## KERALA CALLING

₹12

prd.kerala.gov.in/publication/keralacalling

FEBRUARY 01, 2022 VOL 42 NO.04





## VIGILANT ON terra firma & CYBERSPACE



It is perhaps a truism that the prosperity of a community is heavily dependent on the security of its citizens. Security, in large measure or in the broadest sense, is the result of an effective law and order system, that preserves existing infrastructure, makes uninterrupted livelihood possible, promotes education and culture, helps businesses thrive, ensures peaceful co-existence of people belonging to different faiths, and so on. Seen from this perspective, the responsibilities shouldered by the police force of any land are as heavy as they are relentless. No amount or degree of praise is ever enough to appreciate the services they perform. And today, the challenges the police face are more numerous and complex, challenges that demand constant vigilance and regular upscaling of skills so that they are one step ahead in restricting mischief-makers, wrong-doers, criminals and terrorists.

It is a matter of great pride to the state government and the people of the region that the Kerala Police have scaled new heights in terms of expertise and achievements, and emerged as the best in the entire country. Over and above performing the traditional duties on the terra firma (boots on the ground) they have started patrolling the virtual world, turned techsavvy enough to penetrate the dark webs of the cyber world, and become airborne by remote-controlling drones – all for the sake of protecting the vulnerable sections of the society, and pre-empting crimes, even while maintaining high standards of accountability and transparency.

The news reports about the establishment of the Cyberdome

and the activities that the Kerala Police execute preventing a range of 'hi-tech' crimes like online abuse, internet fraud, cyber terrorism, data breach, identity theft and so on, and nabbing culprits with the help of the most sophisticated tools – are enough to give an approximate measure of the additional and onerous duties they do in this digital era. Keeping abreast of the times, police stations in Kerala are applying for ISO certification as well. All these have changed the profile and stature of the police force, and this issue of Kerala Calling is an attempt to capture their newest image. An account of their various achievements as well as an almost comprehensive interview with the DGP and state Police Chief Mr Anil Kant IPS, we hope, will give the readers an idea of the trials the Kerala Police face, the feats they perform, and the help they render to keep the state safe.

Additionally, *Kerala Calling* pays a moving tribute to the songbird of India – Lata Mangeshkar – by trying to unveil the secret of her envious popularity, and to crack the mystery of her everlasting allure.

#### S.Harikishore I.A.S

Editor





Of A people's force, indeed!

Pinarayi Vijayan, Chief Minister

09 Important Achievements of Kerala Police

10 We are the best in every aspect-Anil Kant IPS

In an exclusive interview with the Kerala Calling Team (Rajesh C./Anchitha A.), the DGP & State Police Chief, Anil Kant IPS

15 Making women much bolder

G. Sparjan Kumar IPS, City Police Commissioner, Thiruvananthapuram

16 Going beyond traditional policing

Manoj Abraham IPS, Additional Director General of Police (HQ) Nodal Officer, Cyberdome, Kerala Police

- 20 Effective intervention
- 26 Mobile Phones: The crucial Evidentiary Devices

Dr. Sunil S.P., Joint Director (Research), State Forensic Science Laboratory, Thiruvananthapuram

- 29 A glorious example of community policing
  T. Naravanan IPS. City Police Commisioner. Kollam
- 30 Monitoring the virtual world vigilantly

V.P. Pramod Kumar, Deputy Director (Public Relations) Police Headquarters, Kerala Police

- **The Technological Spring** P. Prakash IPS, I.G. South Zone
- 34 POL-APP: delivering manifold services@fingertips
- 36 Existing to serve people

Aadhithya R. IPS, City Police Commissioner, Thrissur

39 Kerala Police Assistant

A.V. George IPS, City Police Commissioner, Kozhikkode

- 40 Taking stringent measures on tackling cyber crimes Ilango.R IPS, City Police Commissioner, Kannur
- 41 The safe use of digital media Anchitha A, Asst. Editor, I & PRD.
- 43 Rahe Na Rahe Hum Mahka Karenge The heady fragrance of Lata Mangeshkar's voice

T.N. Seema

- 45 A musical vine that conquered our hearts
  Ramesh Gopalakrishnan, Music Critic
- **47 The Second 100-day Mission** Staff Reporter
- 49 Economic development through sustainable development
  Niveditha P.S.

Editor : S. Harikishore IAS

Additional Editor : K. Abdul Rasheed

Deputy Editor : V.P. Aswathy

Editor in charge : C. Rajesh

Assistant Editor : A. Anchitha

Circulation Officer : A.C. Abhilash

Design : Anil D. Prakash

Printing : **St. .Joseph's Press**, Vazhuthacaud,

hiruvananthapuram

Photo Credits : **I&PRD Photography Division** 

Kerala Police, FB, Freepik

Views expressed in the articles published in Kerala Calling are not, necessarily, those of the government. Kerala Calling welcomes free expression of divergent views and exchange of ideas through its pages.

#### **ENQUIRIES**

Editorial : **0471 251 8648** Subscription : **0471 251 7036** 

#### TO SUBSCRIBE

Send Rs. 120 as money order to The Director, Information & Public Relations Department, First Floor, Secretariat Annexe, Thiruvananthapuram-695001.

The subscription amount will also be received at the State Information Centre, Press Club Building, Thiruvananthapuram. Phone: 0471 251 8471 and at all District Information Offices.

#### **RESPONSES MAY BE SENT TO MAIL:**

keralacalling@gmail.com facebook.com/Kerala Calling

#### **EDITORIAL MATERIALS**

Articles/features appearing in this magazine are either commissioned or assigned. Neverthless, other articles are also welcome. A maximum of 750 wordage is appreciated. Such items should be addressed to The Editor, Kerala Calling, First Floor, Secretariat Annexe, Thiruvananthapuram



## A people's force, indeed!

#### Pinarayi Vijayan

**Chief Ministter** 



It is a matter of pride for the State that we have a police force that is extremely peoplefriendly and making the State No.1 in the country in keeping law and order.







Interventions and capacity building measures have enabled the Kerala Police to earn many accolades.



ver the last two years, we have faced an extraordinary situation in which we have had to contain the COVID-19 pandemic in such a way that the lives and livelihoods of our people were protected. Yet, we have succeeded in an exemplary manner, thanks to the concerted efforts of various departments of the Government, like Health, Home, LSGD, Revenue, Disaster Management and so on. In making our co-ordinated efforts at the State, district and local levels successful, the Kerala Police has played a commendable role.

They have not only helped in enforcing restrictions on public movement, but also in maintaining law and order. They even made active and creative interventions so as to ease the lives of the public reeling under distress, ranging from delivering medicines and essential items to the sick, to carrying out innovative and comprehensive awareness campaigns related to COVID-19. Our Police force was also able to effectively thwart attempts to subvert the activities to contain the pandemic. As part of that, strong action was taken against the perpetrators of fake news, especially on social media. Their exemplary service during this pandemic clearly demonstrates that the efforts of the Left Democratic Front Government

to modernise Kerala Police and to transform them into a truly people's force over the last six years, have borne fruit.

Since 2016, there has been an unprecedented development in the technical capabilities of Kerala Police. This has enabled them to prevent crimes, and improve investigations. A number of measures have been put into place to check the growing instance of cybercrime. Cyberdome is the most important project in this regard. It has taken up the task of acquiring the technological excellence required to provide cyber security as well as coordinating the activities related to it. Kerala Police Assistant Chatbot Service is a new initiative implemented through Cyberdome, by the Kozhikode City Police, which helps the public to submit complaints hands-free, using Google Assistant.

The Drone Forensic Lab and Research Centre of the Kerala Police that operates under the Cyberdome came into existence in August last year. The forensic lab's activities include forensic testing to determine the characteristics of different types of drones, understand the device's memory capacity, software and hardware capabilities and analyse operational history. It also conducts research to build new types of drones to meet the emerging needs of our police force. Another important service recently launched is the Cyber Financial Fraud-Call Center. It has been set up to receive and process complaints about internet-based financial frauds. The 24-hour centralised call centre operates under the Central Government's Citizen Financial Cyber Fraud Reporting and Management System.

Kerala Police's citizen service portal has been improved so that people can easily access a number of services such as filing complaints at police stations, obtaining copies of FIRs, police clearance certificates and permission to use loudspeakers. It can also be used to submit insurance claims in case of accidents. The services are also available on mobile phones through the Kerala Police's mobile application, Pol-App. Grapnel 1.0, a software to investigate crimes on the Dark Web, which has been developed through a Hackathon, further enhances the technical capability of the Kerala Police.

Such innovative interventions and capacity building measures have enabled the Kerala Police to earn many accolades. Cyberdome is the first law enforcement agency in India to receive the ISO 27001 certification. It has been receiving the certification consecutively for the last four years. Neendakara Coastal Police Station has received the Kerala State Biodiversity Conservation Award from the State Biodiversity Board, for its biodiversity conservation activities in the coastal areas for the past five years.

Of late, it has become a people's force, thanks to the Government's interventions.

The State Forensic Science Laboratory has been recognized as an accredited body for examining electronic evidence. This is an important accomplishment as only five forensic labs in the country have been approved previously.

The Social Media Division of the Kerala Police has received the National e-Governance Award instituted by the Central Government for innovative ideas and initiatives in the field of e-Governance, for the COVID-19 campaign activities carried out using communication and information technology. The official Facebook page of the Kerala Police has 18 lakh followers, making it one of the most followed State police force pages in the world.

Over the last 6 years, Kerala has been repeatedly adjudged as the State with best law and order situation in the country. Kerala has remained as the only State in the country, in which not a single instance of communal riot occurred, despite orchestrated efforts to incite it. The contributions made by the Kerala Police in maintaining Kerala as a peaceful and secular State needs special mention. It is in such a model atmosphere that the developmental and welfare efforts of the LDF Government could continue unabated. By performing their duties in such a way that the State of Kerala could get several recognitions, the Kerala Police has also been acknowledged -SKOCH awards, FICCI's smart policing awards, Cops Today International award, Security Watch India award etc. - time and again, for their contributions which have protected the lives and secured the livelihoods of Keralites.

It is a matter of pride for the Govern-







ment of Kerala that the Kerala Police is one of the best police forces in the country. Of late, it has become a people's force, thanks to the Government's interventions. Our aim is to improve on any shortcomings and enable the Kerala Police to achieve greater heights, in the service of the people.

#### Important Achievements of the Kerala Police



- Pink Protection Project has been introduced to address issues specifically related to safety and security of Women & Children in Public, Private and Cyber Spaces. Officers are given special training to handle such complaints effectively. 35 motor bikes and 20 bicycles are allotted for this project.
- KAP 6 Battalion started functioning at Kozhikode Rural with 113 posts including 100 Police Constable Posts.
- THUNA The Hand You Need For assistance is an initiative of ICT wing of SCRB for providing services and information to citizen through portal. THUNA is intended to act as a helping hand to general public. Users will be able to login and download FIRs, raise complaints/service requests and know its processing status.
- State Forensic Laboratory has been awarded with the Examiners of Electronic Evidence achievement on 05.11,2021.
- Chief Minister has inaugurated 14 new buildings including various Police Stations, Child Friendly Police Stations, Women Police Barracks and training centres.
- Cyber dome was given ISO Certificate on account of its outstanding performance in monitoring Cyber crimes.
- The Kollam Neendakara Coastal Police Station has won the Biodiversity Award instituted by the Kerala Forest and Wildlife department for their green initiatives.
- Muttom Police Station in Idukki District has received ISO 9001:2015 certification for excellence in prevention and detection of crimes, maintenance of Law & Order, establishing public peace and tranquility and other policing activities in the jurisdiction of the Muttom Police Station.
- Kerala Police project Social Media Cell COVID initiatives has been awarded Gold under category 6 – use of ICT in the management of COVID 19 of the Award scheme of the National Awards for e-Governance 2020-2021.
- Mararikkulam Police Station has become the first police station in Alleppey to receive the ISO certification award for their operational excellence and the activities conducted along with Health department during the time of COVID 19.
- Koratty Police Station in Thrissur Rural has been awarded ISO 9001:2015 certification for excellence in prevention and detection of crimes, maintenance of law and order, establishing modern facilities and amenities for the welfare of the public and also promoting green protocol, agriculture, education and other support services.
- The Skoch Award is the highest civilian honour in the country

- given by an independent body. Three projects of Kerala Police Virtual Q, E-VIP and WhatsApp System has won the award in 2019. Kerala Police bagged the SKOCH Gold award of police and Emergency services for the rescue and relief operations during the Kerala Floods (Jalaraksha -2018). The Student Police Cadet Program, HOPE Project and Pink Police Patrol project have won the SKOCH order of Merit Award in 2018.
- The Kerala Police bagged first rank in the All India Board Exam for Fingerprint Expert conducted in the year 2018 by the National Crime Records Bureau, New Delhi. A Finger Print Searcher of State Crime Records Bureau, V R Rajani Raj has won First Rank.
- The Janamaitri Police Project being implemented by the Kerala Police was selected for the Police Excellence Award for 2017, instituted by a journal COPS Today International, published by Foundation for Research.
- The Dog Squad of the Kerala Police has received silver medal in the Police Duty Meet held in Chennai. Vineesh V R of Pariyaram Police Station in Kannur has got silver medal in lifting and packing session in 2018.
- Valapattanam Police Station in Kannur has been adjudged as one among the first 10 best police stations in the country in the year 2018. This was based on a research and study conducted by the Ministry of Home Affairs, Government of India.
- The Student Police Cadet Project developed by the Kerala Police has been selected for implementing in all states and union territories in India. Union Minister for Home has made an announcement to this effect in Hariyana on July 21, 2018.
- The prestigious FICCI award for smart policing has been given for the Counter Child Sexual Exploitation Centre and for the Emergency Response Support System of Kerala Police.
- The Kollam Coastal Police Station has won the Vanamithra Award for Kollam district, instituted by the Kerala Forest and Wildlife department for their green initiatives.
- Chakkarakkal Police Station in Kannur City has received the ISO certification award for its operational excellence in law & order, crime prevention, VIP Security etc.
- e-VIP application is an innovative project which has replaced all physical tapal system of Passport Verification and transformed into a complete paperless mode. The police verification process for passports that used to take up to 20 days has now been reduced to four days in several districts following the implementation of e-VIP, an online police platform.

# We are the best in every aspect

Anil Kant IPS, DGP & State Police Chief



In the last six years, the Kerala Police have undergone tremendous changes, and incorporated the state-of-the-art technology for preventing as well as investigating crimes. With many a feather in the cap, the force is rated as one of the best in the country and this recognition has boosted its spirit and efficiency.

The Kerala Police give utmost importance to women's safety and encourages the involvement of the community in making Kerala the safest state in the country to live in. A host of programmes are on the anvil to ensure the law and order machinery in the state runs on well-oiled wheels.

In an exclusive interview with the Kerala Calling Team (Rajesh C./Anchitha A.), the DGP & State Police Chief, Anil Kant IPS speaks in detail about the various activities and measures of the Kerala Police that ensure the protection of lives and properties of the people of Kerala in the most effective manner.

The Kerala Police have a reputation for being one of the best-managed state police forces in the country and the State is ranked one of the best in terms of maintaining law and order. Can you brief the journey of the State Police in achieving such an enviable position in the country?

Since the formation of the State in 1956, the Kerala Police have progressed into a highly professional, responsive, citizen-centric and technologically advanced force. The Kerala Police pride itself on being able to provide the highest quality of policing services to

The Kerala Police pride itself on being able to provide the highest quality of policing services to its citizens through the skillful management of law and order and crime detection and prevention. its citizens through the skillful management of law and order and crime detection and prevention. The policing parameters which have enabled this achievement are the high levels of responsiveness of the force to public calls and complaints; commitment to the law in letter and spirit, infrastructural assets, a well- trained and continuously updated force that acts promptly without fear or favour, and a host of social/community policing programmes which form the bedrock of core policing in the State. The stellar position occupied by the Kerala Police have been aided by various factors like the existence of an excellent, well maintained fleet of vehicles that provides mobility and low response time; a deep commitment to democratic constitutional values and downtrodden sections imbuing all police actions with humaneness and finally, several initiatives that have combined policing objectives with public needs, taking the police to the gates of the citizens and occupying a special place in their lives.

It is a well-known fact that the Kerala Police have become a beacon of light by introducing several innovative reforms and schemes in the Department. What is your vision regarding the performance of the Kerala Police in this backdrop?





The Kerala Police have had several feathers in its cap as far as special schemes and projects are concerned. Apart from the legally mandated Janamaithri Suraksha Project that has enshrined public spiritedness into every police action, the Kerala Police cater to the special needs of various vulnerable groups like women, children and senior citizens through several tailormade, targeted and award-winning interventions. A few examples include the CHIRI helpdesk to provide emotional support and psychological counselling to the needy children; Prasanthi helpline for the senior citizens in need; self-defense training for women; house visits; Pink Patrols for preventing street crime against women; and cyber-crime prevention through Cyberdome, Dark Net Monitoring Lab, Counter Child Sexual Exploitation Unit etc. From Financial fraud to traffic streamlining, there is no aspect of modern-day policing that has been left out of the ambit of Kerala Police's competency. There is a dedicated StoP Banking Fraud Division and an Integrated Digital traffic Management system, among other initiatives. The Social Media Cell of Kerala Police uses social media platforms in an extremely engaging and creative way to convey policing concerns and messages to the public through videos, memes etc. Hence, safety and security of the citizens have been the topmost priority of Kerala Police and various innovations over time have helped in the steady attainment of this goal.

#### Does our State have the lowest crime rate as compared to other states in the Country?

Kerala's unique policy of free registration of crime cases has often resulted in misleading statistical conclusions like Kerala having an unusually high crime rate. This is far from the truth. In actuality, the high crime figures point to a milieu where cognizance is taken for every criminal offence, no complainant is being turned away and zero burking of crime. It highlights the low tolerance threshold the State Police

has for crime, and the speedy legal action that is immediately initiated once a crime is reported. Kerala has undoubtedly one of the most effective prosecution practices in place relative to other states of the country, with very high rates of registration, final reporting and conviction of cases. This has resulted in citizens perceiving Kerala to be a very secure state that guarantees protection of life and property of its inhabitants.

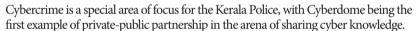
In the process of prevention, investigation

#### and finally prosecution of crimes, how far the Kerala Police has advanced using the latest technologies?

The Kerala Police have emerged as a cutting-edge player in the use of technology to aid and advance basic policing. We have to our credit several pioneering and award winning digital and cyber initiatives like Cyberdome, CoCoon conference, Dark Net Monitoring Lab, Hackathons, Stop Banking frauds division etc. Apart from the everyday use of technological interfaces to streamline policing, like extensive use of video conference facilities, e-challans for traffic offences, electronic verification interface for passport applications, the Kerala Police have also ensured that digital evidence is effectively used in the investigation of cases. Mobile location tracking, call details, tower dumps have helped the Kerala Police crack many a case, and also secure foolproof convictions in many serious offences. Our officers, true to a professional force, are continuously trained in the collection and preservation of digital evidence.

The Kerala police have accorded top priority to the issue of women's safety. To this end, various schemes and projects, now consolidated under the umbrella of the "Pink Protection Project" are in existence.





Women in Kerala are highly educated and capable of accomplishing their goals. What can you say about the presence of women in the Department for the last six years? Is there any steady growth in their presence in the Force since then? What changes can it bring to the entire force?

Kerala, with its high social development indices, occupies a covetable position in the country for its favourable sex ratio, high literacy and women's empowerment. This has found a mirror in the police force as well, with gender neutrality being a highlight. Kerala has the country's first women's police station which was started in Kozhikode in the 1970s. Kerala Police today boasts of an exclusive all- women battalion. Women commandoes are a part of the force as well. Women officers are posted in every single police station, making the police station both inclusive as well as a conducive place for women and minors who visit the station for various purposes. Women's helpdesk exists in every station, which is managed by the female personnel there. Women, who are arrested or are accused in a case, are escorted by women personnel. Kerala scores well on the human rights index, and the adequate presence of women personnel can be duly credited for that. Of course, attaining the ideal gender representation in the force is a work in progress, and given the current trends, will continue in full earnest in the years to come.

The dowry related harassment became a matter of discussion in recent times. What are the stringent measures and actions taken by Kerala police in light of this?

Social evils like dowry harassment and related incidents are undoubtedly a cause of grave concern for Kerala. It jeopardizes the safety of women and tarnishes the State's otherwise good reputation in matters of women's welfare. The police have recognized



this, and launched a multi-pronged strategy to address the issue in the best possible manner.

Helplines like the Women's helpline, Aparajitha Online etc have been launched as exclusive hotlines for women to report domestic violence, abuse and other crimes. Pink Patrols focus on women's safety in public spaces, while also responding to emergency calls of domestic violence. A State Women's Cell, headed by an SP rank officer looks into petitions by women. Every district has its own dedicated Women's Cell. Women Police stations are also in existence. The various women safety initiatives of Kerala Police have now been clubbed under the umbrella of Pink Protection Programme. Recognizing that dowry related incidents are as much a social problem as a criminal offense, the State social media cell also took the lead in enlightening the public by launching a digital campaign on the evils of the dowry system.

#### What are the novel initiatives introduced by the Department to ensure the safety of women? Especially to the women working in various fields?

The Kerala police have accorded top priority to the issue of women's safety. To this end, various schemes and projects, now consolidated under the umbrella of the "Pink Protection Project" are in existence. Pink Patrols, exclusively managed by women police personnel have been introduced in various cities in Kerala. These are womendriven well-equipped vehicles with women officials patrolling the busy public areas

Recognizing that dowry related incidents are as much a social problem as a criminal offense, the State social media cell also took the lead in enlightening the public by launching a digital campaign on the evils of the dowry system.





of the city while also responding to emergency calls from women in need. There are exclusive helplines for women like the Pink Police helpline 1515, Aparajitha helpline, 112 etc. Aparajitha online is an exclusive platform for women to send their petitions related to domestic abuse and other violence. In addition, the Kerala Police have instituted Pink Beats operating with special shadow teams to prevent and detect eve teasing incidents on transport buses, trains and areas in the vicinity of higher educational institutions. Exclusive motor cycle patrols are also working effectively in the state. The Kerala Police have also conducted a record number of self defence training programs in all the districts to instill confidence in women to ward off any physical aggression they might face. Besides these, cyber capabilities of the force have been augmented to help the force to swiftly tackle cases of cyber crime against women.

#### Police training is one of the prime aspects in the administration of the State police. What are the novel initiatives taken to improve the quality of training in the Force?

No police force can be in sync with international best practices and advancements unless there is a systematic, regular system of training. Capacity building is an integral component that makes the force relevant to the times. The nature, complexity, needs of the society, expectations from the police, technical aspects, legal issues etc. are in a constant state of dynamic evolution, and therefore necessitating periodic refresher training for the force. We have excellent indoor and outdoor training facilities at the Police Training College, Thiruvananthapuram and Kerala Police Academy, Thrissur. All the ranks, from constables to the level of ADGPs, are trained in various aspects of policing, including social and digital. This is a continuous process. We have refresher training programs for those who get promoted to undergo in-service trainings. Basic recruitment training for new recruits is important, consisting of basic professional ethos which helps them to serve the society well. We keep on updating

the training curriculum by including new topics and re-working all the latest developments in policing, so that the quality of training keeps pace with the new emerging challenges. The Kerala Police Academy is recognized as one of the best training institutes in the country. In-Service training programmes are conducted in collaboration with the Institute of Management in Government (IMG), Bureau of Police Research and Development (BPR&D), Data

Security Council of India, Wildlife Crime Control Bureau etc. KEPA has introduced Blended Training Methodologies (combining role play, videos, moot courts, crime scene reconstruction along with traditional classroom lectures), THINK auditorium (the largest Smart classroom in India with a capacity of 1000 persons), Smart classrooms, Counter Insurgency Training Centre, and various digital platforms like KEPA E-learning system, Digital Training Management System and Digital Knowledge Management system. There are driving simulators with different models like Differential system, Steering System, gear system, clutch assembly system etc. The Academy also has advanced Weapon Simulator with four different types of weapons. Further, the Academy boats of a jungle trail running track, an IED Training Park, an Indoor Stadium, and a Gymnasium. MoUs have been signed with various Universities like University of Calicut, National University of Advanced Legal Studies, Mahatma Gandhi University, Cochin University of Science and Technology.

Kerala can be rightly considered a pioneer in introducing community policing in India.





Kerala can be rightly considered a pioneer in introducing community policing in India. Community policing in Kerala has been legalized by introducing a specific section in the Kerala Police Act. The Janamaithri Suraksha Project of Kerala Police encompasses house visits by beat constables utilizing Smart phones and GPS technology. Community policing has been widened to introduce schemes that cater to the myriad needs of various sections of society, which results in bringing the police and public closer in the larger aim of ensuring safety and security. Some of these schemes include the enhancement of coastal security, creation of responsible future citizens through today's students (Student Police Cadet program), improving the lot of the tribal population, welfare of senior citizens, improving traffic awareness, spreading digital surveillance to rural areas, security of residential and commercial areas, identifying missing children, railway security, highway security etc.

Hence, community policing has been seamlessly blended into the core policing of the State, resulting in various positive spinoffs like gathering vital intelligence from the public, disseminating awareness to curb drug abuse; timely police intervention in domestic conflicts and other disputes which could result in potentially grave crimes; helping marginalized sections of society in various ways; spreading legal awareness about various issues like child marriage, POCSO Act, dangers of social media and safe use of internet; monitoring the movements of migrants and floating population, among other things.



## Making women much bolder

#### G. Sparjan Kumar IPS

City Police Commissioner. Thiruvananthapuram



Policemen are the group of officials who know every nook and corner of their jurisdiction. They are also the ones who understand the problems of the people under their respective stations.

#### **Self-Defense Training Programme**

Self-defense training is a joint venture of Kerala Government and Kerala Police to enhance the safety of women and children. The project was introduced in the year 2014 and officially inaugurated on 5th July2015 at Womens College. After that training was imparted to the selected Women Police officers, Kudumbasree workers and Nirbhaya Volunters. The training equips the trainees to be self-protected in unexpected attacks against them. The training module consists of 20 hrs includes awareness of the surroundings and threats in the society, mental preparation to avoid victimization, legal provisions for the women safety, police assistance facilities, medical aid etc. and also providing practice of effective and simple techniques for surviving in physical attacks. The basic awareness is given by the trained police team by visiting schools, colleges, residents associations, offices etc and the expert physical training on self-defense training is being provided at the state/ District Centre situated at the Cantonment Asst. Commissioner Office Building, Statue. The center fully equipped and started functioning from 28.03.2019. The police deputed four experienced Women trainers from Police Department Namely Jayamary, ASI(G) of Police, SulfathBeevi, SCPO(G), Athulya. VJ, CPO and Aneesban, CPOwith a view to conducting efficient and successful training programs in and around Thiruvananthapuram City at different venues.

In Thiruvananthapuram City, 228 classes conducted at school level, and 44776 students were trained and 130 classes conducted in College level and 35664 students were trained at college

level and 594 classes were conducted in Residents' Associations and other institutions and 60992 persons were trained till date.

#### Major demonstrations on self defense training programme

- 1. TRADE FAIR AT MUMBAI 2015
- 2. INDIA INTERNATIONAL TRADE FAIR AT DELHI 2016
- 3. ONAM VARAGHOSHAM 2016
- 4. SPC STATE CAMP DEMOMSTRATION 2016
- 5. INTER NATIONAL TRADE FAIR AT MUMBAI 2017
- 6. INTER NATIONAL TRADE FAIR AT CHENNAI 2017
- 7. TRADE FAIR AT BANGLORE 2017
- 8. INTERNATIONAL CELEBRATION AT RAILWAYS AT TRIVANDRUM 2017
- 9. SBT ZONAL OFFICE 2017
- 10. DEMONSTRATION AT TECHNOPARK 2017
- 11. KARSHIKOTSAWAM 2017 AT PUTHARIKANDAM 2017
- 12. DEMONSTRATION AT SANGUMUGHAM 2017
- 13. GOVT. SECOND CELEBRATION AT KANAKAKUNNU 2018
- 14. STATE SCHOOL KALAMELA AT THRISSUR 2018
- 15. GOVT. THOUSAND DAY CELEBRATION AT CENTRAL STADIUM 2019
- 16. WOMENS DAY CELEBRATION, RAILWAY AUDITORIUM 2019
- 17. DEMONSTRATION AT TECHNOPARK 2019
- 18. DEMONSTATION AT THAMPANUR KSRTC TERMINAL 2019
- 19. AZADI KA MAHOTSAW, VELLAR 2021

#### Major institutions in which classes conducted

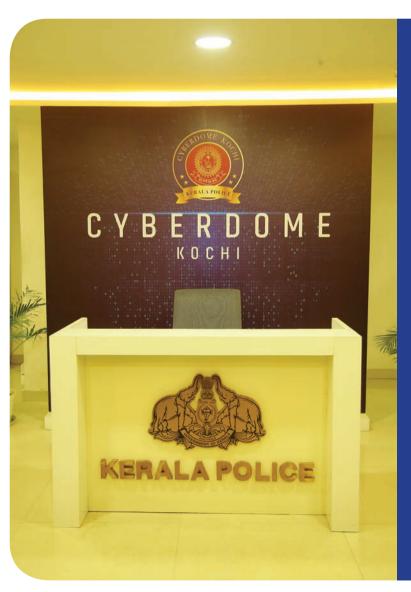
- 1. SBT
- 2. RESERVE BANK OF INDIA
- 3. GEOLOGICAL SURVEY OF INDIA
- 4. THIRUVANANTHAPURAM COLLECTORATE
- 5. KARSHIKA COLLEGE, VELLAYANI
- 6. UST GLOBAL
- 7. TATA CONSULTANCY
- 8. TATA ELXI
- 9. INFOSYS
- 10. COASTAL AREAS OF THIRVANANTHAPURAM UNDER TSS UNIT
- 11. NISH
- 12. DEAF & DUMB SCHOOL JAGATHY
- 13. NIRBHAYA HOMES
- 14. LOURDE MATHA COLLEGE, KUTTICHAL
- 15. VSSC, THUMBA

During the time of pandemic season the training programme has been conducted through online medium and more than 400 women and children were attended through the online awareness sessions conducted through the virtual platform.

# Going beyond traditional policing

#### Manoj Abraham IPS

Additional Director General of Police (Headquarters) Nodal Officer, Cyberdome, Kerala Police





Cyberdome is a technological research and development centre of Kerala Police Department conceived as a cyber centre of excellence in cyber security as well as technology augmentation for effective policing. It envisages as a high-tech public-private partnership centre of collaboration for different stakeholders in the domain of cyber security and handling of cyber crimes in a proactive manner. One of the main objectives of the Cyberdome is to prevent cyber crimes through developing a cyber threat resilient ecosystem in the state to defend against the growing threat of cyber attacks by synergizing with other departments and nodal agencies of the state.



ncreasingly, now a day it is observed that cyber criminals are frequently exploiting network vulnerabilities, terrorists are using the Internet for information exchange and communication. Online sexual violence and child sex abuse imagery, online frauds, terrorist activities, data loss and data breaches and identity theft as well as defacement are also common. The dark nets and cyber warfare are emerging areas of cyber threat. Hence a threat in any form in this cyber space is always a matter of concern for a law enforcement agency. Two major challenges to the law enforcement include jurisdiction issues and discovering the identity of a cyber-criminal. Since the world is ever more dependent on the information and communications technology, the Kerala Police is supposed to deal with crimes unheard of a decade earlier. The issue of cyber security needs to move beyond traditional policing activities and requires a different outlook to deal with technology. To ensure effectiveness and coordinate response in tackling the emerging cyber security threats prevailing in the state, a technology centre is required to foster the capabilities and expertise of the Kerala Police as well as to develop strategies to deal with this dynamic challenging environment of technology. Cyberdome is a visionary initiative of the Kerala Police to curtail and fortify the notoriously widespread cyber menaces from various

towards our cyber space

#### **Major Divisions of Cyberdome**

- 1. Cyber Intelligence: Cyberdome has a key role in providing insights for cyber intelligence by tracking and analyzing the activities of the cyber world. Social media analytics, anti-piracy measures on the internet, virtual policing, monitoring of online sex rackets and countering cyber terror activities are the key focusing areas.
- Cyber Security: Primary focusing area of Cyberdome is cyber security as
  the protection of departmental systems, networks and data in cyberspace.
  Cyberdome is to provide continuous attention that requires for protecting
  sensitive government and personal digital assets to safeguard national
  security.
- 3. Incidence Response: Cyberdome is engaged with incidence response activities such as identifying the perpetrators of attack, assessment of damage and taking adequate steps to minimize the loss by using tools, techniques and resources at our disposal. Objective is to detect and react to the computer security incidents.
- 4. Cyber Forensics: Cyberdome is setup with a cyber forensic division to provide technical support for investigation teams dealing with cyber crimes which involve scientific processes of identification, seizure, acquisition, authentication, analysis, documentation and preservation of digital evidence.
- 5. Research & Development: Cyberdome is aimed to play a major role in the area of cyber security as well as cyber threat resilience research by collaborating with academic partners. Catering the technological advancements for Police to increase the effectiveness of the policing is another objective of the centre.
- 6. Training & Awareness Creation: Cyberdome is holding the responsibility of keeping the police personnel in touch with the latest developments and trends in cyber world. Cyberdome is also designed to engage and educate public through events and initiatives with the goal of raising awareness about Cyber security.
- 7. Counter Child Sexual Exploitation Cell: To ensure protection of children from online sexual abuse and to launch a concerted effort to prevent and detect online sexual abuse of children, a special team designated as Kerala Police CCSE team had been constituted and a sub unit of the same is functioning at Kerala Police Cyberdome.
- 8. Consultancy & Service: Cyberdome proposes to offer Consultancy and Services in cyber security domain with joint ventures of private companies in a paid service model.

criminal sources and dimensions



### Major initiatives and achievements

- 1. Social Media Monitoring:
  As part of surveillance over
  the cyberspace, Kerala Police
  Cyberdome regularly conducts
  analytics on various Social
  Media platforms. Reports in
  this regard with actionable
  intelligence are submitted to the
  authorities on daily, weekly and
  fortnightly basis.
- 2.VAPT Analysis Regularly conducts VAPT (Vulnerability Assessment and Penetration Testing) on all major Government websites and reports the vulnerabilities to the concerned departments for mitigation.
- 3. Training on cybercrime investigation: Cyberdome is holding the responsibility of keeping the Police personnel in touch with the latest developments and trends in cyber world and to get them trained in latest Cyber investigation techniques. Cyberdome is also designed to engage and educate personnel through events and initiatives with the goal of raising awareness about Cyber security and Cyber Safety. Exclusive sessions for investigating officers

on Online Financial Fraud investigation and mitigation are also been conducted sate-wide in association with the RBI and the Banking fraternity.

- **4. Kid Glove:** 'Kid Glove protecting children in cyberspace' is a cybersecurity workshop being organised by Kerala Police Cyberdome to spread awareness among school students, teachers and parents about cybersecurity. The event includes digital forest workshops and awareness classes on various subjects concerning cyber safety. The workshop aims to address increasing concerns of cyber security and vulnerability of children in cyberspace. The programme had been conducted in all the districts in coordination with various departments, NGOs like child line and Bodhini, IT companies like UST Global and Allianz technologies etc.
- **5. Financial Fraud Monitoring** A Special Cell has been created in association with RBI to tackle bank frauds, with particular reference to OTP frauds, online frauds and hacking of the Banking Sector. An online office of all the major banks is made operational for information sharing.
- **6. Proactive steps to prevent Banking frauds** Timely intervention of Cyberdome to report the Vulnerabilities in Banking UPI apps prevented financial fraud. Based on the report of Cyberdome, The RBI and NCPI had taken action to took down those Vulnerable UPI Apps and patched the same. Cyberdome is continuing its efforts in this regard and is constantly assessing banking apps to detect vulnerabilities if any.
- 7. Smart Policing by using AI & ML: Software which could detect riders without helmet using cameras is under development and is now on testing phase. The technology will be a powerful tool for the police to gather evidence and catch criminals. The system also enables law enforcers to compare faces of suspected offenders to the department's extensive database of known offenders.
- **8.Professor Pointer:** Introduced another unique Cyber Safety awareness project; Professor Pointer The Answer to Cyber Issues. The project aims to create awareness about preventing cybercrimes through animation movies, stickers and posters.
- **9. Stringent action against Child pornography** Operation P-Hunt: Based on the analysis of various social media platforms, it is found that child pornography (CP) has increased manifold due to easy availability of



various applications and portals which provide anonymity. Considering the seriousness and gravity of the issue, Kerala Police Cyberdome initiated a covert operation named "P-HUNT" to curb the crime which poses a serious threat to the society and to bring the culprits to book. The sequel of Operations had been a great success.

#### **10.Darknet Monitoring:**

Cyberdome is conducting manual darkweb monitoring and is continuously searching for darkweb sites which are facilitating illegal activities. Information is being collected from search engines like notevil, candle, duckduckgo, torch etc and also from telegram channels.

### Applications developed by Cyberdome

- **A.) Kid Glove** e-Learning Portal
- **B.) BSafe** Alerting fraud and spam calls
- C.) e- curfew pass Online pass for emergency travel during Lockdown For medical needs and purchase of essential items. https://pass.bsafe.kerala.gov.in
- **D.) Shops App** Mobile app for home delivery of essential

commodities for public.

- **E.) Shops App** Mobile app for purchase of essential commodities from Central Police Canteen (CPC) for Police personnel.
- F) BSafe Quarantine Tracker Mobile App
- **G)** The Grapnel Version 1.0
- **H) VaccineFind.in** Web App: https://vaccinefind.in

#### Other initiatives

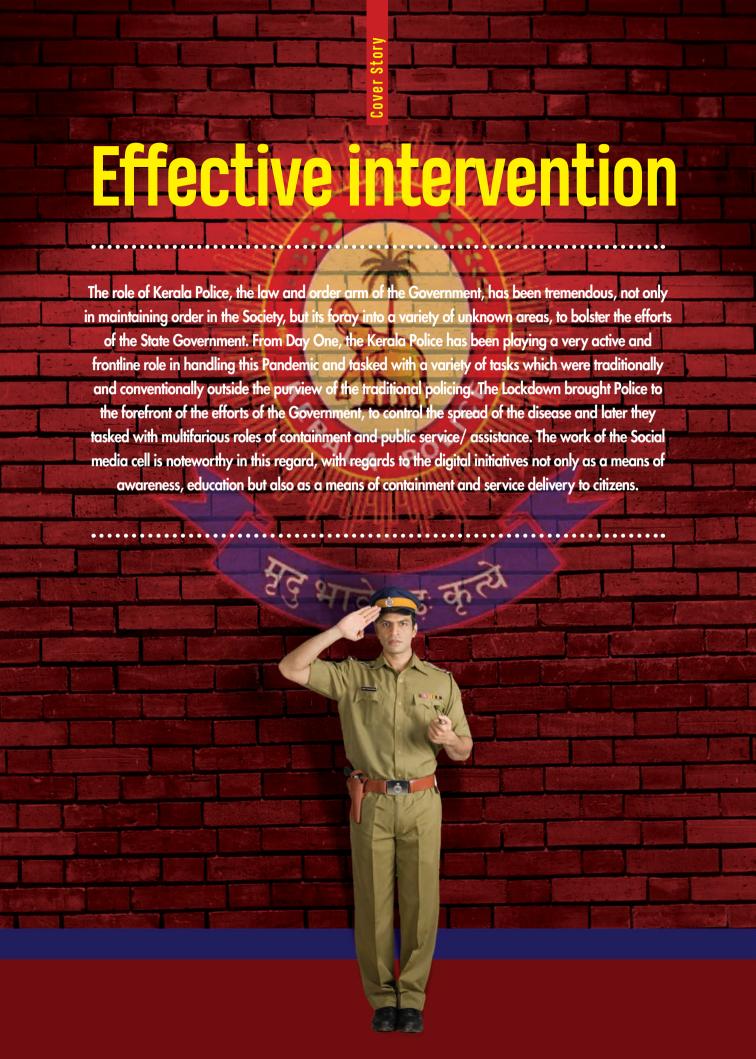
#### **CODSEC/HACKP - Policing the Future:**

- · Association with All stakeholders of Digital Economy
- Tie up with Dubai Police on cyber security: Collaboration with ICMEC & Interpol:
- Awareness Campaigns on and off the media CCSE Centre :
- Drone Forensic Lab and Research Center

The mission/ Vision of the Cyberdome Centre is to "Ensure a Cyber Secure world" and in this drive we have got a huge response from the industry, the private sector and the professionals engaged in the IT Industry, who have come forth to partner us in this novel venture. Cyberdome is thus marching ahead as a law enforcement entity, in the vast and borderless world of internet, to keep it safe and secure. We call upon all stakeholders to partner us in this unique venture to build a secure Cyber world.

**Drone' KP-2021**- International Drone Development Hackathon in keeping up with the latest technological trends, the Kerala Police is foraying into the realm of the drones. The Kerala Police came forth with an exclusive hackathon "Drone' KP"- for identifying innovative solutions and suitable workforce in drone technology, with the theme "Eagle eyed Policing". The Kerala Police Cyberdome announced first of its kind international drone development Hackathon - 'Drone' KP' with core focus on Drone technologies.

The competition was held on 16th and 17th of December 2021 and had got a huge response from participants all over the country with 50+ teams competing in the final round of the hackathon. The event served as a perfect launch pad for dronegeeks, inspiring students, start-ups and budding entrepreneurs to come together and create leading-edge solutions that can strengthen the drone capabilities of the Kerala Police.



### Implementation of Lockdown-Legal, Effective & Complete

he Police response to a pandemic was not enlisted in the SOPs (Standard Operating Procedures) which the Police falls back, in times of crisis. Faced with a totally new problem, with no past experience, the rank and file fell into the grind to ensure that the instructions of lockdown are implemented in letter and spirit. But what made the Kerala Police different is the manner in which the lockdown was ensured. Through purely legal means, high voltage awareness campaigns and seeking the cooperation of the citizens, the police implemented a near total lockdown ensuring the complete full stop to the spread of the virus in the State.



#### Innovative Digital Media Intervention

he social media handles of the Kerala Police in the past few years have become one of the most popular pages in the world, for its witty content and tongue-in-cheek responses. One of the most decorated and awarded Police Force in the area of Digital Technology and Innovations, the Social Media Cell of the Force has played a major role in building up the general image of the Police, and in ensuring the community support for various Initiatives of the police department. With more than 1.8 million followers on Facebook and with a total of more than 2.5 million followers on TikTok, Share chat, Twitter, YouTube etc, the awareness campaigns/videos/trolls etc gained international recognition. They proved that Digital Technology can be used very effectively in containing not only the typical law and order problems, but also in effectively handling Pandemics also.

The initial intervention was when the Social Media Cell of Kerala Police came out with highly innovative posts and videos on precautionary steps to be followed to check the spread of the corona virus. One of the top trending videos on social media were the 'corona virus awareness videos' by the Kerala police.

It is in the area of Digital awareness against the Virus, that Kerala Police then caught the imagination of the world, with highly innovative videos/ clips that has earned international attention, particularly in the West and USA. The importance of being different was understood and also the need to be humorous in this panic situation, had to be coupled in all the posts/ videos. One of the top trending videos on social media are the 'corona virus awareness videos' made by the Kerala police.



All these are innovative in-house creations of the Kerala Police. where all the Actors, Directors and Producers are also police officers.

The video, which gained international attention, due to the special "Hand washing dance". The hand-washing practice to stem the virus one step further - with a fun dance left fans of social networking sites in splits, and was played prominently by BBC, Fox news and all the major media houses in the world.

Then came the partially animated video of the Virus, with the message of" Break the Chain" that was released and immediately became viral globally, and garnered around 8 million views on the various social media handles of the Kerala Police, apart from being widely shared on Whatsapp. With its witty and creative content, the video caught the imagination of all netizens around the globe, particularly in the COVID times, with a message that we can effectively fight the virus.

This was followed by a series of campaigns by the social media cell, on precautions to be taken to prevent covid, need to stay home and stay safe, fighting covid together etc and this was done in a highly Innovative fashion using film stars, trolls, songs, humour etc and all these campaigns were viral on the social media. The Social Media Cell of the Kerala Police thus became the prime "Social Media Influencers" of the Globe, in this fight between "Man Vs the Virus".



## bSafe Home Quarantine Solution/ APP

he Kerala Police through its cyber cell/ cyberdome were the first to develop a platform for the surveillance of the movement of high-risk people who have been placed under quarantine to tackle the spread of the novel coronavirus in the state. One of the challenges the administration had been facing was is keeping people in quarantine and this platform or App was the digital solution for the same. The software tracks the movement of people in quarantine using GPS geofencing technology and was purely a voluntary effort, where the quarantined person downloads the App on to his mobile.

Geofence is a virtual boundary set up around a geographical location. The technology uses Global Positioning System

(GPS), Wi-Fi or a person's mobile phone to track their location. Mobile service providers are providing the GPS and mobile tower locations of such a person and the Police Authorities are alerted immediately when the person steps outside the geofenced area. Kottayam District Police was the first to start this platform and then this was spread to the other districts and multiple Apps and solutions are being used on the same parameters.





he Kerala Police has launched a telemedicine mobile application that allows free video consultation with doctors across the state. The mobile application called 'blueTeleMed' can be downloaded for free from Google Playstore. The initiative of the Kerala Police is in cooperation with the Indian Medical Association. While the original idea behind the app was to help out police personnel in the state involved in lockdown duty, its service has now been extended to the general public.











#### KIDGLOVE- Cyber learning website for children

Association) a non-profit organisation, to create "Cyber Safety and Security Awareness" among Teachers, Parents and children. It was started in the year 2015, as a part of the annual c0c0n - Cyber Security and Data Privacy conference hosted by Kerala Police and then spread to all schools of Kerala. Considering the scenario of the pandemic COVID 19, and the fact that all the Schools were ready to start with Digital online classes, the KIDGLOVE programme for the academic year 2020 - 2021 was transformed to an "e-classroom platform" so as to continue our efforts to protect children in cyber space, without any disruption.







Kid Glove is an initiative by Kerala Police and ISRA (Information Security Research Association) in collaboration with esafety Commissioner, Government of Australia



#### Drone Usage for enforcing Lockdown

uring the COVID period, Kerala's skies have been dotted with unmanned aerial vehicles or drones, watching out for socialdistancing violations from gatherings to games of beach football. What the offenders but only to scare them into rushing back home. These small out with sirens and flashing lights so the people below can't miss them even after sunset. Wireless technology has also been allowing the police to bark out instructions over speakers fitted onto the flying machines. It had all begun with the Kerala police deploying their three high-performance quad copters — drones with four rotors — on lockdown watch. The move worked so well that the police have drafted in private players to build a network of 300 drones that now scan every corner of the state. The extensive use of drones for surveillance, not only to enforce the lockdown, but also in identifying the production of spurious liquor and sale of drugs, was another noteworthy feature of the police response, which was soon emulated by the other forces. The Police intervention in the colonies housing the migrant labours (Guest Workers) checking on the facilities given to them, tying up on their provisions, encouraging them and keeping them engaged without any violence, was another feather in the cap of Kerala Police in



the police want is not to identify and prosecute

#### **CCSE Cell during COVID 19**

handling this crisis.

ockdown means restriction inside residences and lack of free movement. This has also led to huge increase in internet activity all Laround the Globe and increasing use of social media. In short the lockdown has led to increasing digital usage, which in turn has had a totally different impact on cyber crime trends, particularly in relation to pornography and child crimes. Kerala Police CCSE (Countering Child Sexual Exploitation) Team, functioning under Cyberdome started a digital analysis of the virtual trends during the lockdown. The basic trends that can be derived in the behaviour of internet users, due to the lockdown in Kerala are as follows.

- There is an increased online activity seen from Kerala by those seeking child abuse material on the net, and particularly darknet. The platform used by Kerala Police to identify such accused looking for CSAM has drastically increased during this period.
- In the darknet chat rooms also, this demand for CSAM has increased drastically and is clearly evident.
- 3. A similar trend is found in porn groups operating over whatsapp and Telegram and number of such groups have increased drastically during this period.
- 4. Social media and gaming sites that are proving to be a lifeline for parents and their children to keep them entertained at home, are being exploited by these criminal elements to get access to children.
- 5. Use of malwares to activate the webcams of the victim and to steal information of children has also been reported around the globe and in many parts of the country.
- 6. Many obscene pictures inside household, flats etc have been uploaded in recent times, which clearly shows that most of the pictures have been taken and uploaded in the lockdown period
- 7. Abuse of children locked up in their homes cannot be ruled out and from the pictures being uploaded such incidents are very ikely during this period.

In the lockdown period, we had cases where the devices of children were hacked and pictures were taken using the webcam and passwords stolen and the hacker trying to blackmail the

The CCSE cell of the Kerala Police, went into a high tech mode to identify the persons downloading CSAM material from the internet. IP address were collected using spec software, and action was initiated against such individuals. Also many such grou been reported to Telegram and removed. Many such groups with names SREYAYUDE, THAVALAM, THANASERTHA, KAMBI FAMILY, MANTHANGA GIRL, were operating with more than 200 odd members each from the State, were all removed after reporting the same to Telegram and action is on to identify the administrators. The CCSE Cell thus managed to keep online crimes against children in check during this period.



mobile sanitation vehicle to disinfect police Apersonnel on duty in the wake of the COVID-19 was launched by the Kerala Police to sanitize the police personnel at the duty point itself. The bus is a mobile sanitising unit to disinfect the police officers.

The police officials can enter the bus through the back door and disinfectant will be sprayed after which the officer can come out through the front door and all the solutions used are based on limits prescribed by the Health Authorities.

The mobile unit would go to all places where police were deployed and disinfect them as they come into contact with a lot of common people on the road.



## Bsafe fraud prevention App

B Safe is a platform by the Kerala Police Cyberdome available on both android and web application with multiple features. The area web application with multiple features. The app comes with features like alerting fraud/spam calls, preventing hoax, blocking the spam calls automatically, provide the user with the option to search or automatically detect numbers from clipboard and

giving authentic notifications on various notices of public importance.

The App was very useful in detecting internet fraud cases during the lockdown and the same platform was used for issuing emergency passes and for quarantine control.

The Social Media Cell of the Kerala Police thus stood out with its multifarious digital Initiatives, not only for policing the society and for enforcing covid related restrictions, but also in providing digital solutions to the citizens in even non-traditional areas, earning the goodwill of its citizens.

The war against the virus has not fully ended, but in the midst of this crisis also, the Kerala Police has stood out with its unique blend of Community oriented policing, laced with Digital innovations and smooth, sober but firm law enforcement, which has ensured its position as one of the top forces in the country, if not in the world.....

















# Mobile Phones: The crucial evidentiary devices

Dr. Sunil S.P.

Joint Director (Research), State Forensic Science Laboratory, Thiruvananthapuram





The exponential growth of mobile devices has transformed many aspects of our lives. Smartphones are submerging computers with their improved functionality and enhanced storage capacity. This led to an increased usage of mobile phones across all sectors. Hence mobile phones become more and more crucial as evidentiary devices in civil and criminal investigations.





he rapid increases in the number of different kinds of mobile phones make it difficult to develop a single tool to examine all types of devices. Each mobile device is designed with a variety of operating systems. Hence special knowledge and skills are required by forensic experts to acquire and analyze the device. State Forensic Science Laboratory, Thiruvananthapuram is accredited by NABL and the Cyber division of the lab is notified by the Government of India as Examiner of Electronic Evidence as per the gazette notification.

#### **MOBILE PHONE FORENSICS**

Mobile forensics is digital forensics relating to the recovery of digital evidence from a mobile device. Mobile devices have become a vital part of people's lives, and as such, are playing an important role in investigations. The worth of a forensic examination naturally lies in its ability to restructure what a user was doing on a digital device in the past leading up to a particular event.

Fruitful examination of mobile devices requires the special knowledge and skills of mobile forensics experts. Fast changes in technology cause greater challenges to experts in their daily business.

When a mobile device is encountered during an investigation, the expert should decide: What is the best method to preserve the evidence? How should the device be handled? How should valuable data contained on the device be extracted?

#### **CYBER FORENSIC CASES IN KERALA**

The total number of cyber cases received in Forensic Science Laboratory (FSL) in the year 2010 is only 140 and this number gradually increased to 335in the year 2015. However, with the world witnessing technology and user migration from computers to mobiles, that figures suddenly raised, reaching1907 in the year 2020

#### **CURRENT CHALLENGES**

Knowing the importance of the forensics of mobile phone devices, it is essential to understand the current known challenges facing investigators in general and forensic scientists in particular. The major challenges are listed below.

#### **Platforms**

The term 'mobile device' includes a variety of devices such as Smartphones, Tablets, Cameras, Smartwatches, Drones, MP3 players, navigation devices etc. Dealing with different gadgets creates a challenge for the mobile forensic examiner, as he/she needs the specialization of each device to extract successfully as much data from it forensically.

#### **Security mechanisms**

Securing mobile devices has been a focus of device manufacturers as personal privacy is increasingly important to their markets. Security mechanisms on mobile devices range from handset user locks to SIM card PINs and PUKs and device encryption. The methods for securing and or encrypting data vary widely from device to device and from one operating system to another.

#### **Operating System (OS)**

Operating System (OS) is the software that enables the user to "operate" the mobile device and help to store and retrieve data as per the instructions in that file system. Market shares of mobile OS manufacturers change extremely fast. Every year new mobile devices are released, which can easily change the constellation of the OS market shares.



#### **Cloud data**

Nowadays the aggregate amount of data containing information, very valuable to forensic investigations, is never saved in mobile devices but in cloud storage using the devices' OS or third-party apps data. Cloud backups can offer the chance to recover data deleted by the user or the data of locked, broken or wiped devices. However, acquiring this data is not only difficult because of legal constraints but also because of security mechanisms.

#### **Accidental reset**

Proper handling of mobile devices is vital to maintaining the integrity of the data they contain. There are specific procedures for the collection, packing, labelling and forwarding of mobile devices. Any type of mishandling of the device can result in destroying data on the handset.

#### **Apps**

Apps frequently store most

information in SQLite databases, so those databases will contain a leading part of the case data. Mobile forensic toolkits decode databases forensically and display them in an organized way. However, depending on the forensic toolkit, only a few different apps are supported, which is a comparatively small number, as there were about millions of apps available.

#### Physical damage of devices

Another challenge faced by mobile phone examiners is that seized mobile phones are very often received in damaged conditions. Data extraction from damaged devices is extremely difficult. One tool used as a last resort in such cases is the Chipoff technology.

#### **Data preservations**

When a mobile phone is seized, it is very important to prevent the device from receiving any further data communication. Flash storage device stores data in a "first-in, first-out" order, older stored data could be deleted. So before the initial acquisition, mobile devices must be disconnected or blocked from further radio frequencies to avoid changes in data. Most mobile devices allow their users to wipe all data by issuing a remote command.

Mobile device forensics is a substantial process in any modern crime investigation. It includes many approaches and concepts that spread outside of the borders of traditional cyber forensics. The mobile phone expert should understand the different acquisition methods and the complexities of handling mobile data during analysis. The type of smartphone, operating system, security features will determine the amount of access to the data. Continuous training of mobile forensics experts and availability of advanced forensic tools are vital to be able to deal with the challenges in mobile forensics successfully.

## A glorious example of community policing

#### T. Narayanan IPS

City Police Commissioner, Kollam



allithottam is situated on the coast of the Arabian Sea and the majority of the people are dependent on the sea for earning their livelihood. When Sub Inspector from Kollam West, Pradeep P, was posted as the Sub Inspector at Pallithottam police station, he studied the various aspects related to the lives of the coastal people to understand the factors influencing their behaviour. Subsequently, he started executing works related to community policing more effectively in Pallithottam PS limit. During his interaction with the coastal community, he understood that they did not have a driving license though most of them knew driving.

He conducted several classes to educate common people regarding the importance of law as well as to make them aware of the need of acquiring a driving license for their safety and the safety of the public. He discussed the matter with his senior officers as well as with the Regional Motor Transport Officer. As per their guidance, he formed a team consisting of Police, Motor Vehicle Department, Driving Schools, NGOs and Councilors of Kollam Corporation to deal with the issue of obtaining a license to the coastal inhabitants. With the help of TRACK (NGO), he collected data from the public as well. A total of 2450 applications for driving licenses were received from that small geographical area. With the assistance of Driving Schools, the data was uploaded to the official website of the Motor Vehicle Department.

The Motor Vehicle Inspectors and Assistant Motor Vehicle

Inspectors were assigned the task of giving orientation classes to the applicants. Subsequently, a learner's license test was conducted, 72 out of 74 passed in the first test itself. The result motivated others to enrol their names to attend the test. Practical training was given free of cost by the driving schools. Subsequently, the first road test was conducted and all the 54 who attended the test passed. As of now, around 1800 fishermen have passed the learner's test and 1572 have obtained driving licenses in Pallithottam PS limit itself. Following the stupendous success, this innovative idea was implemented in all the coastal area Police Stations of Kollam City Police District, and the response was massive. As of February 2022, a total of around 2600 persons from the coastal areas in Kollam City have obtained driving licenses as a part of this initiative.

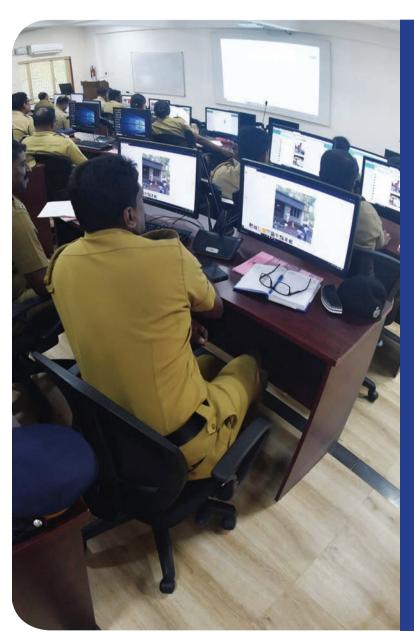
The above initiative has brought many positive changes in the perspective of the community towards Police and Law and Order Management. Now, police personnel are getting more reliable information from the public and the police can tackle the hurdles that used to occur in the past.

After this intervention by the police, the entire perception of people has changed and they have become legally enlightened. This was the result of the painstaking efforts taken by Sub Inspector Pradeep. P under the supervision and guidance of Asst.Commissioner of Police, A.Prateepkumar, and is a glorious example of capacity building through effective community policing by the Kerala Police.

# Monitoring the virtual world vigilantly

#### V.P. Pramod Kumar

Deputy Director (Public Relations) Police Headquarters, Kerala Police





The Kerala Police are always at the forefront in creating awareness on various subjects, disseminating information on various initiatives of the police and thereby boosting the general image of the police through social media platforms. The State Police Media Centre and the Social Media Cell are working round the clock to create awareness through their social media platforms in the form of posters, trolls, memes, short videos etc.





he State Police Media Centre is maintaining the Facebook pages, Twitter handle, Instagram account and YouTube channel of the State Police Media Centre as well as those of the State Police Chief. The Kerala Police Social Media Cell is maintaining the official Facebook page of Kerala Police, Instagram, Twitter and YouTube. The social media platforms of Kerala Police have been famous for their witty content and tongue-in-cheek responses. The trolls, memes and posters have won the hearts of netizens and thus these social media platforms have been widely accepted by the public.

The Kerala Police social media handles have been very active during the time of two floods and two COVID seasons. More than 400 videos were created by various Police units across the State with a view to creating awareness among the public as to how the Police has been equipped to face the challenge. The official Facebook page of Kerala Police has achieved a rare feat by gaining over one million likes in 2018 itself, surpassing the popularity of the New York Police Department and the Queensland Police. The Instagram page of Kerala Police has achieved a rare feat by gaining over one million followers in 2021, surpassing the popularity of the New York Police Department and Interpol.

In the Covid pandemic period, Kerala Police have played a pivotal role in sensitizing the public about the key precautionary measures to be taken to keep the virus away. The social media handles have created awareness about the virus, precautions to be taken and the importance of social distancing through videos, posters, memes and trolls. The Facebook pages have been widely accepted by the public as well as the media. Each post on the page gets an overwhelming response from the common mass by way of likes and comments. In a span of fewer than two years, the Facebook page of State Police Media Centre has achieved more than 5 lakh followers. The Break the Chain video posted by the Social Media Cell has got close to 3 million views. The handwashing dance posted by the State Police Media Centre has gone viral across the world and watched by over 31 lakh people with nearly 40,000 shares. The video went on to be appreciated by international media, including networks such as BBC, Reuters, AFP, Australian Broadcasting Corporation, ANI and BBC, besides channels in the US, Russia, the UK, China, Italy and the Netherlands. The Chief Minister himself has lauded the video in his Twitter account. The US embassy in Delhi also shared it on their page.

As the classes shifted from offline to online during the pandemic, various awareness posters, videos on the social media platforms for creating awareness. The awareness campaign named 'KP Tips' has become a talk of the town after the various awareness videos went viral on the State Police Media Centre's Youtube channel. The video 'Padikkanam e-padangal' shows precautions to be used while handling cyberspace by school children and other users. It has become an eye-opener to parents and teachers. A video was also published showing the importance of safe internet banking. About 80 plus videos have been posted on the YouTube channel where we have got as many as 6400 subscribers. Kerala Police have also initiated various campaigns, created and published various posters on their social media platforms regarding drug abuse, the importance of safe driving, mobile addiction in school children, alcohol addiction, cyber frauds, loan fraud, a campaign named 'Mindathirikkaruthu' to bring to light the exploitations through Social Media. The campaign named 'Sradhichetheeru' has received appreciation from the media and the public. It narrates the importance of making children safe and secure in society. The campaign 'Vedhanayakuruthu Venalavadhi' conveyed to teachers, parents and students about the tips to be followed during summer vacation. 'Adi Thada' campaign, showing a woman Police officer narrating women self-defence technique for self-defence was also accepted by the common folks.

Kerala Police Social Media handles and platforms have played a major role in developing awareness programs and campaigns for educating the people in the society. As the campaigns have made effective changes in the behaviour of the people, the Social Media platforms won the heart of the young and old. Kerala Police Social Media Cell has been awarded the State Governments e-governance award category for its non-conventional awareness campaigns and public interactions through social media platforms. The Social Media Cell COVID initiatives have also been awarded Gold under category 6 – use of ICT in the management of COVID 19 of the Award scheme of the National Awards for e-Governance 2020-2021.

## The Technological Spring

#### P. Prakash IPS

I.G. South Zone





The Kerala Police have been listed as number one in the country not only in maintaining law and order, but also in adopting technological developments in accordance with the demand of the era. The Kerala Police have under gone a high-tech makeover during the last two years, especially effecting computerization to the day-today policing activities



n accordance to the Govt. policy to provide all the government service to public through online mode, the Kerala police had revamped all the existing web-based applications, mobile application and network connectivity to the latest advanced technology platforms to render online services to public. As an on-going process, general public were forced to visit police stations/ offices for multiple times w.r.t redress of complaint/service request etc. New citizen portal and mobile interface are introduced with an objective of ensuring improved and time bound service delivery to the public of Kerala with enhanced features and ease of use interface. By adopting all these modern technologies in the day to day policing activities, the Kerala Police guarantees minimum footfall of public at Police Station. Some of the key technological features which were implemented in the Kerala Police during last two years are

#### **SDWAN** (Software Defined Wide Area Network)

In the current times of increasing demand for high bandwidth, dynamic provision of network resources, protection from internet threats, encrypted secure data traffic etc., the Kerala Police have revamped the existing Police networks with the secure SD-WAN to ensure the protection of confidential data over the networks, along with considerable savings for the public exchequer every year. The latest networking technology viz., Software Defined Wide Area Network (SD-WAN) for CCTNS was implemented in the Police force as the total network, security and connectivity solution. SDWAN is the latest networking concept where a specific application of software-defined networking (SDN) technology is applied to WAN connections such as broadband internet, FTTH or 3G/4G.

SDWAN enables the Department to build a strong Wide Area Network connectivity and application delivery to the users and customers across locations. The scope of SDWAN implementation includes all the Police Stations, SDPOs, District Police offices, Range offices, Zonal offices, Crime Branch offices, Railway Police offices, Finger Print Bureau, Forensic Science Labs, State Special Branch, Telecommunication Headquarter, State Crime Records Bureau, CCTNS Training Centres and Police Headquarters.

The Kerala Police is the first police force in the county in implementing SDWAN technology.

#### iCoPS - Integrated Core Policing System

State police had developed and implemented an application viz., iCoPS (integrated Core Policing System) with the intention to replace the CAS application which is being used for a long time for day today policing activities. The new application is developed in the latest environment with better features and ease of use. This application has been developed with an intention to subsume all other applications currently being used at police station level to a single system which will reduce multiple data entries for the same cases in different applications and to ensure "one data, once entry". iCoPS has been indigenously developed by an inhouse development team of the Police Computer Centre of Kerala police along with a team of current System Integrator for CCTNS (M/s TCS Ltd). This is the first ever micro services-based application developed in container-based infrastructure by any State Police force in the country. The new application is being implemented in a phased manner and bridge software has been included in iCoPS application to copy relevant data to the existing CAS DB in real time.

As a solution to the demand from Police Stations for an alternate solution for the registration of IIF-8/IIF- 10/IIF 11, facility for automatic registration of IIF-8 has been included in iCoPS adhering to the concept of "One data once entry". Through this facility the main issue with the Missing person registration viz., entry of same data in different forms like IIF-1 and IIF-8 is eliminated.

iCoPS is developed on micro service architecture whereas in CCTNS CAS it was a monolith application with a single database.

As of now functionalities viz., User management, GD and FIR Registration, citizen services are developed and is being used by Police Stations. All the Police Stations across state is using iCoPS for recording regular GD, registering FIRs, processing citizen service request etc.

#### **Digital signature**

The Kerala Police is in the process of implementing digital signature facility for CCTNS generated documents. Works related to implementation of Digital signature had started and completed Proof of Concept (PoC). Once the digital signature is implemented all the forms submitted to courts will be digitally signed. Also the general public will receive police certificates in digitally signed format.

#### **Mobile App for Police Personnel**

It has been decided to introduce a unified mobile app exclusively for the use of police personnel of the Kerala Police only. Using the proposed mobile app police officers can perform their verification/investigation related field level activities in an efficient and speedy manner. The proposed solution includes Facial recognition, toll eye etc., which need Artificial Intelligence based technology.

## POL-APP: delivering manifold services@fingertips

**Women and Child Services through POL-APP** 



#### **Track My Trip**

User can share their journey/trip to 3 selected friends/ relatives and/or to the Kerala Police. The route by geo locations will be captured and sent to the selected numbers and/or to police at a regular interval. This service is very helpful to women/senior citizens travelling alone for a distress free journey.

### Fix an appointment with SHO for Women and Children

By using this service, women/children can schedule an appointment with the SHO of a Police Station. Thus, waiting at the Police station can be avoided and also they can chose their convenient date/time.

#### Service for Senior Citizens/ Women Living alone

Immediate help will be made available from the Kerala Police

for Senior Citizens/Women living alone whenever they needed. Police Beats will provide necessary priority towards their security needs.

#### **CITIZEN SAFETY SERVICES**

#### **SoS Panic Message**

Users will get immediate help if an SOS has been triggered from Pol-App. From the location coordinates obtained from this SOS message, Police can extend help within 10 minutes.

#### **Locked House Information**

Citizens have the facility to report to the jurisdictional police station, when they are travelling out of station, so that the SHO can alert the beat officers.

#### **BLOOD BANK MODULE:**

#### **Donor Registration**

A module related to Blood donation is also included in the

Pol-App. In this module, there is be a provision to enter the details of blood donors by themselves.

#### **Request For Blood**

When a blood receiver needs a donor, he/she can submit his request through Pol-App.All these activities related to the blood donor forum will be managed by a special team in all districts.

#### **Information and Navigation to Nearest**

**Police Station:** Based on the location of the person, the app shows the nearest police station and also facilitates navigation to the same.

#### **Information and Navigation to Jurisdictional**

**Police Station:** Based on the location of the user, the app shows the details of the jurisdictional Police Station and also facilitates navigation to the same.

Contacts of all Police units with Phone number and email ID. Addresses of Police Stations have been included as well.

**e-FIR (FIR Download):** FIR can be downloaded through this App.

#### **Payment Services**

Payment can be made in the following areas: 1. Mike Sanction, 2. SISF, 3. Police Clearance Certificate, 4. Service Charge, 5. RTI, 6. Services & Service Fee, 7. License Fee & Renewal Fee, 8. MV Petty, 9. Covid Petty/Fine.

**Passport Verification Status:** The status of Police Verification for Passport get through this App.

**Push Notifications:** All relevant notifications can be forwarded to citizens.

**Social Media Feeds:** Facebook, YouTube and Instagram of the Kerala Police are available.

**Traffic Guru:** Link to download the Traffic Rules awareness Game

**Search**: Search facility for all services is available

**Tourist Guide:** Facility to search a destination and to find the Jurisdictional Police Station.

**Helplines:** Lists the various help line numbers.

**Cyber awareness:** To create awareness on common mistakes/frauds prevalent in cyber space.

**Website links:** Links of important official websites are provided in this feature.

#### REPORT AN OFFENCE

Offences can be reported in following categories: 1. Traffic Offences, 2. Assault, 3. Rioting, 4. Chain Snatching, 5. Group Clashes, 6. Eve Teasing, 7. Destruction of Public Property, 8.

Public Nuisance.

**Report Spam:** Cases of fraud calls pertaining to ATM fraud/job fraud can be reported through Pol-App and the reported number will marked as spam, if it is found necessary. At the same time, other users will get alerted for this fraud/spam number.

**Information to Police:** Public can share information to Police through this feature.

**Report Abandoned Child:** Any child found abandoned in the streets can be reported along with geo tagged photograph, which will be forwarded to the Women and Child Welfare Control Room for onward action.

**Report Abandoned Women:** Any woman found abandoned on streets, can be reported along with geo tagged photograph, which will be forwarded to Women and Child Welfare Control Room.

**Report Abandoned Senior citizen:** Details of abandoned elders with photo can be reported, which will be informed to the Senior citizens control room.

#### **RATE OUR SERVICES**

**Rate your Police Station:** Anyone visiting the Police Station can give feedback on their experience.

**Rate the app:** Users can rate the Pol-App through this feature.

#### THUNA – Citizen Portal of the Kerala Police

The Kerala Police introduced the new citizen portal and mobile interface with an objective of improved service delivery to the public of Kerala. Revamped citizen portal, "THUNA" (www.thuna.keralapolice.gov.in) is a new endeavour of the Kerala Police for extending services and information to citizens through a web portal in a much better manner.

#### THUNA Services

**Complaint Registration:** Citizen can register a complaint to any police station/ police office in Kerala

**Police Clearance Certificate:** Citizen can apply for Police Clearance Certificate

**Mike Sanction:** Citizen can submit mike sanction request to any Police Station.

**Accident GD Download:** Citizen can apply for the GD copy of an accident to any police station in Kerala.

**FIR DOWNLOAD:** Anyone can download the copy of an FIR

## Existing to serve people

#### Aadhithya R. IPS

City Police Commissioner, Thrissur





Here are two splendid interventions that extended immense help to the needy by the Chavakkad & Peechi Police in the Thrissur district.





he impact of the lockdown on fishermen and civilians in the Chavakkad coastal area of Thrissur district was first noticed by the local police. The then Chavakkad police inspector Anil Kumar Mappilly was heartbroken to see the dire situation in which the fishing families were. They couldn't even afford a single meal a day. In collaboration with well-wishers and some voluntary organizations, food kits and food parcels were distributed to the locals throughout the lockdown. Anil Kumar also became aware of an off-topic issue when he visited the houses under the jurisdiction of the police station as part of the COVID defence operations. At least a few people within the confines of his police station were starving, with no provision for a single meal. On his return to the police station, the inspector convened a meeting of the entire staff of the police station that evening." Many people in our police station area are starving without getting access to a single meal. This is not just the case during the lockdown. Why can't we, the police, come forward to end this famine in our jurisdiction?", Anil Kumar decided

to take action on the issue.

This issue raised by the inspector made everyone think. One of them put forward a viable suggestion. Since the officers are already cooking food in the mess next to the police station for lunch, why not cook for ten more. It could be delivered when someone in need arrives. And so from the next day, along with the food for the police officers, the mess was ready with additional food for ten people. It was packed and placed on a table in the courtyard of the police station. Anyone in need of food could come and get one in the afternoon. This continued the next day. Through the words of locals and the media, this good deed became known to the people. Some of them used to come to the police station voluntarily with food parcels during weddings, birthdays and celebrations at home. When four or five food parcels were delivered from one house to the police station, the total number of food parcels delivered in a day rose to fifty to sixty.

The Chavakkad Police has given a big message to the people that while many of us prepare and waste too much food on special occasions, there are people among us who do not have access to even a single meal. Shortly after this, a voluntary organization called "Nammal Chavakkattukar" (We the people of Chavakkad) set up glass cupboards in front of the police station. The food parcels delivered by the locals to the police station and the food cooked in the police mess were placed on the shelves in front of the people. Those in need could enter the police station compound and pick up food parcels from the shelves. The Chavakkad natives working in the Middle East came to know about this initiative through social media and they have extended their contributions through friends in Chavakkad. Inspector Anil Kumar Mappilly, who started the project, has since relocated, but the present Inspector Selvaraj and his colleagues are efficiently continuing the lunch program with great success. The initiative launched by the Chavakkad police to ensure that no one goes hungry without a meal in the Chavakkad area is such a remarkable success. At present, the Chavakkad police station distributes at least 100 lunch packets a day. In addition to the food cooked at the police station and the contributions of NGOs, locals also deliver food to the police station during weddings, birthdays and other celebrations in any home in the area. Thus,

even after the lockdown period, the popular food distribution scheme continues unabated.

From Chavakkad Police Station we can see the materialization

of the great idea that the police exists to serve the people. And civilians will join hands and look up to the authorities in times of need and distress. The People's Food Distribution Scheme is an exemplary example of our unity and compassion. Congratulations from the Thrissur City Police to all the police personnel of the Chavakkad Police Station and the residents of Chavakkad who are working along with the police on this.

### Rendering help in dire need

A landlord lodged a complaint with the Peechi police station against his tenant alleging that he was not paying the rent for the house. Johnny and his family, natives of Podipara, Peechi, Thrissur, were the opponents in the case. When Peechi Police Station House Officer A.A Shukur visited the rented house as part of the investigation, the sight he saw was extremely sad. Johnny was a mason worker who was unable to go to work due to old age health issues. His wife was suffering from mental illness. Both children were differently-abled. In addition, the eldest daughter had cancer. The family had moved to the rented house when heavy rain destroyed their own home.Peechi Police Inspector A.A Shukur and his team began efforts to build a small house for the family to sleep safely and peacefully. The Wiseman Club members' wholeheartedly accepted the police officials' request for help. In addition, many local well-wishers came in and helped. Thus a small closed house was built there for Johnny and his family. City Police Commissioner R. Aditya recently handed over the keys of the newly constructed house. Wiseman Club members also honoured Peechi Station House Officer A.A Shukur and Janamaithri Beat Officers Frinson and Sanil Kumar.Members of the Wisemen's Club, policemen of the Peechi Police Station and the Thrissur City Police are thrilled to have materialized their dream of a home for a family in dire need, amidst their busy schedules of work.



### Kerala Police Assistant

Talk to Kerala Police!... A Technological Revolution of Kerala Police...

#### A.V. George IPS

City Police Commissioner, Kozhikode

Cyberdome Kozhikode brings a new face to the Kerala Police. For the First time in Indian Police System, Kerala Police proudly launched its new voice assistant service "Kerala Police Assistant" developed by Cyberdome Kozhikode.



Food safety
Covid-19 Protocols
Women safety/women abuse
Dowry
Financial Crime
Senior Citizen Helpline
Snatching And Kidnapping
Vehichle Lost
Drugs

For accurate result refresh your device location

For any suggestions and complaints please visit www.keralapoliceassistant.kerala.gov.in



"Kerala Police Assistant" Chabot service basically guide the public on how, what and where to report a complaint or query to the Police and get their Services. "Kerala Police Assistant" Chabot service can be easily accessed by public by the triggering word "Talk to Kerala Police" and this is a safe, efficient and user friendly Chabot service, which provided through online without installing any special applications or surfing any web pages. The location/

GPS of the mobile phone needs to be refreshed before using this service to get the accurate result. This Chabot service can be invoked by wake-up word "Hey Google" to the Google assistant. If you cannot activate it in this way, just press the home button on the phone for 3 seconds. After activating Google Assistant, say "Talk to Kerala Police" and takes us to Kerala Police Assistant portal, for submitting your queries.

As the "Kerala Police Assistant" works on vocal commands, this system can be also effectively & easily used by the Blind people. In addition, there are many services added with primary aim of protecting women, hence we can say this Chabot service as Women Friendly. For example, if we say "Women Abuse" as triggering word, there will be facilities to inform to TOLL-FREE No.1515 of PINK police, or TOLL-FREE No.112 of Police Control Room or MITHRA Women Help Line and Nearest Women Police station. In addition, If you have just seen "Rash driving", at that moment, you can get the service or guidelines you need from the Kerala Police portal, by justsaying "RASH DRIVING" after activating our portal by saying "Talk To Kerala Police".

The Minister of PWD and Tourism PA. Mohamed Riyas officially Launched and demonstrated the unique initiative chat bot service "Kerala Police Assistant" to the Public in a function held at District Police Training Centre at Kozhikode city. Ashok Yadav IPS (IGP North zone), AV George IPS (DIG and Commissioner of Police Kozhikode City), Swapnil M Mahajan IPS (DCP Kozhikode City) were present at the function. The Assistant Commissioner of Police of various Wings in Kozhikode city were also present at the function. The launch of Kerala Police Assistant Chabot service added a golden feather to the success crown of the Kozhikode Cyberdome as well as Kerala Police. The Kozhikode Cyberdome team including Niyas S. (Assistant Nodal Officer (I/C), Cyberdome Kozhikode), Nighil S, Sujith O, Aswin T, Abhilash K, Sivakumar P, Srikhil KS and Cyberdome Volunteers Shabeeh Bin Shakkir and Sreelal was the key team behind the development of Kerala Police Assistant Chabot service.

### Taking stringent measures on tackling cyber crimes

#### Ilango.R IPS

City Police Commissioner, Kannur

The pandemic has profoundly changed how people use technology in the last year. For a large number of people, routine daily activities now occur at home using a connection to the Internet, including work, school, shopping, doctor visits and entertainment. As time spent online has increased, Cyber Crime has grown dramatically.





Cyber Crime has wide-ranging, long-lasting effects across society, targeting individuals, academia etc. Now a days the challenge of dealing with Cyber Crime is complex. The pandemic of COVID-19 and the imposed lockdown, has led to more people to be confined at home with many more hours to spend online each day and increasingly relying on the Internet to access services,

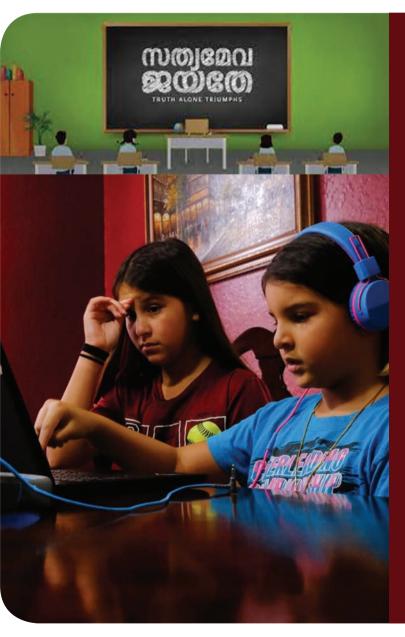
they normally obtain offline. The children need to spend more time online for services such as schooling. This seismic change in how we live our lives and use the Internet has prompted a proliferation of e-crimes.

In the Kannur City Police District, Cyber Awareness classes were conducted physically among students, parents, public, NGOs, volunteers, teachers, clubs, residential associations etc. in the year 2019 and in wake of the COVID-19 pandemic, the same has been conducted through online platforms in the year 2020-2021. The same has also been delivered to the Police personnel in Kannur City District. In addition to the above, the Cyber crime investigation course also has been given to the Police personnel (Janamythri Police, Students Police Cadets, Police Station Public Relation Officers etc.) to enhance their capacity to deal with Cyber Crimes in this District. Recently, in the COVID-19 pandemic newer forms of Cyber threats are existing. In order to curb this, awareness campaigns are conducting through social media platforms like face book, Twitter, You Tube etc. and publishing awareness videos of cyber security. Online sexual harassment against women and children are seriously being monitored and the police are taking stringent action with the existing laws. In order to curb online child sexual abuse materials transferring, State level raids are being conducted in a regular interval as 'OPERATION P HUNT'.

At present an another initative started by the Ministy of Home Affairs has operationalized a Toll Free Number 1930 (previously 155260), National Cybercrime Reporting Portal (NCRP) a platform that will help preventing financial loss due to Cyber fraud. This helpline will put in place mechanisms where people can report such cases, if they are found to be defrauded. The facility empowers both the banks and the Police, by leveraging new-age technologies for sharing online fraud-related information and taking action in almost real time, it said, adding that loss of defrauded money in online cheating cases can be stopped by chasing the money trail and stopping its further flow before it is taken out of the digital ecosystem by the fraudster.

## The safe use of digital media

Anchitha A.
Asst. Editor, 1 & PRD.





The government of Kerala has launched Satyameva Jayate Digital Media Literacy Program, a twoday workshop to create awareness among students and youth about the safe use of digital media and ways to recognize fake information on the web. The media literacy boot camp for the teachers was organised by the Higher Education Department in association with DataLEADS, a digital media organization. It was inaugurated by Dr. R Bindu, Minister of Higher **Education at the KTDC Samudra** hotel, Kovalam. DataLEADS brought its global expertise in on-line verification and information literacy and led hands-on sessions on different tools and techniques to address mis and disinformation.

act-checking is the need of the hour in the world of information burst. To find out and differentiate which is true and which is fake has become a vicious circle of a dilemma for society. The boot camp was led by DataLEADS' fact-checking and online verification team, started with the exclusive session on Understanding Changing Information Ecosystem led by Syed Nazakat, CEO of DataLEADS. He discussed the massive changes that happened in the flow of information throughout the years. The importance of information hygiene and how to manage that information was the key topic in the morning session.

The media literacy camp tried to focus on creating awareness on how to detect mis and harmful information. It is the fact that 'n' number of news is flowing through the social media and other platforms with which we stumble across. So much so that the need for information hygiene is one of the prime important matters today. The training session became more interesting with the inclusion of 'Kahoot' a gaming session focused on media literacy and was enacted to evaluate things around us.

The afternoon session elucidated various techniques on how to find out valuable and true information from a pile of data. A detailed discussion was also held on the need for verification of images. This reminded that when the manipulated images are shared, it can lead to amplification of misinformation. Google reverse image search and Metapicz are various techniques that we can use to detect and verify the authenticity and fidelity of the images being circulated .

The second day of boot camp set in motion with another game session and also discussed some techniques to find the authenticity of the news. There are many techniques like Geofind, YouTube Data viewer, InVID chrome extension, among others to know about the accuracy of the news being circulated through the social media and other platforms. While playing 'YouTube's first video ever in history', the session highlighted drastic changes brought out by the YouTube and the other social media. Many pieces of news is indeed being generated every day. It is important that as tons of data are being circulated on the internet, one has to acquire the ability to differentiate true news from the fake one. Some interesting exercises were given to the audience to sharpen the observation skills. The significance of critical thinking for analyzing information from different perspectives and the ability to conclude information objectively was also a topic of discussion. To make evidence-based decisions in order to promote good information practice along with critical thinking is relevant in this scenario.

The afternoon session kick-started with the introduction of techniques to verify the authenticity of news or information using the application WhatsApp. To know about the trustworthiness of news and information, one can easily use IFCN factchecking organizations on WhatsApp. Apart from that one can access 'First Check' to know about the viral message or social media post or information related to health. Various videos documenting the need for fact checks were shown during the session. The remaining part of the session discussed the challenges that could be faced by teachers while training their students regarding fact-checking. This particular session reminded the audience that they can help the youth across Kerala to learn and understand the better nature and characterisation of content that gets published online. There might be different types of learners so that one must inform them to care about what is written and the relevance of the content. The trainers should review the module content by knowing the trainees and should carry resources for the training such as flip charts, printouts, etc. This session also gave pieces of information and tips on how to make good training sessions with the help of encouraging group work and interactive sessions.

The final session handled by Mir Muhammad Ali IAS, weighed upon the importance of information in our day-to-day lives. A video was played to highlight the influence of viral videos we came across in our lives online. Another discussion was conducted based on the video regarding the need for information literacy. In the latter module, he threw light on the social media business model. This session also talked about the fundamentals of launching and maintaining a website, as far as a business is considered. The definition of a business model, how a website engages us for hours, how the filter bubble works based on an individual's likes and dislikes were the key points of discussion in the whole session. The underlying points were elucidated with the help of some video clips. Another video based on types of misinformation was played in the middle of the discussion. The possible ways of responding to the misinformation were communicated with the help of another informative video. The easiest way to check the fact is by asking the sender the source. One has to recognize the difference between facts and opinions and never intend to accept information unconditionally.

Looking at the cohort, DataLEADS designed a customized curriculum for educators which could suit their everyday news consumption and media literacy competencies. It was well received by all the participants and same could be seen from the feedback received from over 150 participants who came from all across Kerala to join this unique boot camp.

## Rahe Na Rahe Hum Mahka Karenge -The heady fragrance of Lata Mangeshkar's voice

T.N. Seema





Former M.P & music aficionado T.N. Seema recollects her crush with Lata Mangeshkar's unparalleled, melliflous voice

Lag ja gale se," "Naina barse rim jhim rim jhim," in Woh kon thi; "Jhoom jhoom dhalti rath," in Kohraa; "Kahi deep jale kahi dil" in Bees saal baad; "Tu jahan jahan chalega" in Mera Saya stir nostalgic feelings in us, conveying the deep sadness embedded in love.

The same intense sorrow throbs in the immortal "Dil hum hum kare" set to music by Bhupen Hazrarika in Rudali (1993).



cannot recall when exactly I started listening to Lata Mangeshkar. Perhaps it was a lullaby, rendered by my parents who were passionate about Hindi films and songs, an extraordinarily beautiful one penned by Bharat Vyas and set to music by Vasant Desai for the film Do Ankhen Barah Hath: "Mein gaoom thu chup hoja, mein jaagoo re thu soja" [I shall sing, you be quiet. I shall be awake, you go to sleep]. The rustling of leaves and the closing of window panes in the breeze are what largely constitute the BGM of the song. The rest is the tender and intense voice of Lataji.

Several of such nostalgic moments are reserved exclusively for those who love Lataji's songs. That musical voice is an inextricable part of the sentiments and moods of two or three generations. Bidding goodbye to us in her 92nd year, she has left behind not only a priceless empire of melodies but also valuable life lessons about how to scale the tough and dangerous path leading towards it, and celebrate the victory.

By the 1950s she was such a sought-after singer that even the most prominent music composers had to wait for her slots. The famous music composer Laxmikant Pyarelal sought her out to sing 700 of his songs. The works of poets like Sahir Ludhianvi, Kaifi Azmi, Gulzar and others came to us through the medium of her enchanting voice. She sang duets

with some of the most talented singers India has ever seen – from Mohammed Rafi, Mukesh, Kishore Kumar, Hemant Kumar, Talat Mohammed, Manna Dey and S. P. Balasubramaniam to Kumar Sanu, Udit Narayan and so on. The songs she sang for nearly all the great actresses across half a century are distinct signposts of the times they were made in.

Lataji had the rare honour of leaving her voice signature in nearly all the works that are considered milestones in the history of Hindi films. Raj Kapoor's Barsaat (1949) was a veritable music festival. If the seven songs she sang - "Barsaat me humse mile," "Hawa me udtha jaye," "Mujhe kisi se pyaar ho gaya," among others – continue to hold a special place in our hearts that is, undoubtedly, because of their heavenly music and, more importantly, because of her voice, mellifluous as the notes of the veena. Baiju Bawara (1952) was a musical feast, and the songs Lataji sang for it, including "Bachpan ki muhabbat ko," "Dil se na juda karna," "Jab yaad mile aaye" and "Milne ki dua karna" marked the beginning of a long string of numbers that overflow with the pangs of separation, romance and inner conflicts. She has left us with many haunting "ghost" songs too. "Lag ja gale se," "Naina barse rim jhim rim jhim," in Woh kon thi; "Jhoom jhoom dhalti rath," in Kohraa; "Kahi deep jale kahi dil" in Bees saal baad; "Tu jahan jahan chalega" in Mera Saya stir nostalgic feelings in us, conveying the deep sadness embedded in love. The same intense sorrow throbs in the immortal "Dil hum hum kare" set to music by Bhupen Hazrarika in Rudali (1993). It is a daunting task for music lovers to pick favourites out of the humongous volume of songs - more than 40,000 songs in 36 languages!

In her interviews, Lataji has spoken about the difficult days she went through, forgoing food, travelling by train or on foot in order to go from one studio to another, all for the sake of keeping the wolf from the door and looking after her large family. She was also an artiste who did not have any hesitation about standing up for her rights. The firm stands she took in the dog-eat-dog world of the Hindi film industry were what helped her lead a life of dignity and earn the respect of others.

Her voice was first criticized as too thin but over a period of half a century the Indian world of music saw it transform into one that could convey any emotion. It has been my companion through my own life, humming in my heart through sorrows and joys, love and separation, among friends and in solitude. This is perhaps the experience of all her fans. Her voice, with its otherworldly fragrance, is certain to waft across all ages as one of her own songs proclaims: "Rahe na rahe hum, mahaka karenge Banke kali, banke saba, baag ye wafa mein."

[I may or may not remain, but shall spread fragrance/as bud, as breeze in the garden of faithfulness.]

## A musical vine that conquered our hearts

Ramesh Gopalakrishnan Music Critic





The Nightingale of India, the Voice of the Millennium, the Owner of Lotus filament-like Voice, the River of Sound Soaked in Moonlight these are sobriquets that try to capture the admiration of myriads of song-lovers in India. There is only one singer who epitomizes all these epithets in our land, and that beauteous voice has vanished from our midst - Lata Mangeshkar. She had been battling for her life for the past couple of years. But eventually on 6 February 2022, she sank into the depthless abyss of death. Quite literally, that departure marked the end of a historic era in Indian film music.

It is amusing to recall that at one point in time, Pakistan is said to have admitted to India that it was prepared to forsake all claims to Kashmir if India would surrender Lata Mangeshkar the singer. India's repartee was equally famous: Give us Noor Jahan the Melody Queen, and we will surrender Taj Mahal to you!



hat does the name 'Lata Mangeshkar' mean to this great country? She was not merely a singer par excellence but an actor, producer and music director as well. In an artistic career spanning 75 years, she sang thousands of songs, in more than 36 languages. She composed music for a few Marathi films like Ram Ram Pahune, Mohityanchi Manjula, Maratha Tituka Melvava, Sadhi Manse and Thambdi Mati. Except in the first, she took the name of "Anandghan". Earlier, during 1942-48, she acted in four Marathi and four Hindi films. She produced a few Hindi and Marathi films as well.

Lata was born as Hema on 28 September 1929 at Indore in Madhya Pradesh to the Hindustani singer, Marathi theatre actor and music director Dinanath Mangeshkar and his wife Shevanti. She would later conquer the world of Indian music as Lata Mangeshkar. Lata Mangeshkar was followed by three sisters - Meena, Asha Bhosle and Usha - and a brother, Hridayanath Mangeshkar. All the siblings were amply blessed by the Goddess of Music, and they worked in the field of music. But only Asha Bhosle followed her into the world of playback singing.

In 1942, she got an opportunity to act and sing in a Marathi film. Although her song was recorded, she could not act in that scene due to the unexpected death of her father. As

a result, her first song was never released. Later, in 1947, she was made to sing for a Hindi film named Aaap ki seva mein. A thumri that began with "Pa lagu kar jori re ..." is generally considered her debut song. The next year witnessed the birth of her first hit song "Dil mera toda ..." sung for the film Majboor. Its music was composed by Gulam Hyder. By then; that is before the death of Dinanath Mangeshkar, the family had moved to Pune. This relocation did a power of good to Lata's singing career in the film industry.

Within five years of the release of her first film, she sang under all the prominent music directors in the Hindi film world. Her "Aayega aayega aanewala . . ." for Mahal (1949) made her a recognizable voice throughout India. Thereafter, producers of Bollywood started queueing up to book her for their films. In course of time, Lata Mangeshkar became an indispensable part of the Hindi film industry. One point worthy of special mention in this context is that O. P. Nayyar was the only famous music director who did not engage her for any of his compositions. The reason for this avoidance is unknown to this day. Her only gift to the Malayalam film industry is the famous song "Kadali chenkadali . . ." composed by Salil Chaudhary for Nellu (1974) directed by Ramu Kariat.

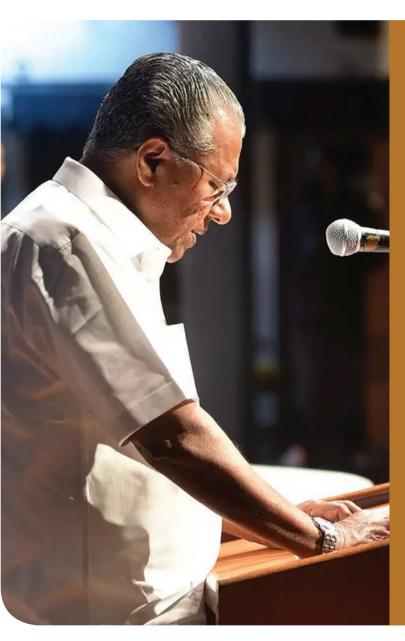
The very name Lata Mangeshkar, who ruled the world of Hindi films for more than half a century, evokes continual waves of songs – hundreds of them – in our memory. Each and every one of her songs is loved for various reasons because they contain all the emotions and sentiments known to the human mind. But one iconic film is worth mentioning here – Mughal-E-Azam released in 1960 – that was celebrated all over India for the dazzling importance it gave to music. Of its 12 songs, composed by the legendary Naushad, eight were Lata solos, one was sung by Lata along with Shamshad Begum, two by Ustad Bade Gulam Ali Khan and one by Mohammed Rafi. The film was noted for its enormous production costs, unprecedented until then, but its most noteworthy component was undeniably its songs. An interesting point about the film is that most of the songs were created in order to exploit the sheer range of Lata Mangeshkar the singer. Perhaps Mughal-E-Azam alone is enough to explain the reason why she attained so much relevance in the Hindi film industry of that time. In those days, there was probably no lover in India who did not croon her famous "Pyar kiya to darna kya..."!

Lata Mangeshkar has been feted and honoured by her own country and other nations as well – Padma Bhooshan (1969), Dada Saheb Phalke Award (1990), Padma Vibhushan (1999), Bharat Ratna (2001), National Order of the Legion of Honour (the highest French order of merit, 2007) and more.

To expect another musical vine [Lata] to wind its way into our hearts and conquer us so thoroughly may only be a pipe dream, after all!

### The Second 100-day Mission

**Staff Reporter** 



The Government of Kerala has announced second turn of 100day mission, an action plan to advance in health, social security, infrastructure development and employment safety. The State has already witnessed a great leap in many of these aspects in the first phase of this action plan. Not different from that, this mission would also weave a tale of success, as the government is determined to move with a vision of advancement in all aspects.



second '100-day mission has been initiated by the government of Kerala. As part of the program, a variety of projects are being implemented to make a progressive impact on all possible sectors in the State. The first 100-day mission implemented from June 11, 2021- September 19 focused on improving social security, employment safety and infrastructure development. This current program will also channel its focus on these aspects.

20,000 houses, 3 housing complexes, 532 houses through 'Punergeham project, door-to-door service all over Kerala, a claim of the title deed for over 15,000 people, etc are going to be executed as part of the Life Mission. 14000 houses will be provided K-FON connections and all districts of the state will be allocated 'Subhiksha hotels. 150 wellness centres, 53 new school buildings, 15 PHC's, Navakerala Fellowship for 150 students, 1,500 rural roads, Mankulam Hydropower Project and Cherthala Mega Food Park are also a major part of this 100-day mission.

The mission is expected to create employment for around 23 lakh working days, mostly in the construction sector, in collaboration with various departments. The new 100-day mission will have a total of 1,557 projects. It is being implemented at a cost of 17,183.89 crores. It would be one of the rarities in history to complete such a large-scale program in different parts of the state in such a short period of time. The recession that followed the epidemic in many areas has affected human resource utilization.

The program will solve this issue to a large extent. The distribution of wealth among the ordinary by mobilizing human resources is one of the efficient ways to overcome the fatigue caused by the COVID on the state's financial structure.

The school in Poovachal is a worthy example of how development projects are effectively implemented in the state of Kerala. A few years back, such a school project could not be imagined as there weren't big funds to allocate to the education sector. But the school is proof of how dreams come true with perseverance and planning. The main responsibility of any government in power is to ensure the development of the land, not for anyone section to enjoy but for the whole population. No matter how small, projects like this are an inspiration to continue consistent progress. From small hydropower stations to refurbished treasuries, from the food park to the rubber company, from the International Exhibition and Convention Center to the Life Science Park, from the livelihood empowerment schemes for people with disabilities to the Expatriate Assistance Scheme, from classroom preparation for SC children to return loan scheme for backward class expatriates, it is the small projects that add to the bigger picture. The state aims to comprehensively touch all sections of the society and all parts of the country.

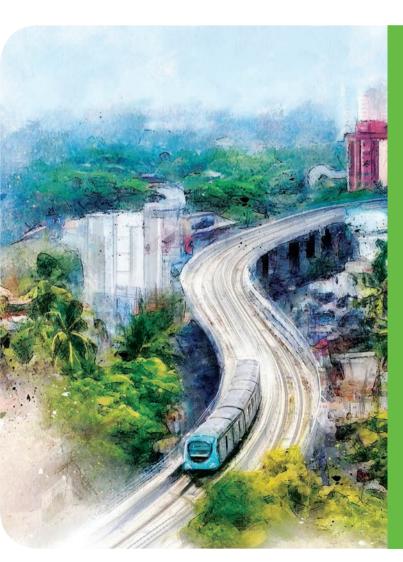
Our country suffers the most in the matter of employment opportunities. It is a sad truth that qualifications are not proportional to the availability of jobs in the country. In a smaller state like Kerala, this issue stands out even bigger. The great flood of the century followed by the extreme monsoons, the Nipah virus, Okhi and lately worldwide pandemic COVID, has deeply affected the economic and social welfare of the state. And it is with extreme pride we say that it is the unity of the people of Kerala that helped fight together for survival. To add to these efforts by the people, the government is committed to ensuring its complete support and help to its citizens.

School education was greatly disrupted by COVID. But the digital learning approach the state implemented stands as a model for the whole country. The campaign for the protection of public education was started at a time when public education was in a state of great decline, but now, the public education sector has greatly improved. The number of students attending public schools in the state is also increasing exponentially every year. Kerala has always taken the education of its children seriously and the government has taken up the responsibility of providing the best learning facilities to the students of the state. KIIFB Fund, Plan Fund, NABARD Fund and other funds were utilized for this purpose. Thus, construction works worth about Rs 5,000 crore are being undertaken for the education sector alone. As a result, Kerala is consistently ranked number one in the Performance Grading Index conducted by the Union Ministry of Education. The state is also number one in the School Education Quality Index conducted by NITI Aayog. Kerala also tops the SGD India Index conducted by the United Nations and NITI Aayog. The government is determined to strengthen the higher education sector in line with the strengthening of the public education sector.

Kerala is moving with the vision of developing a knowledgeable society and the government is supplementing with appropriate steps to implement it faster.

# Economic development through sustainable development

Niveditha P.S.





The phrase "sustainable development" was coined in 1980, popularised in the 1987 report of the World Commission on Environment and Development (the Brundtland Commission), and given global status by the United Nations Conference on **Environment and Development (UNCED).** Transportation is predicted to be the key driving factor behind an increasing global need for energy over the next twenty years, according to the United Nations General Assembly (Indeed, it is now the largest enduse of energy in developed countries and the fastest growing one in most developing countries). In the context of infrastructure, public transportation systems, goods delivery networks, affordability, efficiency, and accessibility of transportation, as well as improving urban air quality and health and reducing greenhouse gas emissions.

he Government of Kerala is working to achieve an integrated development of all social strata and long-term sustainable development. To accelerate the economy's long-term growth, special attention is paid to industrial and infrastructure development. Transportation infrastructure refers to the basic facilities and services that are required for economic activity to run smoothly. Roads, trains, waterways, airways, telephones, and related industries are the focus of major transportation infrastructure development operations. Sustainable transportation is defined as a mode of transportation that can supply required capacity and performance, uses an inexhaustible energy source, is compatible with desired lifestyle, and is both clean and economical. Future generations should have more economic, ecological, and social options as a result of today's transportation policies and investments, not less.

#### Key Opportunities of Sustainable transportation in Kerala

For the third year in a row, Kerala has remained at the top of Niti Aayog's Sustainable Development Goals (SDG) India Index 2020-21, demonstrating its social, economic, and environmental success. Kerala received 75 points, up from 70 and 69 the previous two years. Kerala has topped the index from its inception in December 2018, and it has since become the country's principal instrument for tracking progress on the SDGs. Although the state was experiencing pandemic related problems, this is a great step towards commitment to sustainable development.Kerala has also made strides in the domain of sustainable transportation.

Kerala has risen to the top of India's list of states with the most environmentally friendly transportation systems. Kerala recently received the distinction for 'City with the Most Sustainable Transportation System.' The Ministry of Housing and Urban Affairs will present it. The award is granted in honour of India's transportation infrastructure in various states and union territories. The prize was granted in honour of the projects that were executed to improve the city of Kochi's transportation services, such as Kochi Metro, Water Metro (Water Connectivity with the Same Experience as Metro), and E-mobility. This is a great step towards achieving sustainable Development goals of 2030. Apart from having ecological benefits to the state's Economy, it has far reached impacts on economic development and growth.

#### **Economic Growth and Sustainable Transportation in Kerala**

In any economy, there is a significant link between sustainable transportation and economic growth. The 'Ripple Effects' of sustainability in the transportation sector quickly trickle down to the economy. Kerala's economy has made significant progress in the area of sustainable mobility, thanks to its efficient and cost-effective infrastructure. The Government of Kerala has adopted a variety of efforts in this area, as seen by our success stories. The economic advantages of sustainable transportation for our economy are following.

- ▶ Job Creation and lowering unemployment rate in the state's Economy: Jobs in services, high technology, building, design, manufacturing, maintenance, research and development are all possible with sustainable transportation can increase job opportunities in the economy and thereby lowering unemployment and poverty.
- ► Attracting new business units to the state and diversifying the business investment opportunities: The state of Kerala has already bagged biggest and investment worthy business opportunities in the field of sustainable transportation. Attracting new business units which are economically efficient is crucial for our state and can lead to sustainable economic growth.
- ► Reduction of Transportation costs and encourage usage of sustainable transportation resources: Sustainable transportation is always a least cost method and is beneficial for the economy. The economy can save considerable amount of costs by moving towards transportation with sustainability.
- ► Economic Development: The state of Kerala can have efficient economic development by investing in sustainable transportation services by creating more jobs, reducing travel costs, alleviating poverty and unemployment, etc

The below diagram summarises the economic benefits of sustainable transportation.

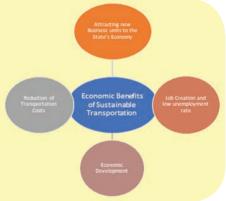


Figure 1: Economic Benefits of Sustainable Transportation

### Smoothing the Path of Sustainable Development

With 75 points, Kerala ranks first in the NITI Ayog's Sustainability ranking. The importance of sustainable transportation in achieving this goal cannot be overstated. Our administration is implementing many steps in the field of sustainable development to help us stay on track. Among these, the initiative in sustainable transportation is

seen as significant and equally crucial for economic growth and development. This achievement will definitely smooth the way of achieving sustainable development.



### "MRIDHU BHAVE DHRIDA KRUTHYE"

