# How Countries of South Mitigate COVID-19: Models of Morocco and Kerala, India

by

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## Abstract

Since the reporting of the first case of COVID19, Morocco and Kerala[2] have immediate operation through the national campaign and strict monitoring of citizens who came from COVID19 affected countries. The district and governments have taken contiguous actions for shifting the victim to quarantine camps and remained the relatives and people who kept contact with the infected under observation at their house and hospital. Besides, all the public functions are banned. Likewise, ceremonies like marriage, religious festivals, sports competitions, and all the societal activities that require mass gathering has been suspended. Educational institutions of both private and public undertaking are locked. Cinema theatre, malls, tourist areas, and any other crowed spots are also closed. Importantly, public campaign and advice across social networks have played a significant role in imparting the severity of the malady to the masses. The way to prevent the disease has been informed the people through all possible media. By understanding the situation, the people stop going outside their home, functions held with few and follow social distancing. Overcrowded cities and towns became uncrowded. The department of health has act expeditiously to manage the problem. Seeking citizens' cooperation was the first step that got success. People mobility has been controlled to a greater extent to dominate the spreading of diseases and individuals came from COVID19 prone zones kept under quarantine with appropriate treatment. The coordination of health care and functioning of hospitals and health personnel is strengthened across the state of India and regions of Morocco. In Kerala, the number of COVID19 cases reporting has been reduced considerably. This state has taken actions before all other Indian, which are appreciated by many nations. Its effort has been considered as a model in extenuating any communicable disease in the world. This study attempts

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to explore how Kerala and Morocco reduce COVID19 efficiently and examine how both utilised their experiences to mitigate Corona virus.

**Keywords:** Kerala-Indian; Moroccan; COVID19; Health Risk; People's Adoption; Government Actions

## Introduction:

The world lives in globalization. Its subjects have multiplied, after having been associated throughout the past century with the economic, financial and political fields, they have subsequently moved to more profound levels, breaking cultural and social boundaries with them, to be added to it since the end of 2019 Corona virus Disease-2019 (COVID-19) or epidemiological globalization. This disease was firstly announced in China and gradually propagates different parts of the world. The detailed ailment has gently and real qualities, including sickness cause to death. The older and people of change suffering from heart illnesses, lung disease and diabetes are at higher risk of evolving serious COVID-19 sickness. The infection is tainting individuals and spreading effectively from individual to individual. Cases have been identified in many nations worldwide and network spread is being deserted in a developing number of countries (Centres for Disease Control and Prevention, 2020). As on the first week of March 2020, over 118,000 cases were accounted for in 114 nations and 4291 individuals have lost their lives. By thinking about its proliferation over the world and its seriousness, W.H.O. declared COVID19 as a pandemic. The illness rapidly spread to the other nations like India and Morocco which are very ill-equipped to relieve the potential transmission.

The infection is a pathological and contagious phenomenon, not new in human history. Human being has known the proliferation of the epidemic over the years, the severity of which varied according to the type of virus, and claimed the lives of many individuals. However, the COVID19 is fast-moving to benefit from the technology revolution as well as the global value chains (GVCs).

Corona virus insured everyone (the government and the people) that human destiny is one that unites us wherever we are in north or south countries; those classified poor or developing or advanced/developed. The COVID19, united citizens regardless of their colours, nationalities, customs, religions, prayers, languages, and ideologies, on one catchword: curbing the spread of the infection and undertaking the same precautionary measures to address this epidemic that reminds humans of their 'weakness' vis-à-vis natural environment. Whatever the source of COVID19 is it a human production or a natural evolution and transformation of a virus, the important thing is that the policies and regulations of all countries face this epidemiological globalization to save their citizens.

Certainly, COVID19 affected several sectors, but the global economy has not yet reached the stage of economic crisis. And in the event of a global crisis, Corona virus will not be the cause, it will only be as a 'candle' or 'umbrella' on which all the failures of the global economic system will be commented.

COVID19 is credited with hiding the features of political, economic and social crimes committed daily since the beginning of the 21$^{st}$ century and whose intensity has accelerated since the spread of the epidemic because public opinion is preoccupied with them. The results of these policies are more dangerous and deeper than all the pain that COVID-19 causes, such as:

i. the oil price war between America, Saudi Arabia, and Russia;

ii. the file of Syrian refugees and the financial, economic and political profits that Turkey reaps from it;
iii. the Sahel crisis and France intrusion in African politics to defend its interests;
iv. The file of Libya and Syria and International interventions in determining their fate, and the severe humanitarian crises in the world (migration, terrorism, human trafficking, etc.);
v. the file of the Middle East and the 'Deal of the Century', and the tragic isolation of the Palestinian;
vi. climatic fluctuations and their harmful effects on the countries of the south;
vii. the deterioration of the social protection system in many countries; the collapse of the democratic system; and
viii. The return of the threats of high external debt in a lot of poor and developing countries, and so on.

Whatever the number of COVID19 virus victims will be, it will not be as huge as the daily casualties of the world capitalist system. Whatever the pain and the duration of the suffering of the patients with the virus, you will not be as painful and long as the misery of refugees, clandestine, hungry, marginalized people, and victims of wars.

On the superficial analysis, the difference between epidemiological globalization and other types of globalization is not mentioned. It affected the poor and the rich, male and female, young and old, north and south countries, or developing and developed economies. However, in its core, a huge difference between epidemiological globalization and other types of globalization is revealed, as in its sweeping regions of the world. The epidemic is fair and just but, in contrast, it is injustice and unfairness. Some are equipped with the modern laboratory equipment and have the necessary hospitals, medical staff, and clinical beds, and can build a hospital or more in a few days and have all the financial and human resources to manage the crisis. On the other side, some will face Corona virus with very primitive tools without healthy structures. The neoliberal system has produced social inequalities and marginalization. Some people live with epidemics and the death of family members and children as natural matter. They classified these situations and death as fate/destiny and the decision of God. So, poor and marginal citizens are mainly confronted with epidemics/crises by talismans and sorcery or prayers.

On the other hand, people are not analogous. Some are accustomed to epidemics because they have adapted to them by governmental policies that did not make attention to the well-being of citizens in their strategic plans of development. Thus, it created an individual in solidarity only with himself/herself and his/her close relatives, and easy prey for fake news. It is the case for many countries in the south. On the other hand, some depend on their politicians and managers and trust in their decisions and reports because they believe that the future of the individual is the future of the group, which is the future of the nation. It is the case of many countries of the north.

There is a difference in dealing with globalization which creates the master and the slave. The master has the power to make them control the reins regardless of the severity of the results because they always benefit from the crises. As for the subordinate countries in the global system, most of which belong to the countries of the south, they are the ones who will bear the burdens of all the losses resulting from the crisis, whatever the nature of the financial, political, economic, social or epidemiological crisis, such as those that passed in 2008 and its

repercussions and consequences are still weakening its shadows on many poor and developing countries because they could not negotiate their national interests, they chose to hate fragile regional alliances or border conflicts that depleted its energies and its resources. Is it not time for these countries to wake up for establishing their economic sovereignty system and thereby achieves their economic, social and health security? Unfortunately, once again the reality of these countries with weak and dependent economies is stripped, this time by COVID19.

This article tries to compare the procedures followed in Morocco and Kerala state in India. They are not neighbouring countries, but the global epidemic has determined their fate. For that, the cases of Moroccan and Kerala a state of India will be displayed. Thus, the study attempts to explore how Kerala and Morocco mitigate COVID19 efficiently and, also, examine how both utilised their experiences to mitigate Corona virus.

**The outbreak in Kerala – India:**

**Presentation of Kerala's Experience of Mitigation of Communicable Diseases:**

Kerala is the southern state of India, holding peculiar features of development among other India states since its inception; it is mainly regarded as 'Kerala Model of Development'. Kerala model is based on improving health, education, and quality of life for people. The state has experienced a decrease in the birth rate, mortality rate and decline in the rate of growth of the population. Kerala has achieved a positive sex ratio with 1084 females for 1000 males, which are much higher than the national average and the educational sector has shown a positive growth trend (93.91% literacy as per 2011 census). It is chiefly recognized that the education, health and per capita income of Kerala is the symbol of social development and are interdependent (Nandeesha, 2014). Kerala is considered as an early model of sustainable development because of improvement in the quality of life, ecological steadiness, social and economic equality and the decrease in political difficulty. Many unique socio-economic conditions in Kerala have been postulated to a health model. The state has low infant mortality (Nithya, 2013). In many respect, Kerala's health status is almost on par with that of developed economies. The public health care system in the state has helped in providing treatment facilities to people of all sectors of the society. Along these lines, the Kerala model of health is often described as 'good health based on social justice and equity' (Ekbal, 2017).

The state has witnessed the occurrence of viral diseases like chikungunya, dengue fever, rat fever, Nipah and non-communicable diseases like diabetes, hypertension, and cancer also increased. The growth of patients led to the mushrooming of private hospitals. Furthermore, privatization and commercialization of the health sector lead to an increase in health care cost(Deepak, 2015). The expansion and development of public hospitals with advancing facilities across the state have rebuilt the public health sector. In pace with the growth of communicable diseases in the state, the government has planned necessary facilities and usually, the situation has been managed by the department of health. In 2016, the new Health Minister K. K. Shailaja teacher was appointed, who initiated reforms in the health sector of Kerala. The development of health facilities in Kerala offers numerous exercises being developed. The dynamic role of the state government has been a key factor in the development of health care services.

Kerala has achieved good health indicators compared to other Indian states and Kerala has a long history of organized health care. A steady rise in the number of institutions and beds in the state in allopathic medicine are recorded. Besides the state is also having a medical

institution under the indigenous system of medicine such as Ayurveda and Allopathy. The number of beds per lakh[3] of population in the state over the use also rose. The availability of well-established health infrastructure in the state has strengthened the health service delivery mechanism. The state has a well-functioning disease surveillance system and advance facilities to recognize any communicable diseases. The state has proven once again with the recent incident of detection of a first Nipah virus outbreak in the state in March 2018. The health personnel in the state worked in a well-organized manner for detecting confirmed cases of Nipah, monitored their health status regularly, samples were collected and continued the monitoring until they complete the maximum incubation. 17 people lost their life due to the infection according to 'The Economic Times (2019)'.

The effort of the health department in controlling Nipah virus was outstanding and is praised by many across the world. Kerala has learned about handling any emergency from the outbreak of Nipah. Kerala has a long experience in fighting against communicable diseases like dengue, chikungunya, leptospirosis, malaria, hepatitis, and H1N1. The restless effort of the health personnel and authorities during the epidemic has brought normally. W.H.O. appreciated the strong health system of Kerala and her effort to combat viral disease. It is widely emphasised today that Kerala has executing plans to mitigate COVID19 is the reflection of accomplishment learned during the outbreak of Nipah virus.

**How Kerala Mitigate COVID-19:**

The administration of India has suspended e-visas gave to nationals of France, Germany and Spain, and suspended visas gave to outside nationals who have made a trip to Corona virus affected nations. Among the Indian states, Kerala has detailed an enormous number of COVID19 infected cases. However, there is no pre-plan yet, Kerala's reaction to this virus has been exceptional.

On February 3, Kerala identified the first case of Corona virus. The state has dealt with the situation and admitted the infected in the hospital. The government has unmistakably unloaded data concerning the best approach to forestall COVID19 and found a way to control the spread of manipulation. The Health Minister, K. K. Shailaja frequently tended to the general population through Press Conference and passed information about the situation prevailed in the state. Right data could go out and that help to instruct people generally. Interim, the state has started mindfulness battle on forestalling infection at the ground level and accordingly everybody was thought about how to deal with the outbreak.

To dodge the spread of disease, the government has requested that the schools, colleges and cinema halls will stay shut in the state till March 31. Classes up to 7 all things considered – state, CBSE will stay shut and examination which has started for them will be required to be postponed. The assessment for classes 10, 12 and vocational secondary will anyway proceed. Last assessments of classes 8 and 9 additionally will continue obviously. Temple and church celebrations, which witness mass social occasions, ought to be stayed away from, however, ceremonies can be held calmly.

The state has set up a broad arrangement of normal verification and directed even mock drills at public hospitals. The bed in the public hospitals could be immediately changed over into the isolation ward. Since the detection of position Corona virus cases, the state has given the top need to execute a self-planned convention to contain the spread. The infection contaminated

[3] 1,00,000

individuals with side effects were held under isolation ward in the hospital and the individuals who kept contact with tainted were placed in home quarantine. Following the individuals who had immediate and roundabout contact with infected was not a hazardous assignment. At the point when the administration discharges the route map of infected travel, the individuals who kept contact with tainted were reached the health department. Local health workers were conveyed to satisfy whatever need such home isolated individuals had, including medical services and shopping for food.

The government has concentrated on advising the general population about the circumstance that insures with maintaining a strategic distance from the frenzy of individuals. The health minister appeared on TV at least twice per day and consoling that the emergency can be relieved. Additionally, the government limits the spreading of bits of gossip and fake news on the flare-up of COVID19. A media monitoring team was set up that screen the spreading of bits of gossip and fake news in social media and different channels of correspondence. The individuals spreading fake news were punished by law.

The state has pronounced a 'state calamity' since the identification of three positive Corona virus cases yet the circumstance was levelled out following a couple of days and expected that there is no reason to panic, at that point the ministry of health pulled back the warning. The central government proposed a quarantine time of 14 days yet the Kerala government has not taken any chance and isolating period for 28 days necessary followed as a prudent measure (Oommen Kurian, 2020). The government has set up a team with the Director of Health Services (DHS), additional DHS and MD and the state-run medical service corporation to assess the situation, create awareness and isolate new cases. The medical service corporation assumed the liability to guarantee basic drugs, masks, gloves, and different things. The state has encountered an extreme lack of masks and hand sanitizer. To guarantee the stock of masks, production has begun in jail with the assistance of prisoners. Kerala State Drugs and Pharmaceuticals have started the production of hand sanitizers to strengthen the accessibility in the market. Initially, the test of COVID19 was done at Pune and it required three days to acquire the outcome. The government has made the courses of action to test the sample at National Institute of Virology, Alappuzha in Kerala, consequently, the outcome gets within a day. Wide publicity was given about the safety measure to be taken and toll-free number for the public to call to report suspected cases was set up. Individuals have been encouraged to cover the mouth and nose during sneezing and wheezing. The local administration thanks to the health department led a mass meeting to give mindfulness on the significance of utilizing kerchief while sniffling and during cough. Besides, the government has provided door delivery of essential items to people under home quarantines. Many children at the Anganwadies over the state will likewise give food items at their home anyway the Anganwadies are shut as a safety measure against Corona virus spreading.

How Kerala mitigate COVID 19? The answer to this question point to the strict protocols of the Kerala government executed since the outbreak of COVID19. The government has proposed and implemented a series of actions from time to time and many are precautionary. Strict screening at all the airports, ports, railway station, bus stand, and state borders were started. A campaign to promote personal hygiene to cut down the spread of COVID19, called ‘Break the chain’ was initiated. Politicians, sportspeople, celebrities and many others were accompanied to promote the campaign and they recorded videos promoting hand washing, personal hygiene and spread them through their social media. As a part of this, the government

installed water taps at public spots with hand-washing facilities. Besides, DYFI has set up many hand-washing centres in public places across the state.

According to the daily bulletin of Directorate of Health Services, Government of Kerala, 1471 people from corona affected countries are under surveillance, out of which 1421 are under home quarantine and 50 are admitted in loneliness facilities till 21/01/2020. As per the report published on 03/02/2020, 2239 travellers from corona affected countries have been identified and placed under surveillance. Out of which 2155 are under home quarantine and 84 are admitted in isolation facilities. A 24×7 control room has been set up in the state and all the district headquarters. At least two hospitals with quarantine facilities have been identified in each district. The daily bulletin published in 20/02/2020 states that 914 people are under home isolation and 7 are under quarantine at hospitals. Out of 433 samples tested, 423 samples are negative. The government has prepared 46 training videos for training staff in the health department and other related departments. The videos are circulated through the YouTube channel of the Directorate of Health Services. For providing psychological support to the families of suspected persons, 215 persons have been assigned across the state. 3646 tele-counselling services were provided until 20th February 2020.

As on March 10, 2020, 1495 people are placed under isolation, out of which 1236 are under home quarantine and 259 are admitted in isolating facilities at the hospitals. To speed up the testing, facilities have been set up at Thiruvananthapuram and Kozhikode medical colleges. Sum of COVID19 detected people in the state was 14 till March 10. Kerala has strengthened the surveillance day by day and took all possible actions to promote the spreading of disease. The report on 17/03/2020 shows that 18,011 persons are under surveillance, out of which 17,743 are under home isolation and 268 are admitted in an isolation ward in the hospitals. The total positive cases were 24 till now. Eighty training videos are prepared for training health staff; provide psychological support to 133 persons and tele-counselling services were provided to 10,153 people. The health department is vigilant in 24 hours to respond to the outbreak of COVID19. The effort of the Kerala government has fruit as many infected admitted in the isolation ward has recovered completely. Kerala's actions to control COVID19 have been admired by many across the world. India Today concluded in its report on COVID19 that 'Kerala has been more proactive to manage the big challenge […] what Kerala think today helpfully India will think tomorrow'.

A report published by British Herald entitled 'A Master class in Tackling COVID19 from Kerala, India' described about Kerala as a 'state in the Indian subcontinent tucked away into the south-western Malabar Coast has always been fairly different from the rest of the country – whether it's related to literacy, education, food habits, and even political tastes. While the rest of the country has been dealing with religious and political clashes, Kerala is a shining example of how secularism should ACTUALLY work in a democracy – with all religions peacefully coexisting in the state. And how Kerala deals with COVID19 is a model that has been applauded internationally too. It is not that the state has exposure to the virus at all – it is the second-most influenced state in India. Kerala, a small state in a developing country, has created a model that can be easily adopted by some of the most developed countries in the world.'

Since the first case of COVID19 revealed in Kerala, the government has initiated stringent actions to combat the virus. There is no doubt to say that Kerala successfully handling the spread of corona virus and taking all precautions which were needed. The credit of handling the situation and framing a Kerala model of combating communicable diseases goes to the Government of Kerala, especially the Health Department.

**Financial Measures against COVID-19:**

Kerala Chief Minister, Pinarayi Vijayan has announced a financial package of Rs 20,000 crore[4] to mitigate the impact of the corona virus and its associated economic crisis. The package consists of Rs. 500 crore for health initiatives and Rs. 2000 crore for loans and free ration. Rs. 20,000 crore is about two-thirds of the state's annual plan. Through the self-help groups of Kudumbasree Mission, loan support worth Rs 2,000 crore will be made available. The Rural Employment Guarantee Scheme to the tune of Rs 1,000 crore each will be launched in April and May. Social welfare pensions for April and May will be distributed in advance. This will require Rs 1,320 crore. About Rs. 100 crore have been put aside to give Rs 1,000 each to that income less people who are outside the domain of government welfare pension schemes. Both Below Poverty Line (BPL) and Above Poverty Line (APL) cardholders will be given free rice. Moreover, concessions have also been announced for auto rickshaw and bus operators in the state. Entertainment tax reduction will be given to cinema theatres. The financial package of the Kerala government is more appreciable as it covers the problems of society due to the outbreak of Corona virus and able to break down the financial crisis.

In fine, Kerala tried hard to mitigate the spread of COVID19 through a variety of strategies that are not yet executed by any Indian state. Kerala found its efficiency which is a part of the Kerala model of development. The people of the state have better education, the standard of living and are more conscious to accept the guidelines of the government. It was proven many times but it is proven over the days since the outbreak of COVID19. So, the way by which Kerala mitigated and fight effectively against the fast-spreading of COVID19 evolving a model to combat against communicable diseases.

**The outbreak in Morocco:**

**Propagation of COVID19:**

On March 2, a person of Moroccan nationality returning from Italy tested positive for the Corona virus. Their 'condition is stable and does not cause distress,' according to the government statement[5]. Between March 4 and 13, the cases of corona virus registered in Morocco are people (Moroccans and non-Moroccans) coming from Italy, France, Spain, and Austria. On March 14, ten new cases were declared (18 cases in sum) where eight were Moroccans from Spain, Italy, and France. The ninth case concerns the first local contamination from a recorded case, and the 18th case is the Minister of Equipment, Transport, Logistics and Water, Mr. Abdelkader Amara. From March 15, the number of cases increases faster (Figure 1). Morocco, therefore, revealed on Saturday, March 14 the suspension of air links with Italy, Spain, Algeria, France, Portugal, Germany, Belgium, and the Netherlands.

[4] 10 Million

[5] https://www.rtl.be/info/monde/international/le-bilan-du-coronavirus-de-nouveaux-morts-en-france-et-en-italie-acceleration-dans-le-monde-mais-ralentissement-en-chine-1200776.aspx

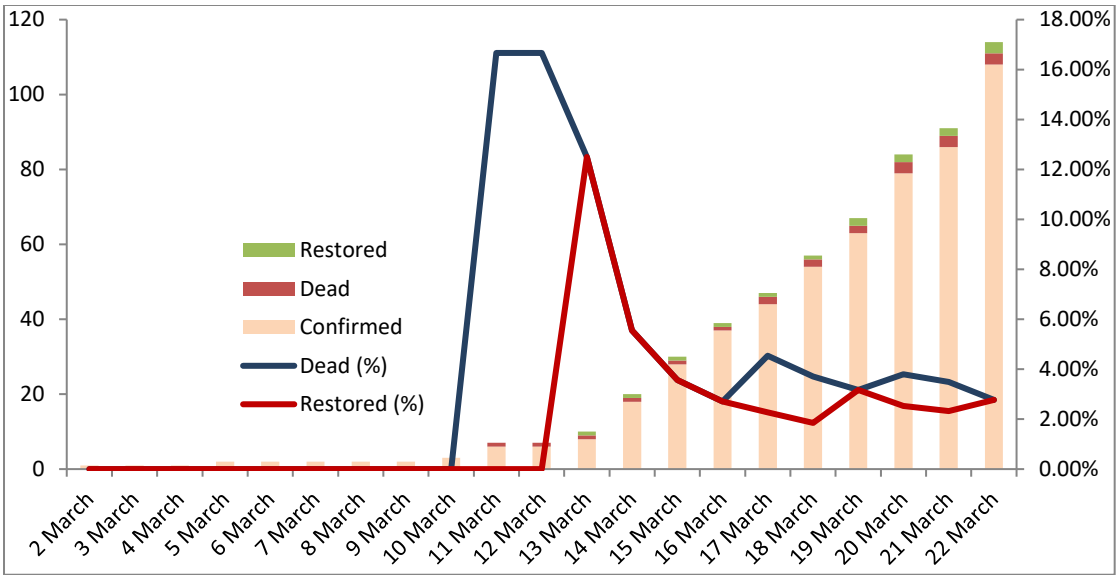


**Figure 1 Propagation of COVID19 in Morocco[6]**

On March 11, Morocco recorded the first death, almost 17% of the total of infected people. The first case was cured on March 13, representing 13% of the number of people infected with COVID19, see Figure N° 1. After twenty days of COVID19, rates of recovery and death people are almost identical.

The corona virus has spread, except for China, around the world through the displacement of a person leaving its territory, which explains why the first step the government is taking is closing the borders.

**How Morocco Mitigate COVID-19:**

Since the registration of the first case (March 2) at the Mohammed V airport in Casablanca, Morocco has started to take measures to screen passengers at its various airports and ports. From March 9 to 22, Morocco implemented measures to contain the spread of the epidemic. Flights to several countries are suspended, but return flights are however authorized. At the same time, maritime links with Spain and France are suspended, considering that European countries represent the main economic partners of Morocco. But public health and health security are now the most important.

On March 12, the Ministry of Habous and Islamic Affairs disseminated the precautionary measures to be taken in mosques, such as:

i. Make people at risk and with low immunity aware of the possibility of praying at home;
ii. Reduce the time of preaching and classes in mosques;
iii. Close the mosques directly at the end of the prayers;
iv. Reinforcement of cleaning and disinfection operations on door handles, taps ...;
v. Closing toilets or removing ablution utensils;
vi. Removal of glasses and other containers used for drinking in mosques;
vii. Removal of prayer clothes made available to women;

[6] Source: Elaborated according to the ministry of health-Morocco, 2020

viii. Ask the faithful to greet each other from a distance without touching each other;
ix. The moussems[7] have also been cancelled throughout the national territory and until further notice.

On March 13, the Ministry of National Education, Vocational Training, Higher Education and Scientific Research (MNE) announces the closure of preschool and nursery school, educational institutions, vocational training and managerial training, and universities, including language centres and schools under the responsibility of foreign missions. The private institutions are also concerned. This closure began on March 16 and will end 'until further notice'. However, these measures must be accompanied by other measures able to ensure the continuation of educations, using modern technology and national television channels. On March 19, the ministry decides to keep a few managers and employees. So, each institution must keep only a few people able to guarantee the continuity of certain fundamental tasks as e-learning.

On March 14, the Ministry of Culture, Youth and Sports announced the suspension of all cultural, educational, sporting and educational activities, and the closure of cinemas, theatres, sports halls, until further notice. The Interior Ministry also announced the ban until further notice of all public gatherings attended by more than 50 people. Company has more than 50 employees are not concerned. On March 16, the interior ministry ordered the closure of many public spaces and public domain facilities. This decision concerns cafes, restaurants, cinemas and theatres, party rooms, clubs and sports halls, hamams,[8] game rooms and nearby grounds of sport.

On March 19, the interior minister declared a state of health emergency and restricted traffic in Morocco from Friday at 6 p.m. until further notice, and declared this as the only inevitable way to keep the corona virus under control. In this regard, the displacement of an individual must be justified by an authorization issued by the local authorities. This minister reveals, moreover, the stop of travel of all passenger transport vehicles, from midnight on March 24.

**Financial Measures against COVID-19:**

Health personnel are the most important asset and the primary resource that the health system must mobilize to create the conditions necessary for sustained improvement in the health status of the population. The human resources situation in Morocco is marked by a significant quantitative and qualitative deficit.[9]

The World Health Organization places Morocco among the 89 countries of the World which presents an acute shortage of medical personnel. Indeed, the number of medical and paramedical personnel providing direct care to patients remains far below the minimum threshold required to guarantee the entire population an adequate supply of services for a lasting improvement in health status. Most medical resources are installed in the regions of Casablanca-Settatand Rabat-Salé-Kénitra where 20% of the population lives. As for paramedical personnel,[10] the distribution of their workforce is fairly uneven between regions.

The health system is unable to absorb all people who will be infected by the epidemic. For this reason, Morocco is rapidly implementing the various measures to limit the damage from

[7] The moussems designate in North Africa an annual regional festival which associates a customary celebration, which can sometimes be religious (often to honor a saint) with festive and commercial activities.
[8] Hamam or Turkish bath is a place of public bathing.
[9] For more detail, see the report of ONDH-Morocco, 2007.
[10] Auxiliary nurses, medical assistants and health assistants, specialized technicians, etc.

COVID-19. Thus, the king of Morocco decided to set up a special fund of 10 billion dirhams[11] to face exceptional health expenses and support the disaster areas. Fortunately, the amount collected has exceeded the amount planned, meaning that all people are engaged against the invisible enemy.

In fine, Morocco declares a one-month state of medical emergency over COVID-19, from March 20 till April 20, implying restricting movements and suspending private and public means of transport between cities. The violation will be punished with imprisonment for a period of one to three months and a fine ranging between 300 and 1,300 dirhams[12] or one of these two penalties. While 'masses of people have defied this procedure in several cities on Saturday night mainly in Fez, Sale, Tetouan, and Tangier', [13] Moroccan people are aware to accept the guidelines of the government and execute the decision of emergency.

**Concluding Remarks:**

In fine, it is very risky to fight against an unfamiliar disease. Morocco and Kerala (a state of India) tried hard to mitigate the spread of COVID19 through a variety of strategies. Their reactions against Corona virus were very stringent even in the initial period. The people who appeared the symptoms of the virus have been informed to stay under home quarantine until the inspection of the medical team and thereafter shift to isolation wards in the public hospitals. The infected are treated under the strict supervision of the medical team. The health facilities in the state are efficiently utilized to mitigate the spread of COVID19. However, they have not been able to devote efforts especially to migrants, refugees and the homeless.

All public functions of Morocco and Kerala are banned, like marriage, religious festivals, and sports events. Educational institutions of both private and public undertakings are closed. Cinema theatre, malls, tourist places, and any other crowded places are also closed. Also, both areas of this study have devoted significant financial funds to overcome this disaster. Importantly, public outreach and campaigns through social media play a significant role in imparting the severity of the disease to the masses. The way to prevent the disease is to inform the people through all possible media.

It is not realistic to compare two countries that have an economic, political, social and cultural difference and, perhaps. However, the human development index, published by World health organization-World Bank, shows that the two countries must attach great importance to human development in their development models (Table 1). They are classified among the worst countries. Also, the number of doctors per 10,000 people is feeble (Table 2).

Although their considerable model in mitigating any communicable disease, Morocco and Kerala must focus on developing two main sectors: Education and Health. China is isolated COVID19 according to the high level of technology and health services.

**Table 1 Human Development Indicator**[14]

| HDI Rank | Country | 2000 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 129 | Morocco | 0.742 | 0.756 | 0.759 | 0.763 | 0.766 | 0.769 | 0.773 | 0.777 | 0.780 | 0.784 |

[11] 934 million Euros
[12] about 140 Euro
[13] For more detail, see http://www.china.org.cn/world/Off_the_Wire/2020-03/23/content_75846513.htm
[14] Source: http://hdr.undp.org, 2014

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 135 | India | 0.648 | 0.678 | 0.683 | 0.688 | 0.693 | 0.698 | 0.702 | 0.706 | 0.710 | 0.714 |

**Table 2 Medical doctors, per 10,000**[15]

| **Year** | 2017 | 2014 | 2013 | 2009 | 2007 | 2004 |
|---|---|---|---|---|---|---|
| **Morocco** | 7.27 | 6.1 | 6.3 | 6.47 | 5.85 | 5.3 |
| **India** | 7.78 | 7.26 | 7.18 | 6.24 | 6 | 5.74 |

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