

How “Triple Lock” COVID Containment Strategy of Police made Kasaragode COVID-19 free!

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Summary:

The first positive Corona Virus case was reported in Kasaragode district on 3rd February 2020. But from 20th March onwards, Kasaragode witnessed a sudden rise in Corona cases and soon it became India's biggest hotspot. In order to prevent rapid spread of the infection, government of Kerala ordered lock-down of Kasaragode district. However, on 23rd March, 19 new positive cases were reported in Kasaragode which was the highest single day rise ever. Government of Kerala realised that the situation in Kasaragode was fast slipping out of control and the possibility of rapid spread of virus appeared real as district Police and local administration struggled to enforce lock-down. Hence government of Kerala decided to depute a senior IPS Officer to Kasaragode as Special Officer COVID with the mandate of enforcing the lock-down and containment of spread of infection. Shri Vijay Sakhare IPS, IGP and Commissioner of Police, Cochin was selected as Special Officer.

In order to contain the spread of the virus, Special Office made a strategy. It is a three phased strategy, named as 'Three Locks' Strategy. The strategy leverages the expertise of the human resource in police department- of conducting surveillance, enquiries and investigations-, the familiarity of area, community policing connect with the people and the disciplined and regimented police personnel. Use of technology and the community policing also play prominent role in the strategy.

Lock-I is for broader restriction of movement of all the people residing in the district. **Lock-II** is for restricting movement of people living in distinct geographical areas which have reported positive cases. These areas were demarcated on a Geographical information system (GIS) and named as COVID Containment Zones (CCZs). All entries and exits were blocked by deploying police personnel. **Lock-III** is targeted effort to keep primary and secondary contact of COVID positive person confined at home. It is achieved by combination of technology and human surveillance.

Innovative technology was used in containing the COVID virus.

Keeping quarantined persons in their homes was the biggest challenge. **COVID Safety App** helped Kasaragode Police in detecting violation of home quarantine by the people. When ever home quarantined persons moved more than 50m from their home, the App sent an alert to Police. Such violators were shifted from home quarantined to institutional quarantine.

In order to provide free medical consultation by doctors and emergency services like ambulances, **“Swaraksha Kasaragode”** platform was launched. More than 25000 person utilised the services of the Platform.

Initially launched to meet essential requirement of the persons residing in COVID Containment Zones, **“Amrutham”**-a home delivery service of Kasaragode Police was extended to entire district.

House visits of Police teams to the quarantined persons proved extremely useful in surveillance and enforcing home quarantine. During these visits, these teams shared informative videos about precautions to be taken against COVID and correct method of observing quarantine with the inmates. **Contact tracing** by Police teams ensured that almost all the persons who have come in contact with a positive person are traced.

As part of Plan-B, **capacity** enhancement was planned by Kasaragode police on 25th March itself. More than 1000 bathroom attached beds in the hospitals and more than 2000 bathroom attached rooms in hotels, lodges and hostel were identified and made ready for being used as **'Make-Shift'** hospitals. Services of 225 doctors and more than 500 paramedical staff were mobilised for meeting any emergency situation. Since Kasargode district had 9 ventilators only, more than 500 Oxygen Cylinders were mobilised.

Continuous **communication** was maintained with the people residing in the district through local print and electronic media channels and social media. Loud and clear message was communicated that our fight is against the Virus and not the people and that we can win the fight together.

With in three weeks of implementation, the strategy returned great results. The containment strategy of Kasaragode Police was applied on 25th March. In first week from 25th to 31st March, 64 new positive cases were reported. In the next week from 1st April to 7th April, 47 new positive cases were reported. The next week results reflected the impact of containment strategy. Only **11 new cases** were reported. Compared to the previous week, it was a remarkable **76%** reduction of cases. The impact of containment strategy can be gauged from the fact that in a period of 11 days after 7th, only 12 cases were reported whereas in 11 days preceding 7th April, 75 cases were reported- an unbelievable **reduction of 84%**. The success of strategy can be gauged from the fact that **it has brought weekly reporting of cases from 64 to barely 5 with in the span of three weeks - a reduction of 92%**. In succeeding three weeks, only 5,4 and 2 positive cases were reported and in last 11 days since 1st May, no positive cases have been reported- which demonstrates the resounding success of the containment strategy. The last Corona positive patient was discharged on 10th May 2020 making Kasaragode district COVID-free.

The interventions in the 'Three Locks' containment strategy are a combination of professional policing techniques and innovative use of technology. It is possible to apply the strategy to any other location or situation as professional policing practices- conducting surveillance, enquiries, investigations and enforcement of order- and technology do not change with place and people.

Though Kasaragode has become COVID-free on 10th May, several new challenges lay ahead. Central and State governments have opened up national and state borders for bringing Indians who are stranded in foreign countries and other states home. Many of them are positive, symptomatic or asymptomatic carriers. They have been asked to undergo mandatory 14 day institutional quarantine or home quarantine. Our experience is that home quarantine is 'No quarantine'. The possibility of these persons spreading infection to other family members and the community is very real.

In Kasaragode, the 'Lock-III' has been scaled up to cover these new returnees. Using professional policing methods, technology - COVID Safety App, Drones etc and community policing, these returnees are put in positive home quarantine so that they do not stay out and spread of infection can be checked. Similarly, institutional quarantine centres are being monitored by deploying police personnel at every floor and using technology.

“Triple Lock”

COVID Containment Strategy of Kasaragode Police

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INTRODUCTION:

The first positive Corona Virus case was reported in Kasaragode district on 3rd February 2020. From 20th March onwards, Kasaragode witnessed a sudden rise in Corona cases. Appreciating the gravity of situation, in order to prevent rapid spread of the infection, government of Kerala ordered lock-down of Kasaragode district.

However, on 23rd March, 19 new positive cases were reported in Kasaragode which was the highest single day rise ever. Government of Kerala realised that the situation in Kasaragode was fast slipping out of control and the possibility of rapid spread of virus appeared real as district Police and local administration struggled to enforce lock-down. Hence government of Kerala decided to depute a senior IPS officer to Kasaragode as Special Officer, COVID-19 with the mandate of enforcing the lock-down and containment of spread of infection. Shri Vijay Sakhare IPS, the Commissioner of Police Cochin was chosen as Special Officer COVID. He along with his team consisting of IGP North Zone Shri Ashok Yadav, SPs Smt Shilpa and Sabu Mathew proceeded to Kasaragode.

Strategy:

The Special Officer and the team reached Kasaragode on 24th March. Immediately after reaching, Special Officer took stock of the situation by taking briefings from the district officials. In order to understand the situation on the ground, Special Officer and the team visited several places in the district. In the evening, they interacted with the field officials and briefed them about the strategy. Officials were also briefed about precautions to be taken by the police personnel while enforcing lock-down. PPEs such as Masks, Gloves and Hand Sanitisers were also distributed to them.

Strategy leveraged the experience of the human resource in police department in conducting surveillance, enquiries and investigations. The familiarity of area, community policing connect with the people and disciplined and regimented structure of police personnel proved extremely useful in effective implementation of the strategy.

It is a three phased strategy, named as 'Three Locks' Strategy.

Three lock strategy is combination of expertise of police human resource in surveillance, monitoring, conducting enquiries and investigations; technology and the community policing.

The "Three Locks"

A. Lock-I:

It was implemented on 25th March.

It is a general lock-down strategy to restrict the movement of people and make them stay at their homes. It was applied to all the persons living in the district.

It uses two pronged strategy of erecting road blocks and intensive domination of the area through mobile patrolling. As part of implementation of Lock-I, Kasaragode district was cut off from the neighbouring state of Karnataka and the adjoining district of Kannur by sealing-off the borders. In order to restrict intra-village movement, the villages in the district were cut-off from each other by putting road blocks. Thus movement of people was restricted to their local villages alone.

In order to ensure that people stay in their homes and maintain social distancing, several techniques were adopted. All the persons stepping out of their homes were stopped at the road blocks. The purpose of their exit from home was ascertained and anyone not having valid reason was either sent back or taken to Police Station. Legal action was initiated against unruly elements and their vehicles were seized. Complete ban on double-riding of the motor cycle was enforced and not more than two persons were permitted to travel in the four wheelers. The mobile patrols apprehended people loitering around, seized their vehicles and initiated legal action against them.



Government had relaxed lock-down norms between 11 AM to 5 PM for providing essential service and facilitating people to purchase essential goods. At 11 AM, long queues were observed at the road blocks. In order to stagger entry of people in the market places, voucher with time stamps were given to people which reduced gathering of people by a great extent. People were asked to buy their essential goods in one go to meet their requirements for at least a few days.

In order to enforce social distancing, foot patrols were sent in market places. They educated shopkeepers and the buyers about importance of conducting essential business while maintaining social distancing. They got circles drawn on the ground, at least two meters apart from each other, so that buyers can maintain social distance from each other. The shopkeepers were advised to keep only one help for conducting business. Both sellers and buyers were advised to wear protective gear while transacting business. The shopkeepers were advised to disinfect shops and surrounding places with bleaching powder and other liquids everyday before opening the shops. Similar advise was given to all public establishments and police tankers were used for disinfecting public places. All the police stations were disinfecting every single day.

The performance of the police parties deployed at the road blocks and in mobile patrols was monitored and measured through personal visits and a set of several proformas. Those units which did not live upto expectation were re-briefed to enhance their performance. Regular debriefing sessions were conducted in the evening to understand the difficulties in the enforcement of Lock-I and methods to resolve them were found.

These measures ensured that with in couple of days, the volume of people coming out of their houses was reduced to almost a minuscule.

B. Lock-II

It was implemented on March 28th.

It is a targeted lock-down strategy to isolate areas which reported positive cases, from the rest of the district. The objective was to prevent social contact of the population having high probability of becoming COVID positive, from the rest of the population of the district.

From 25th March onwards, the geo locations of the COVID positive persons, the Primary and Secondary contacts, the foreign returnee Indians and the home quarantined persons were taken by 80 'house visiting teams' of Kasaragode Police and marked on a Geographical Information System (GIS) by the Cyber Cell Kasaragode. These geo locations were collected through the mobile phones of the 'house visiting teams'. Whenever a team used to visit the residence of Positive, Primary or Secondary contact, home quarantined person or foreign returnee Indian, they used to send the location of that particular house to the Cyber Cell in District Police Office through 'Whatsapp' using 'Maps' or 'Location sharing protocol' in the Whatsapp. Cyber cell collated 'lat-long' of these residences on the Geographic Information System. They also mapped details such as name, age, address, date of arrival, date of becoming positive etc with the geo location on the GIS.

The analysis of data in GIS revealed that all the positive cases and their contacts are located in eleven distinct areas only. These areas were cordoned off from the rest of the district by blocking all the entries and exits and deploying police personnel at these blockades. Only single entry/exit from the area was allowed for the movement of the health officials and emergency medical cases. Extensive Motor Cycle and mobile Patrolling was carried out in these areas to allow minimum movement of people. Drones were deployed to detect gathering of people and criminal proceedings were initiated against persons found loitering without any justifiable reason.

These areas were named as 'COVID Containment Zones' (CCZs) as focus of Strategy was to contain the infection with in a specific locality. According to Micro Plan for containing local transmis-

sion of Corona Virus Disease (COVID-19), issued by Ministry of Health and Family Welfare, Government of India, a geographical area of 3 KM radius around the epicentre will be the 'containment zone'. Based on the mapping of contacts and cases, the containment zone can be redefined. It further states that a 'buffer zone' of an additional 5 KM radius shall be identified around the epicentre.

These CCZs isolated the suspected infected population from rest of the district.



C. Lock-III

It was implemented on March 30th.

It is an extremely focused containment strategy to keep Primary and Secondary contacts confined to their homes.

According to epidemiological studies, an **Index case** can be one or more persons who have communicable disease. Generally, it is the first documented patient in a disease epidemic within a population. They need not be the source of the communicable disease. According to MOHFW, the persons who came from foreign countries and brought infection with them to India are referred as 'Index cases'. **Primary Contact** is a person who acquires a disease through an exposure to an Index case whereas **Secondary contact** is a person who acquires the disease through exposure to Primary contact.

The last international flight had landed in India on 22nd March 2020. If we take 14 days of incubation period, most of the Indians who have returned from foreign countries would have become positive by 4th of April. The Primary Contacts - the family members and friends who came in contact with these positive persons - were at greatest risk of turning positive and transmitting infection to others.

Initially, the exercise of tracing of contacts was carried out by the health inspectors. Under the trying circumstances, they did a good job. But their relative lack of experience in conducting enquiries was reflected in identifying contacts. Since Police personnel have expertise in conducting enquiries and investigation, 30 Police teams led by Inspectors and sub-inspectors were pressed into service for contacts tracing. These teams conducted enquiries on daily basis, used technological means and found out almost all the Primary and Secondary contacts. These contacts were mapped on to the GIS.

In order to keep Primary and Secondary contacts at home, a four pronged strategy was used.

Kasaragode has more than 3000 Primary and Secondary contacts. Some of the them have come in contact with a Corona Positive person who is infected by extremely virulent strain. There are cases in which one person has caused 21 others to become positive and has 121 Primary and secondary contacts. In order to ensure that such contacts remain indoors, static Police guard was deployed at their residences.

Secondly, the residences of the Primary and Secondary contacts were dominated by the Motorcycle beat patrols also - every motorcycle covering 10-12 residences. The motorcycle rider was provided with the list of persons residing in a particular house. In every single visit, the police personnel used to check physical presence of the contacts at their homes and ask about their well-being and requirements. He also demonstrated 'Swaraksha' Kasaragode- a telemedicine platform of Kasaragode Police to the residents. The mobile patrol visited each house at least twice a day.





Drones were put for the surveillance of such houses. A 'drone beat' joining 10-12 residences of Primary and Secondary contacts was created. The inmates were told that they are being surveilled from air.

COVID Safety App was installed in the mobile phones of the Primary and Secondary contacts. Whenever any of the contacts violated home quarantine, Police received an alert. Such person was shifted from Home quarantine to Institutional quarantine. Legal action was also initiated against such violators and the their family members. 631 FIRs were registered for violation of home quarantine and people were shifted to government quarantine.

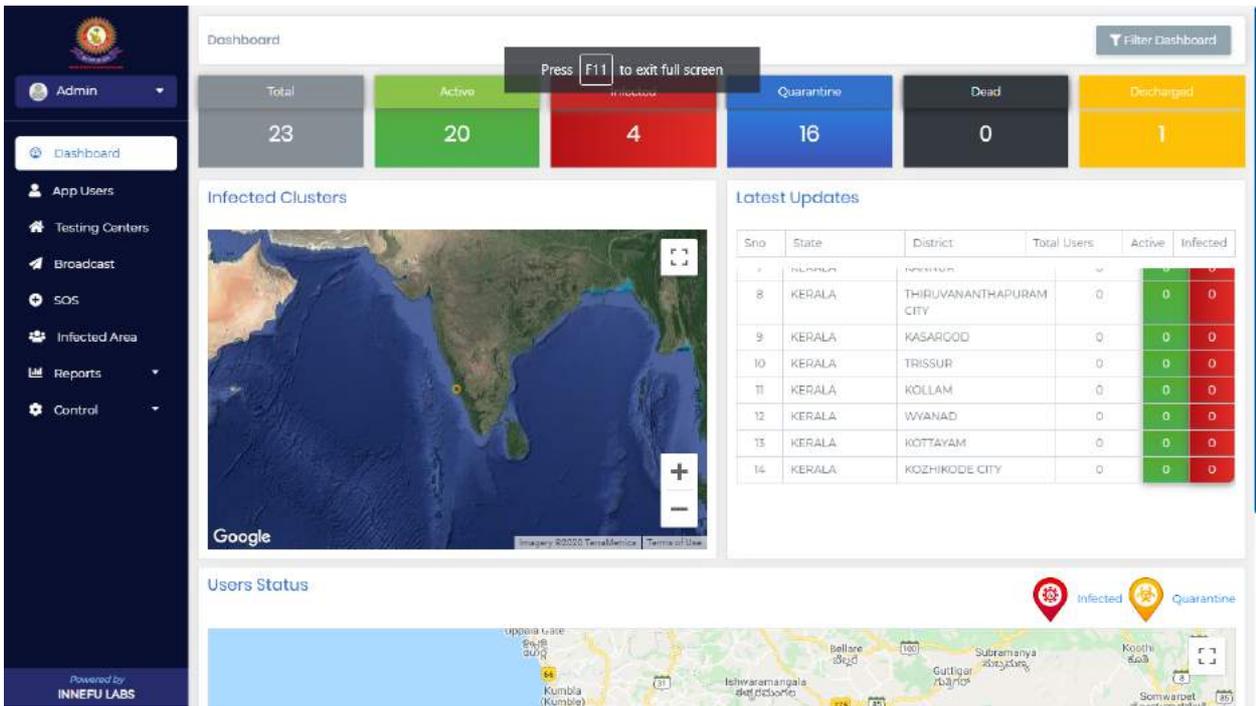
Lock-III ensured that Primary and Secondary contacts remain home at all times. This ensured that they do not violate home quarantine and thus, do not transmit infection to others. By application of Lock-III, 'community spread' was prevented in Kasaragode.

Use of Technology:

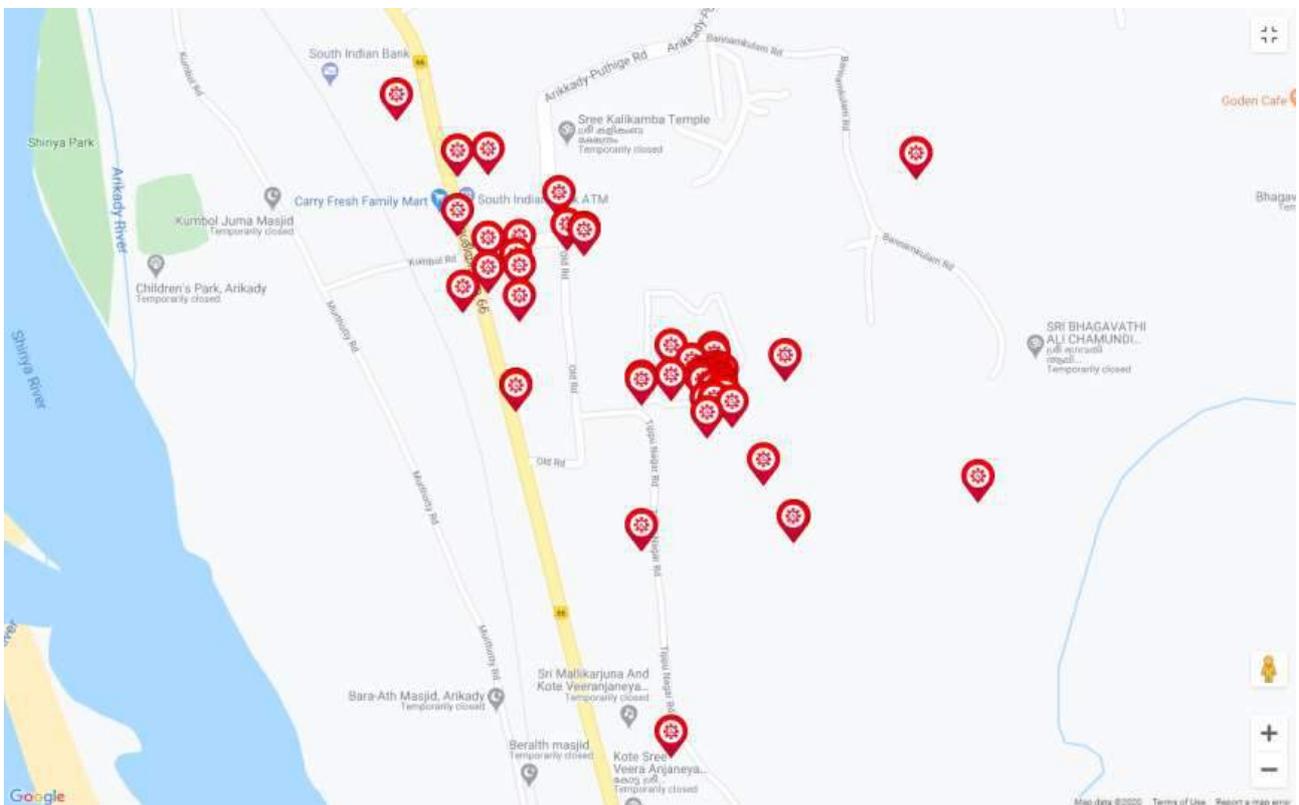
Technology was used extensively for implementation of containment strategy.

A. 'COVID Safety' App - for ensuring Home Quarantine:

One of the biggest challenges in prevention of spread of infection was to keep quarantined persons at home. **COVID Safety App** which tracks the location of a quarantined person and alerts police whenever a person violates quarantine was used extensively. The app was used to track more than 20,000 home quarantined persons which included Indians who had returned from foreign countries and Primary and Secondary contacts. The app was installed with the consent of the quarantined person. The App takes only 'lat-long' data of the quarantined person. In one month of deployment, 5796 violations were detected by the app and more than 300 persons were transferred from home quarantine to Institutional quarantine.



It played very important role in confining Primary and Secondary contacts - who had greatest potential to become positive and infect others- to their homes. By 24th of April, 631 FIRs were registered against Primary and Secondary contacts and more than 300 persons were shifted to institutional quarantine. These details were publicised widely through local media channels to discourage quarantined persons from violating quarantine.



The app was deployed for use on 25th March itself.

B. 'Swaraksha Kasaragode'- Telemedicine Platform:

In order to ensure that people obey lock-down and stay at home, it was important to take care of their essential needs. 'Locked-in' persons, specially quarantined persons, had several medical apprehensions. They needed medical assistance and access to hospital care in case of emergencies. In current crisis, getting doctor for consultation was a biggest challenge as doctors became precious and scarce resource.

In order to provide medical assistance to home quarantined and locked down persons, Kasaragode Police launched '**Swaraksha Kasaragode**' a telemedicine platform. Whenever a person needed consultation with the doctor, he had to just send an audio, video or text message to Police's COVID Control Room. The Control room used to get him connected to the doctor. Similarly quarantined persons could avail emergency services like Ambulances, visit to hospital etc with the help of Swaraksha Kasaragode Platform. More than 25,000 persons used telemedicine-Platform for getting medical assistance.



With this initiative, Kasaragode Police gave a loud and clear message to the quarantined persons that they are locked-out but not alone. Kasaragode Police is with them.

This initiative was launched on 25th itself.

C. 'Amrutham'- Home Delivery Service:



People in COVID Containment Zones were prohibited from crossing the boundary of the Zone. Stricter enforcement of lock-down was carried out in these zones. In order to meet the essential

needs of people residing in COVID Containment Zones, Kasaragode Police started '**Amrutham**' Home delivery Service.

People were requested to send their requirement of essential items to two Whatsapp numbers of Kasaragode Police. Police coordinated with local suppliers and delivered supplies to the doorsteps of the people residing in CCZs on the same day. It ensured that people no longer have to go out for buying essentials reducing the crowding of places in the markets.

'Amrutham' was launched on 28th March. This facility was extended to entire district on 30th March and implemented through the network of the Police Stations.

House-visits by the Police Teams:

In order to ensure that home quarantined persons observe home quarantine properly and take precautions against the virus, 80 teams headed by the officer of the rank of sub inspector were formed. These teams visited 20,000 odd home quarantined persons all over the district. In such visits, the teams advised quarantined persons to stay home. They informed inmates about the safe method of observing quarantine and the precautions to be taken for COVID prevention. They



shared WHO videos with Malayalam voice-over as well.

These teams gathered the geo locations of the COVID positive persons, the Primary and Secondary contacts, the foreign returnee Indians and the home quarantined persons and marked on a Geographical Information System (GIS) by the Cyber Cell Kasaragode. These geo locations were collected through the mobile phones of the 'house visiting teams'. Whenever a team used to visit the residence of Positive, Primary or Secondary contact, home quarantined person or foreign returnee Indian, they used to send the location of that particular house to the Cyber Cell in District Police Office through 'Whatsapp' using 'Maps' or 'Location sharing protocol' in the Whatsapp. Cyber cell collated 'lat-long' of these residences on the Geographic Information System. They

also mapped details such as name, age, address, date of arrival, date of becoming positive etc with the geo location on the GIS.

The teams also demonstrated '**Swaraksha Kasaragode**' telemedicine platform to quarantined persons and briefed them about the services provided by the platform.

They also installed 'COVID-Safety' App in the mobile phones of the quarantined persons with their consent.

These 'house visiting teams' also collected other relevant data from these residences which included, but was not limited to, number of persons living in that particular household, number of bedrooms in the residence, whether a quarantined person stays in a separate bedroom, whether it has attached bathroom, whether the quarantined person eats in his room, whether his room has a TV, whether he comes to drawing room, whether other people in that residence have any contact with the quarantined person etc.

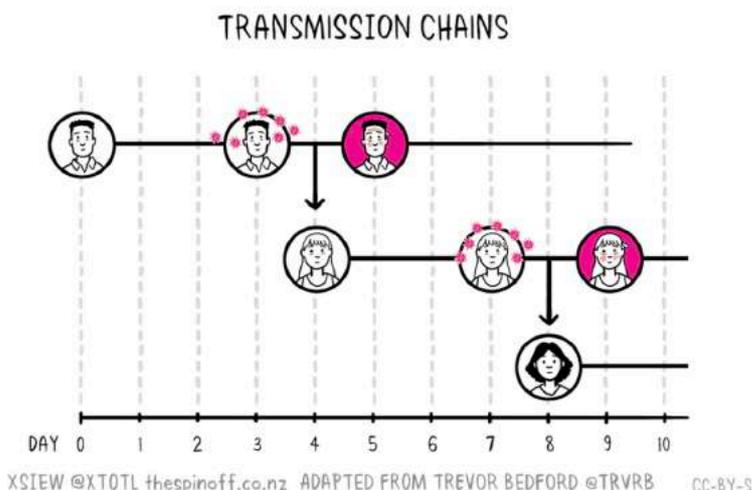
These visits proved extremely useful in ensuring compliance of 'Home Quarantine' by the people and gave a clear-cut message to quarantined person that though they are locked-in, they are not alone; Kasaragode Police is with them.

Contact Tracing:

In public health, contact tracing is the process of identification of persons who may have come into contact with an infected person and subsequent collection of further information about these contacts. By tracing the contacts of infected persons and tracing their contacts in turn, Kasaragode Police aimed at reducing the spread of infection in the population. The goals of tracing are:

1. To interrupt ongoing transmission and reduce spread of an infection
2. To alert contacts about the possibility of infection and offer them preventive counselling or prophylactic care

According to epidemiological studies, an **Index case** can be one or more persons who have communicable disease. Generally, it is the first documented patient in a disease epidemic within a population. They need not be the source of the communicable disease. According to MOHFW, the persons who came from foreign countries and brought infection with them to India are referred as 'Index cases'. **Primary Contact** is a person who acquires a disease through an exposure to an Index case whereas **Secondary** contact is a person who acquires the disease through exposure to Primary contact.



Initially, In Kasaragode, Whenever a person became COVID positive, Health Inspectors used to carry out contact tracing. Under the trying circumstances they did a wonderful job. But due to lack of experience in conducting enquiries, they were not able to trace all the contacts. Since free movement of the untraced contacts could have led to community spread of the infection, 30 Police teams led by the officer of the rank of sub Inspector were given the task of contacts tracing. These teams used their experiences of investigation for tracing almost all the contacts. Technology in the form of use of Call Data Records (CDRs), Internet Protocol Data Records (IPDR), CCTV footage etc was deployed to trace all the contacts of the COVID positive persons.

These teams could increase the list of contacts provided by the DMO by 50%.

Institutional Quarantine:

Those persons who violated home quarantine were shifted to institutional quarantine. The identification was made through COVID-Safety app and the mobile Patrols. Legal action was initiated against the violators and in certain cases against their families as well. Up till 24.04.20, more than 300 persons were shifted to institutional quarantine from the home quarantine.



Capacity Building:

When we reached Kasaragode, we found Kasaragode has only 350 beds in hospitals. Number of doctors and other paramedical staff was also limited. In order to meet unforeseen scenario of sharp rise of positive cases, when number of cases increase in geometric progression, it was essential to enhance capacity of the health setup to accommodate increased number of patients. Hence Kasaragode Police identified more than 1000 beds in private hospitals and 2000 bathroom attached rooms in hotels, lodges and hostels that can be converted into 'make-shift' hospitals. With the help of Indian Medical Association, 225 doctors were identified for managing patients in



make-shift hospitals. With the help of local nursing association, 500 paramedical staff were mobilised for nursing patients in make-shift hospitals. Entire Kasaragode district had 2 ventilators only. In order provide emergency relief, more than 600 oxygen Cylinders were mobilised.

This mobilisation for capacity enhancement was carried out by Kasaragode Police on 25th March itself which ensured that health infrastructure would be able to sustain patients for at least three weeks even if the positive case continue to report at then prevailing rate. This prepared the Kasaragode for meeting the escalated reporting of cases.

Messaging:

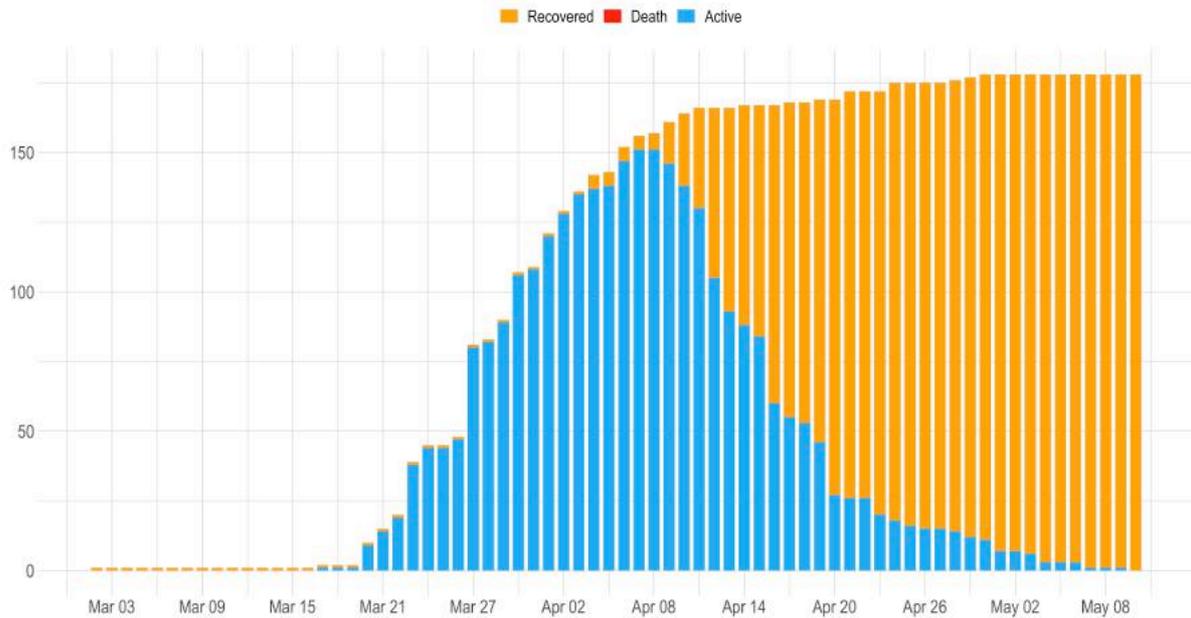
Local electronic and print media, social media and famous personalities were used for communicating with people. Daily evening briefing on local channels and Social media messaging ensured that Kasaragode Police and people were always on the same page. A clear cut message was sent to the people that Kasaragode Police is fighting Virus, not the people and that this fight against virus can be won only if people stay indoors.



Results:

No intervention other than the 'Three Locks' containment strategy of Kasaragode police was applied to the pandemic situation that existed in Kasaragode on 25th March. As a result of these interventions, the reporting of new positive cases dropped sharply. The containment strategy of Kasaragode Police was applied on 25th March. In first week from 25th to 31st March, 64 new positive cases were reported. In the next week from 1st April to 7th April, 47 new positive cases were reported. The next week results reflected the impact of containment strategy. Only 11 new cases were reported. Compared to the previous week, it was a remarkable 76% reduction of cases. The impact of containment strategy can be gauged from the fact that in a period of 11 days after 7th, only 12 cases were reported whereas in 11 days preceding 7th April 75 cases were reported- **an unbelievable reduction of 84%**! The success of strategy can be gauged from the fact that **it has brought weekly reporting of cases from 64 to barely 5 with in the span of three weeks - a reduction of 92%**. In succeeding three weeks, only 5,4 and 2 positive cases were reported and **in last 10 days since 1st May, no positive cases have been reported- which demonstrates the resounding success of the containment strategy**. The last Corona positive patient was discharged on 10th May 2020 making Kasaragode district COVID-free.

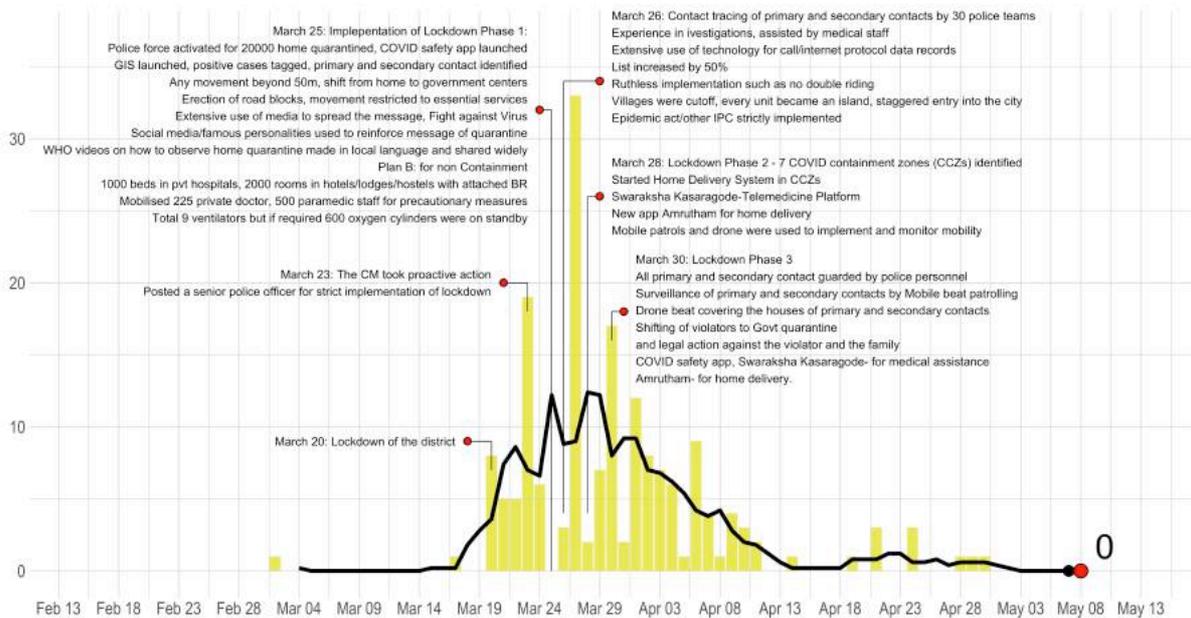
Active, Deaths, Recovered cases in Kasaragod as of May 10



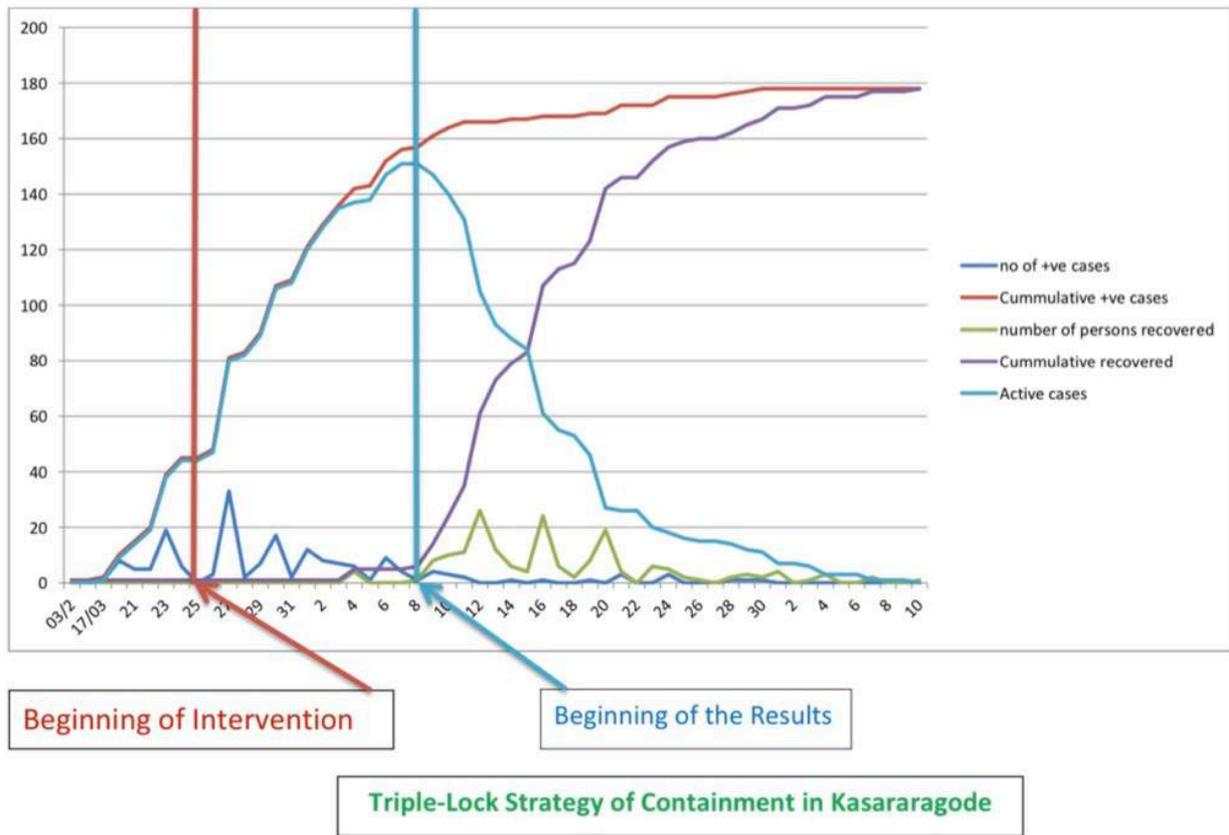
Forthcoming case study by Mudit Kapoor (ISI, Delhi) & Shamika Ravi (Brookings)

Kasaragod Initiative by Kasaragod Police: Triple lock strategy

New confirmed cases, Moving Average (5 day)* as of May 10



Forthcoming case study by Mudit Kapoor (ISI, Delhi) & Shamika Ravi (Brookings)



It is Clear from the graphs that the curve has started flattening after 8th of April when impact of Containment Strategy of Police started appearing in the results, which is in line with two weeks of incubation period for the virus.

The 'Three-Locks' Covid Containment Strategy of Kasaragode Police could succeed in preventing community transmission and bringing down reporting of new positive cases.

New Challenges:

Though Kasaragode has become COVID-free on 10th May, new challenges have appeared since then. People stranded in other states have started returning back to Kerala from other states through land borders. Soon students and others shall return to Kerala in special trains. International flights have started bringing Indians stranded abroad to home. Persons stranded abroad are also being evacuated by the ships. Many of these evacuated persons may turn COVID positive after returning home. Some of them may be symptomatic carriers of COVID-19 and a few may be asymptomatic.

The persons returning through inter-state land borders, including those returning from 'red-zones' have been permitted to undergo 14 day quarantine at their **homes**. The international returnees have been asked to observe mandatory quarantine in **institutional quarantine or in hotels**. It has been our experience that '**home quarantine**' is '**no-quarantine**'. It is very likely that these returnees will violate quarantine and transmit infection to other family members residing with them at their homes and also to the community by venturing out of their homes.

In order to meet these challenges and prevent spread of infection in community, 'triple-lock' strategy has been **scaled up**. The new 'returnees' to Kasaragode have brought under the **umbrella of 'Lock-III'**. The residences of these returnees are being monitored continuously by putting police guards in front of select houses; by covering residences of home quarantined persons with mobile patrols which check physical presence of a home quarantined persons at least twice a day; by deploying drones for surveillance in '**drone-beat**' over these homes and by using COVID-Safety app. Legal action has been initiated against the violators and their family members for endangering the lives of others in the society.

Another challenge is to ensure that those persons who stay in 'institutional quarantine centres' observe quarantine properly and **do not socialise with each other**. If they socialise, in the event of one person turning COVID positive, entire institutional quarantine centre shall get infected. Hence institutional quarantine centres have been put under police monitoring. An officer at least of the rank of Sub-inspector has been made incharge of the centre. He ensures that no persons visits any of the inmates or no inmates goes out at any point of time. Police personnel have been posted in every floor to ensure that the quarantined persons stay indoors and **don't mix** with other inmates. COVID Safety app has been installed in every inmate's phone to ensure that the person does not violate quarantine. CCTV and drones have been deployed at certain places for physical monitoring. Legal action has been initiated against those inmates who were found violating quarantine norms.

Similar system is in place in **hotels as well**. The hotel staff has also been trained in maintaining quarantine and ensuring quarantine of these returnees.

It requires aggressive, determined and meticulous enforcement of containment strategy on day-to-day basis, but the benefits of 'triple-lock' strategy are worth the effort.

Conclusion:

Situation in Kasaragode was turning alarming as reporting of new positive cases rose sharply from March 20th onwards. Hence the government posted a senior police officer as Special Officer COVID for Kasaragode district. He and his team devised a 'Three Locks' containment strategy and applied it to Kasaragode district. The results have demonstrated that the strategy was extremely successful in containing the spread of virus. The success of strategy can be gauged from the fact that it has brought weekly reporting of cases from 64 to barely 5 with in the span of three weeks - a reduction of 92%. In succeeding three weeks, only 5,4 and 2 positive cases were reported and **in last 11 days since 1st May, no positive cases have been reported- which demonstrates the resounding success of the containment strategy**. The last Corona positive patient recovered on 10th May 2020 and Kasaragode district became COVID-free.

The interventions in the 'Three Locks' COVID containment strategy are **a combination of professional policing techniques, innovative use of technology and community policing**. It is possible to apply the strategy to any other location or situation as professional policing practices- conducting surveillance, enquiries, investigations and enforcement of order- and technology do not change with place and people.

