Comparing the Actions of Maharashtra and Kerala Governments in Mitigating the COVID-19 Pandemic

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Abstract

Background: *The outbreak of COVID-19 has posed a major threat to the whole nation with its varied impact from state to state. The major concerns revolve around the administrative actions of the respected governments at various levels. Kerala and Maharashtra were the first two states affected by COVID-19. Since the detection of the first case of Covid-19, Kerala and Maharashtra have taken immediate action and adopted a multifaceted strategy to fight against covid-19.*

Aims/Objectives: *This paper aims to study the various actions and mitigating strategies taken by the state of Maharashtra and Kerala to effectively deal with the COVID-19 crisis. Through the means of graphs and calculation of positivity rate, it analyses how the state of Kerala has contained the spreading of virus and minimises human loss while in case of Maharashtra both numbers of cases, as well as death toll, have been rising.*

Methodology: *The methodology used in this research is content analysis. Graphs are also being used to understand the trend of confirmed cases and deaths in the two states so as to link with the various policy measures*

Results: *The positivity rate of Maharashtra is as high as 19 percent in the month of August as against that of Kerala (6 percent). Comparing the two states on the basis of mitigation strategies, Kerala's model proved to be more effective than Maharashtra, holistically.*

Keywords: National Disaster Management Authority (NIDM); State Disaster Management Authority (SDMA); District Disaster Management Authority (DDMA); Disaster Management Act (DM Act); World Health Organization (WHO); Village Social Transformation Fund (VSTF); Inter-Agency Groups (IAG); Indian Council Medical

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Research (ICMR); Real-Time Reverse Transcription-Polymerase Chain Reaction (RT-PCR); Cartridge based Nucleic Acid Amplification Test (CN-NAAT).

Introduction

The Outbreak of Coronavirus Disease-19 has posed unprecedented challenges to the world. It resulted from the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infections. Coronavirus was first detected in the City of Wuhan of China and soon after it spread across the countries and became a global phenomenon. With its global impact on 216 countries, about 27.9 million cases of coronavirus and 9,03,640 deaths have been confirmed till the first week of September (World Health Organization, May 2020).

Owing to the existing problems of poverty and limited health infrastructure the impacts are even more devastating on developing countries like South Africa, Peru, Brazil, India, Bangladesh and so on. India is a country of vast population which poses serious administrative challenges to deal with this ongoing pandemic of such a great magnitude.

To effectively deal with a pandemic of such great intensity, emergency planning is a prerequisite which includes the various stages; preparedness, mitigation, coordination among the various institutions at all levels, the participation of various stakeholders, putting a comprehensive legal framework for effective implementation, risk communication and so on.

Disaster management Act 2005 provides an institutional mechanism and financial arrangement to deal with such biological disasters. The act provides the formation of NDMA at Centre level headed by PM, SDMA at state level head by CM and DDMA at the district level by DM. Disaster management Authorities at all levels primarily concern with plans, policies, issues guidelines, regulations and laid down minimum standards of relief such as providing various types of concessions, grants, etc. In addition to this, at the national level Ministry of Home Affairs as a nodal ministry to issue guidelines and having administrative control as well as Ministry of Health and Family welfare as a nodal ministry to deal with the biological disaster. Coordination and participation among the stakeholders such as political class, administrations at all levels and civil society organisations are very essential in mitigation as well as providing food materials, communicating risks, managing migrants workers, organising relief camps.

However, in 2013 the report of the "task force to review DM Act 2005" was constituted under the chairmanship of former agriculture secretary Mr. K P Mishra. It has noted that the structure of various authorities constituted under the DM Act of 2005 are not

conducive, lack of transparency in the selection process and its objectivity and selection, therefore, there is a need to redesign the structure of NDMA. It has further mentioned that Authorities under the DM Act have been primarily focusing on the relief and rescue rather than mitigating, though they have achieved success in issuing useful guidelines, orders and regulating activities and so on.

Hence, this study focuses on actions taken by the governments of Maharashtra as well as Kerala and response of the various institutions associated with mitigating the pandemic because coronavirus first caught in these two states. And both states have migrants' issues i.e. Maharashtra is a receiver while Kerala is outsourced migrants. In addition to this, both states have unique demographic features, population density, level of urbanisation, socio-economic indicators, working of local institutions and participation of civil society organisations and so on. Indeed, it checks the effectiveness of our statutory system and institutional mechanism to deal with unprecedented challenges.

Research Questions

- To compare Maharashtra and Kerala Government's model on the basis of mitigating strategies to fight against COVID-19.
- To compare and analyse the positivity rate of the states.

Methodology

The methodology used in this research is content analysis. Content of the government reports, journals, research papers and newspapers have been thoroughly surveyed. The indicators chosen for the study are administrative actions, risk communication and management of Migrants' vulnerability.

Graphs are being used to understand the trend of confirmed cases and deaths in the two states so as to link with the various policy measures and also analyse the positivity rates of the two states.

Kerala

Demographic Details

Kerala is a state located in the Southern part of India with 14 districts. It has a population of 3.3 crore and a population density of 859 per sq. km (Census, 2011).

Past Experience

Kerala is renowned for its 'model' of development focused on improving health care facilities, quality of life and education system for the people. Investment in this model

created the transformation in terms of a decrease in birth rate, mortality rate and population growth. Kerala has achieved a positive sex ratio of 1084 females per 1000 males (Census, 2011) and the best literacy rate of 93.91 percent among all the states (Census, 2011). Kerala's Model of health is often described as 'good health based on social justice and equity' as it is able to provide good treatment facilities to people from all the sectors of the society (Ekbal, 2017).

Kerala has faced several communicable and non-communicable diseases over the period of time like chikungunya, rat fever, Nipah Virus, cancer and many others. This led to the mushrooming of private hospitals with increased and better health care facilities and infrastructure in the state (Nikarthil, 2015). In 2016, Health Minister K.K. Shailaja reformed the health facility in Kerala. Since the beginning, education and awareness among the women played an indispensable role in transforming the development of the health sector. Kerala's government effective response to the Nipah virus in March 2018 set an example for the others and the state's 'strong health system' and 'emergency preparedness' earned great praise from the World Health Organization (WHO) (Press Trust of India, 2018).

As Kerala has one of the topmost healthcare systems in the country, it is widely emphasized today that Kerala has executed plans to mitigate COVID-19 and it is the reflection of accomplishment learned during the outbreak of Nipah virus.

COVID-19 Scenario in Kerala

Kerala reported the first COVID-19 confirmed case on January 30, 2020, when a student returned from Wuhan, China. Figure 1 and Figure 2 shows the cumulative confirmed cases and deaths respectively. In Kerala, 89,489 confirmed cases and 372 deaths have been reported till September 8, 2020.

COVID-19 Testing in Kerala

In Kerala, different types of testing are conducted on a daily basis like RT-PCR Open Test, CB-NAAT, True NAAT and Rapid Antigen Card Test. Figure 3 and Figure 4 shows the graph of day-wise and cumulative COVID-19 testing conducted in Kerala. In Kerala, there are about 79 operational laboratories (Gov.: 31 and Private: 48) conducting tests on a regular basis (ICMR, 2020). Figure 5 shows the graph of confirmed cases vs. testing conducted per month till September 8, 2020. The positivity rate obtained by dividing confirmed cases is a powerful indicator of assessing the current level of Coronavirus transmission in the community and for assessing whether we are doing enough testing for the number of people who are getting infected.

Figure 1: Cumulative COVID-19 confirmed cases in Kerala till September 8, 2020[1]

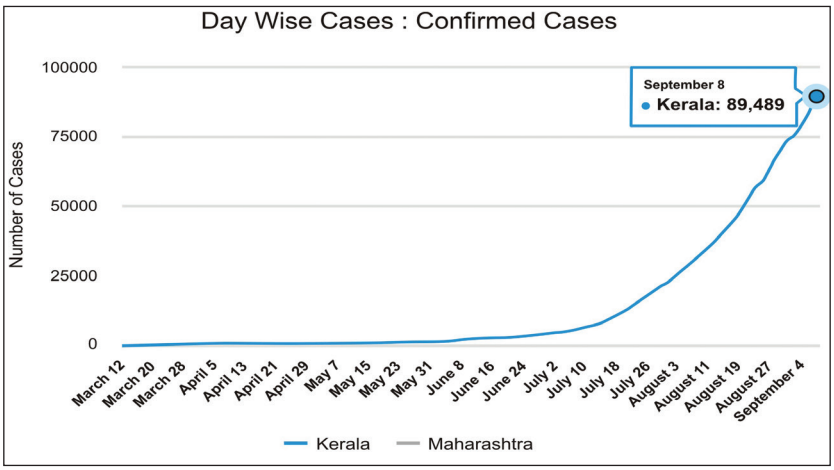


Figure 2: Cumulative COVID-19 confirmed deaths in Kerala till September 8, 2020[2]

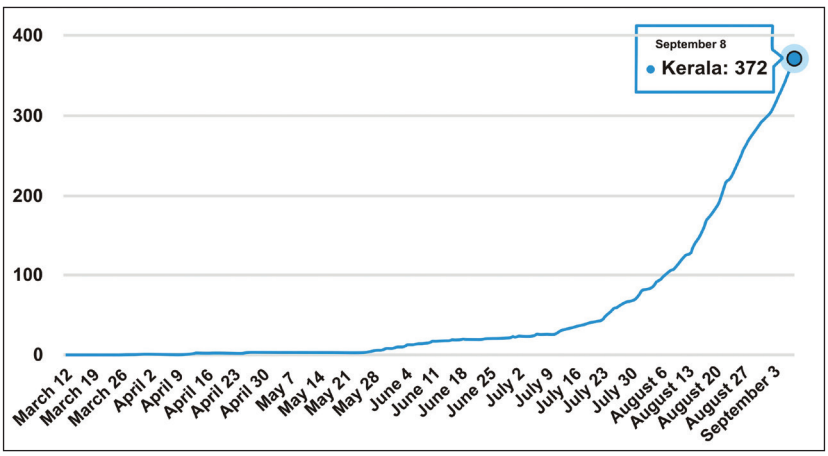


Figure 3: Day-wise Covid-19 testing conducted in Kerala till September 8, 2020[3]

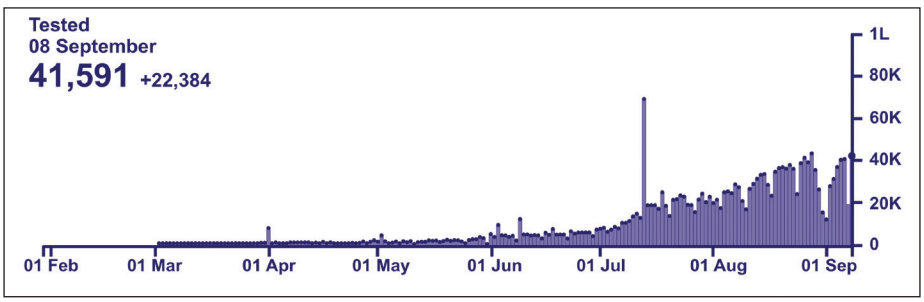


Figure 4: Cumulative COVID-19 testing conducted in Kerala till September 8, 2020[4]

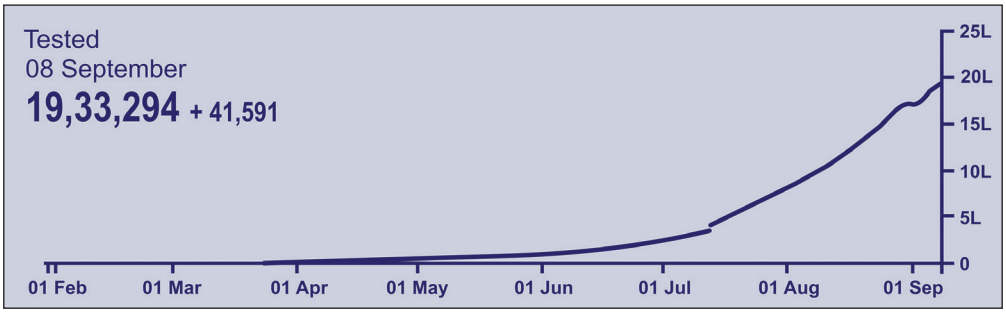
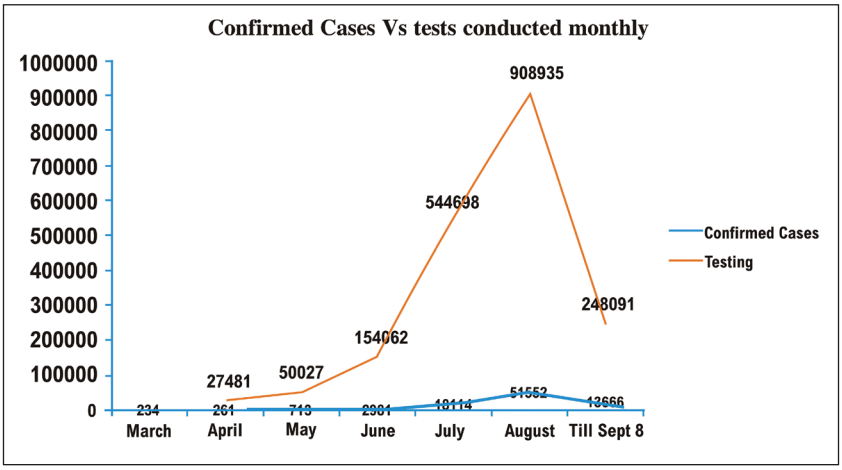


Figure 5: Confirmed cases versus testing conducted monthly in Kerala[5]



Mitigation Actions

Initial phases of responses by the Kerala government were aimed at surveying, identifying and conducting contact tracing of all the passengers arriving from China and abroad. After the confirmation of two or more COVID-19 cases, the state government on February 3, 2020, declared the situation as a 'Health Emergency' in the state. The health department of Kerala also predicted the situation well about the high chances of an increase in the number of patients, perceiving the high epidemic potential of COVID-19.

Administrative Mitigation Measures to Respond to COVID-19

- **Role of Kerala State Disaster Management Authority (KSDMA)**
  On February 4, 2020, a State Executive Committee (SEC) meeting took place in which norms of relief assistance were discussed for allocation. After COVID-19 was declared

a notified disaster by the Government of India on March 14, 2020, which permitted the use of State Disaster Response Fund (SDRF), Kerala Government allocated funds worth 224 crore for the financial year 2019-2020. Assessing the situation, the KSDMA on March 17, 2020, requested the government to use the funds and hence was allowed to use 35 percent of it. Out of this, 25 percent was allocated for quarantine measures, sample collection and screening and 10 percent was allocated for procurement of essential/labs for COVID-19 response. Following this, the Government of Kerala, after considering the report of the Health Department and Economic slowdown, declared COVID-19 as a State Specific Disaster (Government of Kerala, 2020). After perceiving the probability of the strong COVID-19 outbreak, the Kerala Government exercised powers under section 2 of the Epidemics Diseases Act, 1897 along with the provisions of the Disaster Management Act, 2005 and hence notified lockdown in the entire state. This was followed by issuing guidelines for strict compliance by all departments, offices, law and order forces, Local Self Government, and many in the state under the power vested on Section 24 of Disaster Management Act, 2005 (Government of Kerala, 2020).

The government of Kerala also did an effective utilisation of technology. KSDMA used Geographic Information System (GIS) in the initial phases to track the most optimised route for the COVID-19 affected patients to reach with minimum exposure and in the shortest time. Predictive analysis using mathematical models were conducted to assess the number of beds required, the runout capacity after considering the current scenario. The government of Kerala set up round the Clock War Room to monitor and supervise the COVID-19 situation in the state. Different departments like Health, Police, Revenue, Local Self Government, Transport and Food and Civil Supplies Department nominated the officer at the top-level management to facilitate management at the war room. Keeping into mind the twin burden of responding to floods and COVID-19, KSDMA quickly teamed up with the health experts to devise a detailed plan to effectively respond to the two disasters (Mohan, 2020).

- **Role of District Disaster Management Authority (DDMA)**

  Funds of Rs. 50 lakh were allocated to every district of Kerala to the respective District Collectors from the State Disaster Response Fund (SDRF). KSDMA made it compulsory for all the DDMAs to compile a daily report of actions and also ensured minimal staff at Local Self Government Offices for COVID-19 operations (Government of Kerala, 2020). To ensure district-level preparedness, compulsory registration of all foreign returnees was conducted by the District Administration/District Police.

- **Role of the GramPanchayats/Local Government**

  Local governments assessed the availability of essential commodities which were

further categorised, ensuring available response mechanisms, such as, material resources, volunteers, medical resources etc. This was possible through humanitarian support by the NGOs and Civil Society Organisations (CSOs). The Inter-Agency Groups (IAGs) supported by the Kerala State Disaster Management Authority (KSDMA) helped in strengthening the partnership between the NGOs and local Government. During COVID-19 preparedness, the IAGs mobilise volunteers at the ground level for better coordination among different NGOs activities. A well-known initiative, 'Community Kitchen' of the Local Self Government Department (LSGD), provided more than 8,651,627 free meals to the labourers, quarantined people, destitute and other needy persons. This distribution of millions of cooked meals and provision of free ration comes under the Public Distribution Scheme, hence reflective of a well-thought relief strategy by the government of Kerala.

COVID-19 Risk Communication

Kerala's ArogyaSetu Portal has become an effective tool of Risk communication. Kerala Police Social Media Cell and State Police Media centre have been working relentlessly to create awareness about COVID-19 through videos, posts, memes and trolls on social media. In Kerala many awareness programs were organised by the Kerala Health Minister such as, 'Break the Chain' initiative in which many cartoons were painted on the walls to spread awareness among the communities regarding washing hands using soap or sanitizers, wearing masks and maintaining social distancing. The 'Break the Chain' dancing video of 6 policemen posted by Social Media Cell was watched by about 3 million people. Besides this, the Kerala police played a great role in tracking the 'Fake News'. To stop the rumours and busted myths regarding COVID-19, a 'Corona Media Cell' was set up to monitor and tackle the threat of fake news during this crisis. Empowered women self-help groups like Kudumbashree have been working extensively during this period. With the objective to communicate the risk and educate the communities about the safety measures, they formed about 1.9 lakh WhatsApp groups along with 22 lakh neighbourhoods groups.

Management of Migrant Workers in Kerala during COVID-19

Kerala is home to many migrant workers. Kerala has a large number of welfare fund boards for workers working in various sectors. This setup is one of the reasons that the State has a powerful working-class movement in the state. In the initial phase, boards paid financial assistance amounts ranging from Rs. 7,500 to Rs. 10,000 for workers affected by the COVID-19. Boards also paid Rs. 1,000 to 5,000 for workers who are in

living quarantine or hospital quarantine respectively (Dennis, 2020). The government of Kerala allocated funds worth Rs. 56 crore especially for 'Measures of quarantine'. The relief provisions allowed during this period of time are as Rs. 60/adult per day and Rs. 45/child per day for 30 days will be dispensed to individuals under home quarantine and hospital quarantine and also announced to treat the Contractual/Casual/Daily wage/ Outsourced staff on duty on those days in which they are not able to come to the office due to restrictions imposed due to coronavirus. But this remained for a shorter period of time.

Maharashtra

Demographic Details

Geographically, Maharashtra is the third largest state in India with 35 districts and the second most populous state with a population of about 11,23,72,972. The density of population is 365 persons per sq. km. The literacy rate of the country is 82.9 percent and it ranks 12th in the country (Census, 2011).

Past Experience

Maharashtra also has a history of facing deadly epidemics like the Chikungunya Epidemic at Barsi, Maharashtra India in 1973, SARS 2003, HINI Influenza Pandemic (2009) and so on. HINI Influenza Pandemic flu also commonly known as Swine Flu resulted in 9,943 total cases and 937 cumulative deaths by 2nd January 2011, with its main hot spot in Pune. It had the highest reported cases in the whole country. To deal with this pandemic, the state government published the contingency plan in June 2009, which dealt with the institutional framework at the state level and state-district coordination. It was more focused on providing needed action to deal with the pandemic but on an implementation level, it posed a major challenge (Purohit et al., 2018).

COVID-19 Scenario in Maharashtra

Maharashtra reported its first case of COVID -19 on March 9, 2020. Despite various efforts by the Maharashtra government, Covid-19 has posed a major challenge for the state government to cope with this devastating disaster. However, the State government has been continuously taking precautionary measures to contain Coronavirus and reduce the number of cases. Figures 6 and 7 shows the cumulative confirmed cases and deaths in Maharashtra till September 8, 2020. About 9,43,772 confirmed cases and 27,407 deaths have been reported till September 8, 2020.

Figure 6: Cumulative COVID-19 confirmed cases in Maharashtra till September 8, 2020[6]

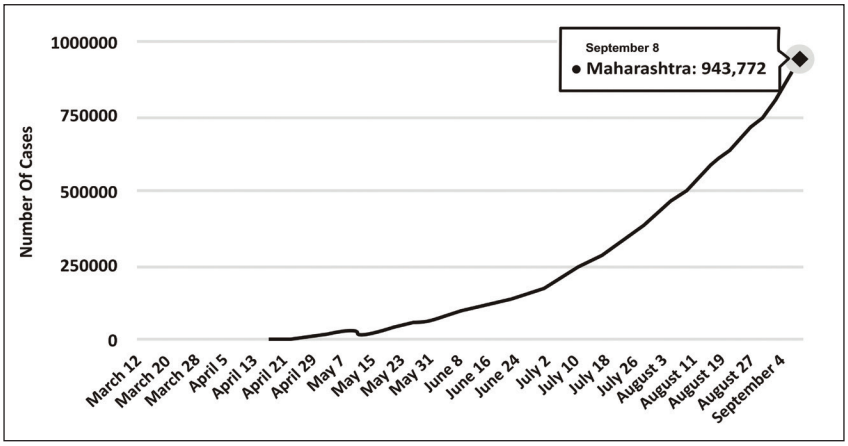
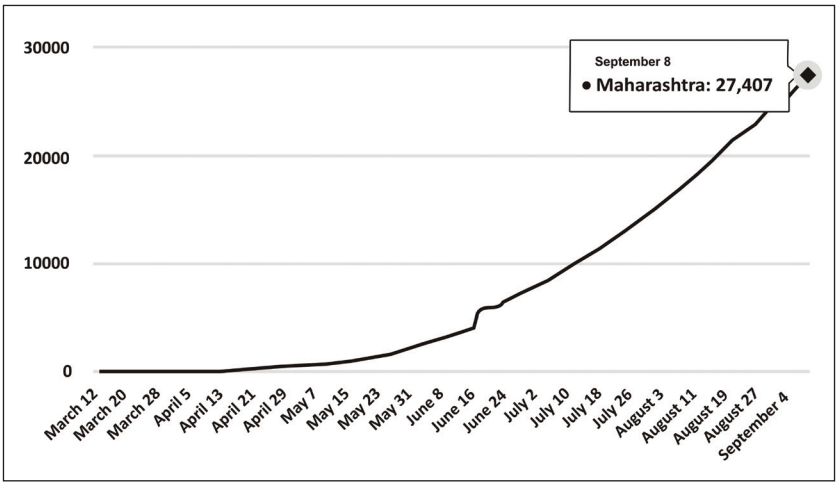


Figure 7: Cumulative COVID-19 deaths in Maharashtra till September 8, 2020[7]



COVID-19 Testing in Maharashtra

In Maharashtra, RT-PCR Open Tests have been regularly conducted. Figures 8 and 9 shows the graph of day-wise and cumulative COVID-19 testing simultaneously conducted in Maharashtra. In Maharashtra as on September 3, 2020, there are about 154 operational laboratories (Gov.: 80 and Private: 74) conducting tests on a regular basis (ICMR, 2020). Figure 10 shows the graph of confirmed cases vs. testing conducted per month till September 8, 2020.

Figure 8: Day-wise COVID-19 testing conducted in Maharashtra till September 8, 2020[8]

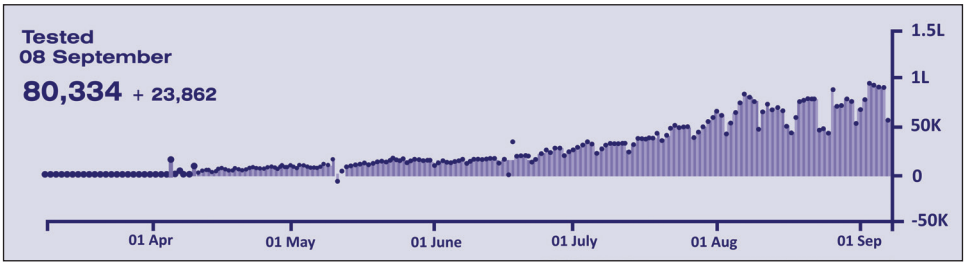


Figure 9: Cumulative COVID-19 testing conducted in Maharashtra till September 8, 2020

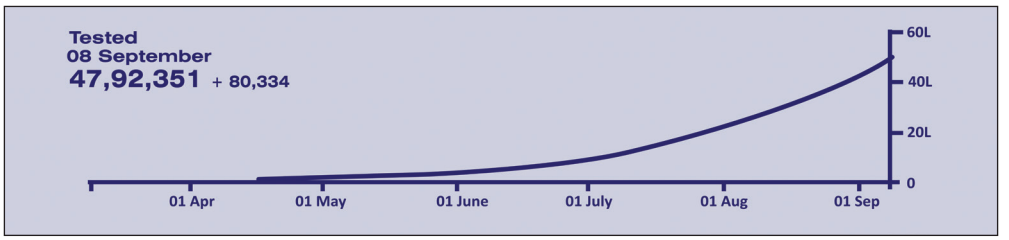
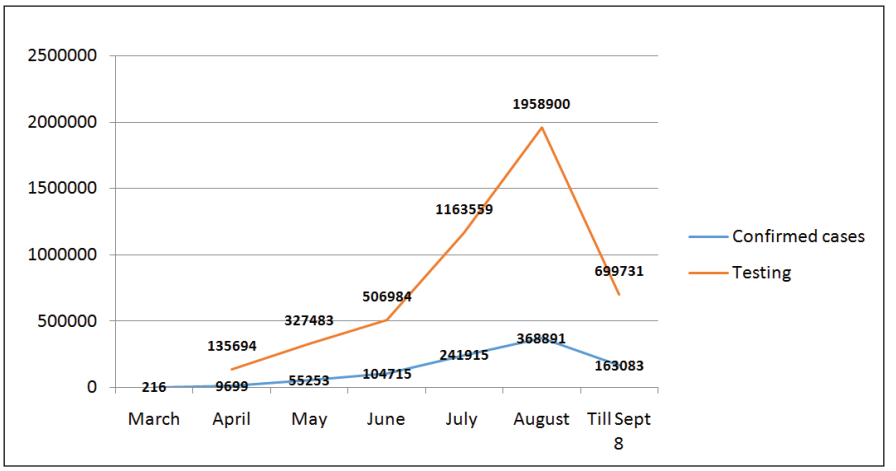


Figure 10: Confirmed cases versus testing conducted monthly in Maharashtra[9]



Mitigation Measures

Early phase of COVID-19

Maharashtra Government invoked the provisions of Epidemic Diseases Act, 1897

after declaring COVID-19 outbreak as an epidemic in the cities of Mumbai, Navi Mumbai and Pune (Press Trust of India, 2020) on March 13, 2020. In the initial phases, the Maharashtra Government notified the COVID-19 regulations on three key areas (a) home quarantining the people with a history of recent travel in the COVID-19 affected countries; (b) Screening the patients affected by COVID-19 in the hospitals; (c) List of procedures in containment zones. On March 15, 2020, the state government announced to increase the laboratory capacity to test the samples of the suspected cases, set up a new laboratory and increase the beds in the hospitals. For example, In Kasturba hospital, laboratory capacity was increased from 100 per day to 350 days (Press Trust of India, 2020). The state government invoked section 144, in Nagpur and Nashik to restrict the movement of people in groups and on March 23, 2020, a state-wide lockdown was declared (Ray, 2020). About 5,000 CCTV cameras and drones have been used in Mumbai as well as in the densely populated areas of Thane district to regularly check that the lockdown is maintained (Express News Service, 2020).

Administrative Measures

- **Role of Maharashtra State Disaster Management Authority (MSDMA) and District Disaster Management Authority (DDMA)**

  Assessing the COVID-19 situation, the government of Maharashtra exercised Power under Section 2 of the Epidemic Diseases Act, 1897 and the powers conferred under the Disaster Management Act, 2005 to extend the lockdown. On March 16, 2020, the Maharashtra government allocated 45 crore rupees to districts with COVID-19 cases (Thomas & Majumdar, 2020). Under the MLA Local Development Program, a special exception was given to use the MLALAD funds for purchasing the medical equipment for COVID-19 during the year 2020-2021.

  SDMAs have a significant role to play in such emergency situations. However, Justice Abhay Oka and Justice MS Sonak considered the response of SDMA and DDMAs in Maharashtra to be quite reluctant and insincere. In addition to this, Mumbai high court in 2017 dismissed the idea of a single Greater Mumbai Disaster Management Authority and bifurcated into the District Disaster Management Authority for city and District Disaster Management Authority for Suburbs. Despite the court directions and pressure from the civil society organisation, District Disaster Management Authorities have met yet and have never discussed any district development management plan and put it in the public domain. The other major problem is with irregular conduction of the meetings.

However, the Brihanmumbai Municipal Corporation (BMC) initiated 'Mission Zero' rapid action plan. This mission is launched to combat the coronavirus outbreak situation in the city, which is severely affected by the disease spread by close contact. Under this programme, 50 dispensary vans will cover different parts of Mumbai for 2-3 weeks to conduct a preliminary examination of patients. This initiative is called the "chase the virus" for the worst affected regions of the city.

- **Role of Gram Panchayat/Local Government**
  One can't ignore the threat of COVID-19 spreading to the villages. The Ministry of Panchayati Raj, Government of India accepted a tool named Mahatma Gandhi Institute of Medical Sciences, Sevagram for the assessment of community preparedness at village level to fight against coronavirus. Online training like Anandvan and Village Social Transformation Foundation (VSTF) started from 24 May 2020, the Department of Community Medicine oriented more than 300 VSTF fellows regarding use of the tool. These volunteers work around 1000 villages of Maharashtra to catalyse community response to COVID-19. VSTF collected this information through its fellows to help the Government of Maharashtra fight the pandemic in a better way.
  In an order of Department of Revenue and forest, Disaster Management, Relief and Rehabilitation of Government of Maharashtra issued on May 2, 2020 mentioned that 33 percent civil defence and home guard works with the local authority. They performed duty as an auxiliary force to the local administration. But the Maharashtra government has not been able to pay their honorarium of Rs. 670 per day which was promised. These civil defence and home guards could have played a key role in the work of aid assistance, distributing food materials and handling migrant's workers, maintaining law and orders, etc. But it was seen that very few people showed interest in becoming part of this group.

COVID-19 Risk Communication

In order to spread awareness among the communities, the Regional Outreach Bureau (ROB) (Maharashtra & Goa region), Ministry of Information and Broadcasting, Government of India initiated a field-based outreach and awareness programme through travelling audio announcement in the rural areas of Maharashtra. Twenty vehicles have been deployed in different COVID-19 affected districts. Staff artists from ROB Pune created audio messages and songs in local languages. Besides this, it also tracked the fake NEWS. Also, there was a lot of involvement with the local videos. WHO also initiated many campaigns in Maharashtra for risk communication? The Maharashtra Government also launched COVID-Madat for tele-screening.

The Community Health Workers (CHWs) like ASHAs, Aganwadi workers, Auxiliary Nurse Midwives also played a great role in spreading awareness regarding COVID-19.

Management of Migrant Workers in Kerala during COVID-19

Maharashtra Chief Minister allocated the fund of Rs. 54.75 crore from the Chief Minister's relief fund. This fund was transferred to the district collectors for the booking of tickets for migrant workers on special trains. The "ShivBhojan" scheme offering meal at Rs. 10 was made available to them at Rs. 5. The state had set up 163 centres across the state to provide food and water to the migrant labourers at the early phases.

Analysis

Graphical Analysis

Kerala and Maharashtra were the first two states in India to have reported the first COVID-19 cases. Even Kerala reported the first case almost a month before Maharashtra. However, comparing the present situation brings to surface shocking results. The total confirmed cases in Maharashtra till September 8, 2020, are about 10 times greater than that of Kerala (Figure 11) and COVID-19 deaths in Maharashtra are about 74 times than that of Kerala (Figure 12). Although, we cannot ignore the demographic differences between the two states.

Testing & Positivity rate of the two states

Kerala has conducted different types of testing like RT-PCR Open Test, CB-NAAT, True NAAT and Rapid Antigen Card Test whereas, in Maharashtra, RT-PCR is the only type of testing conducted. Calculation of the positivity rate for Kerala and Maharashtra (Figures 5 and 10 respectively) obtained by dividing the confirmed cases by the total tests shows that Maharashtra still leads Kerala in terms of positivity rate. As per the calculation, in the month of August, Maharashtra had a positivity rate of 19 percent as against 6 percent that of Kerala. A high positivity rate in Maharashtra is indicative of high Coronavirus infection rates and hence suggests the need to do more testing, and suggests that it is not a good time to relax restrictions. It also highlights the need for taking innovative and proactive mitigation measures.

Figure 11: Comparison of COVID-19 cumulative confirmed cases in Kerala & Maharashtra

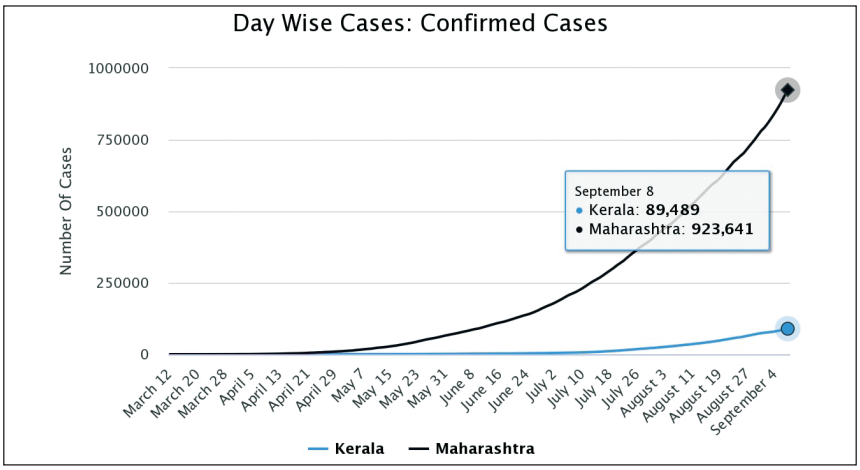
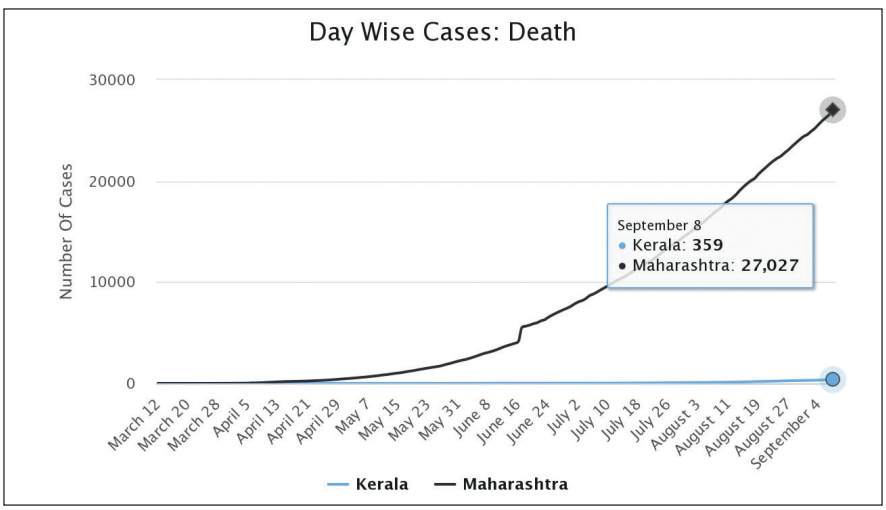


Figure 12: Comparison of COVID-19 cumulative deaths in Kerala & Maharashtra



Analysis on the Basis of Mitigation Measures

Administrative Measures

The analysis of the mitigation measures undertaken at the administrative level highlights the indispensable role that the SDMAs, DDMAs and the Gram Panchayat play while responding to a health emergency of such a great magnitude like COVID-19. Both states have found ways to empower the local government through humanitarian assistance.

However, the content analysis shows that the Kerala State Disaster Management Authority (KSDMA) showed an effective response as compared to the Maharashtra State Disaster Management Authority in proactively allocating the State Disaster Response Fund. KSDMA conducted regular meetings and at the same time monitoring the working of the District Disaster Management Authorities (DDMAs) on a regular basis. Hence, Kerala due to its proactive measures is at a much better situation than Maharashtra while considering the present COVID-19 scenario.

Risk Communication

Communication of risk has become an effective tool in minimising all kinds of losses whether it is economic, social and human. Risk Communication can only happen when you put an effective mechanism in place to reach out to all the stakeholders, particularly local masses and avoid ambiguity. Maharashtra's campaigning against COVID-19 has largely been confined using varying degrees of participation of concerned stakeholders particularly civil society organisations and implementation of policies and orders.

However, the state of Kerala has brought a social revolution to fight against COVID-19 and adopted a bottom to top approach. It has delegated immense power, i.e. financial as well as administrative to the local self-institutions in discharging their role and responsibilities. In addition to this, it has streamlined its decision-making process to avoid ambiguities and incorporated civil society organisations and consulted while formulating any plan, policies or implementing any order and took their suggestions as well. For instance, Kudumbashree acts as a nodal agency working very closely with the community and for the community and helps the government ineffective implementation of the policy at the grassroots level.

Management of Migrant Workers during COVID-19

Both states have faced immense pressure imposed by migrant workers. Maharashtra is the biggest receiver of migrant workers particularly from the North Indian states while Kerala is the biggest outsourcing migrant workers within the country and abroad as well. The migrant community faced the worst humanitarian crisis during this pandemic and they were excessively politicised instead of solving their issues. Maharashtra government has launched a scheme of 'Shiv Bhojan' to provide cooked materials, particularly for migrant workers. Initially, they executed this policy very well but didn't prove to be sustainable. As per the report, there were a lot of discrepancies in the distribution of food materials and migrant workers being asked

to pay for this. While on other hand, the state of Kerala has a large number of welfare fund boards for workers in various sectors.

Conclusion

This study focused on the action of the governments of Kerala and Maharashtra to mitigate the COVID-19. Coronavirus cases are rising very fast in India and evidence shows that COVID-19 cases in the state of Maharashtra are rising and almost all metropolitan areas have converted into cantonment zones while COVID-19 cases have declined considerably in the State of Kerala. However, there is an aggressive control strategy required. A high positivity rate of 19 percent in Maharashtra in August highlights the need for more testing and implementation of strict mitigation measures.

Administrative measures and the role of local institutions, risk communication and management of migrant's vulnerabilities are being highlighted in this paper from March 2020 to September 2020. Though the results of this paper are subject to change with the course of time. From the analysis, it is seen that mitigation strategies adopted by Kerala Government were quite effective as compared to that of Maharashtra.

Finally, COVID-19 has opened up huge opportunities as well. For example, governments need to evolve or rethink the strategy to fight against such pandemic, structural changes like in infrastructure development, putting more resources in research and developments (R&D), investments in human resources development and finding IT-based solutions to the problem. We have witnessed such diseases outbreak year after year hence it is the right time to say that prevention is better than cure.

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Notes

1. https://prsindia.org/covid-19/cases/statewisecomparison
2 https://prsindia.org/covid-19/cases/statewisecomparison
3 https://www.covid19india.org/state/KL
4 https://www.covid19india.org/state/KL
5 https://www.covid19india.org/state/KL
6 https://prsindia.org/covid-19/cases/statewisecomparison
7 https://prsindia.org/covid-19/cases/statewisecomparison
8 https://www.covid19india.org/state/MH
9 https://www.covid19india.org/state/MH

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