2019 as per the government data. This is actually an increase from Rs. 1.29 lakh crores in 2018.

In India, the healthcare industries consist of both private sector and public sector. India plays an important role in the global pharma sector, and has a great pool of scientists/engineers with good potential to steer the industry ahead to greater heights.

The Indian pharmaceutical industry supply for over 50 per cent of global demand for various vaccines. India is the 3rd largest producer of drugs in terms of volume and vaccine production accounts to 60 per cent global production. India contributes substantially to WHO demand for BCG, Pertussis, Diphtheria and Tetanus vaccines, which accounts 40 to 70 per cent. India also supports the global demand for vaccine for the treatment of measles and it accounts to 90 per cent.

The generic drugs manufactured in India and supplied worldwide confer safety and quality. India contributes to the second largest share of pharmaceutical and biotech workforce in the world. The average growth rate of India's biotechnology industry comprising biopharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics is expected to be 30 per cent and to reach US\$ 100 billion by 2025.

Indian pharma products are exported to more than 200 countries in the world, with US being the key market. The Indian pharmaceutical exports, including drug formulations, intermediates, bulk drugs, biological, surgicals and Ayush and herbal products has reached US\$ 16.28 billion in FY 20. It was estimated that 80 per cent of the antiretroviral drugs used globally to combat AIDS (Acquired Immune Deficiency Syndrome) are supplied by Indian pharmaceutical firms. The medical device industry in India market is expected to grow US\$ 25 billion by 2025.

Covid impact, challenges and opportunities

The coronavirus pandemic and its resultant lockdown badly affected all major sectors of the economy, but it has come as a boon in disguise to the Indian pharmaceutical sector. Though some part of pharmaceutical business was affected such as supply chain and import of active pharmaceutical ingredients from China, Covid-19 has provided some opportunities in the pharmaceutical sector, especially India.

In generic market, India is facing high competition from China for the supply of APIs at lower cost. India imports 70 per cent of the API needs from China. This created a lot of hardship to some of the domestic pharmaceutical firms manufacturing certain key APIs. India's health security was under threat due to heavy dependence on China coupled with shortage in supply of key APIs.

Some of the key APIs were crucial to mitigate the burden of accelerating disease like tuberculosis, diabetics and cardiovascular diseases in India. The current dependence of Indian pharmaceutical companies on Chinese APIs created a serious concern for national health security, prompting the Government of India to set up a taskforce for reviewing the internal API sector.

In view of the Covid-19 pandemic situation, the Government of India should take important steps for removing the technical and financial barriers, which will spur the pharmaceutical industry to ramp up API production-thereby reducing the dependency of pharmaceutical industry with China. The Government of India has taken important steps by proposing an incentive package of Rs. 13.76 billion for the promotion of domestic manufacturing of critical key starting materials, drug intermediates, APIs and medical devices. Several key representatives from the pharmaceutical industry and NITI Aayog have suggested that fostering the approvals of pharmaceutical infrastructure developments, clearance from environment ministry and providing tax exemptions and subsidies for the development and promotion of the pharmaceutical industry hubs could benefit the market. Amidst pandemic situation, urgent action is needed to boost medical supply of sanitizer, face masks, disinfectants, surgical gloves, protective gears for health personnel, scanners, infrared thermometers, test kits, inhalers, ventilators etc. Most of the items require low level of technology and can be manufactured easily.

The MSME sector needs high focus in the above endeavour for twining public health and economic development. The Covid situation could be made as an opportunity for MSME for producing low end technology items in medical and sanitary equipment's like masks, gloves, cottons etc. and this could even revive the stagnant sectors. In the last few years, since 2014 the frequency of people visiting India for medical treatment has increased at about 55 per cent. The Government has relaxed the rules for promoting India as a better medical tourist destination by issuing fast-track medical visas, rapid airport clearances for those visiting as medical tourists. The key players in medical tourism are in private sector. The government agencies could do better by opening new avenues in the years ahead.

Investments and recent developments

During the Covid pandemic, several initiatives were taken by the Union Cabinet to boost pharma industry, which include the amendment of existing Foreign Direct Investment policy to allow FDI to invest up to 100 per cent under the automatic route for manufacturing medical device subject to certain conditions.

According to the data by DPIIT, the pharma sector attracted cumulative FDI inflow worth US\$ 16.54 billion during April 2000 to 2020 June. Some of the investments made in the pharma sector during the Covid crisis include sterilization devices and germicidal cabinet, portable and rechargeable car sanitizer, alcohol-free and bleach-free sanitizers and wheeled sterilisation unit especially for hospitals by researchers from reputed organization.

Six generic drug makers signed MoUs with Hidalgo (Mexico) to establish a large pharma cluster for the production and logistics in Mexico. The Jubilant Generics Ltd has entered into a non-exclusive licensing agreement with Gilead Sciences Inc for the manufacture and sale of potential Covid drug Remdesivir in 127 countries, including India.

The Telangana Government has proposed to the Union Government to set up Hyderabad Pharma city with a financial aid of Rs. 3418 crores. A record sale of Rs. 52 crore was reported by the PMBJP at an affordable rate to the public.

India unveiled plans to collaborate with Netherlands with an aim to provide digital health facilities. The Government initiated PLI scheme for the pharma sector worth Rs. 15,000 crores.

India has planned to set up Rs. one lakh crore fund for boosting the pharma sector to manufacture pharmaceutical ingredients domestically by 2023. The Government has approved extension/renewal of extant pharmaceutical purchase policy adding one additional product alcoholic hand disinfectant to the existing list of 103 medicines.

The National Health Protection Scheme, a government funded healthcare programme, which benefit 100 million poor families in the country, provides an insurance cover of up to Rs. 5 lakh per family per year for secondary and tertiary care hospitalization.

The fund allocated to health insurance scheme Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) is Rs. 6400 crores. The Pharma Vision 2020 is an initiative by GOI for making India a global leader in drug manufacture and approval time for new facilities for manufacturing has been reduced to boost the investment. The government has offered Rs. 6,940 crore production linked incentives between 5-20 per cent for incremental sales and plans to set up three mega drug parks to drive sustainable cost competitiveness.

The medicine spending in India is expected to grow between 9-12 per cent over the next five years, leading India to become one of the top 10 countries in terms of medical spending. The better growth in domestic sales would also depend on the ability of companies to align their product portfolio towards chronic therapies for diseases such as cardiovascular, anti-diabetes, anti-depressants and anti-cancers, which are on the rise. The government has taken many initiatives to reduce cost and bring down the healthcare expenses. Speedy introduction of generic drugs into the market has remained in focus and is

expected to benefit the Indian pharmaceutical companies. The thrust on rural health programmes, lifesaving drugs and preventive vaccines will provide space for the development of pharmaceutical companies.

Conclusion:

The NDMA (National Disaster Management Authority) headed by Prime Minister of India Mr. Narendra Modi is the apex body for disaster management in India. Setting up of NDMA and the creation of an enabling environment for institutional mechanism at the state and district levels is mandated by the Disaster Management Act, 2005. NDMA is mandated to lay down the policies, plans and guidelines for Disaster Management. India envisions the development of an ethos of prevention, Mitigation, Preparedness and Response. The Indian Government strives to promote a national vision of empowering all stakeholders to improve the effectiveness of Disaster Management in India.

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