

India's state forensic labs to expand its infrastructure

16 May 2019 | News

India is building its forensic infrastructure to tackle the increasing demand for DNA testing



Led by Delhi and Maharashtra, India's forensic laboratories have managed to reduce pendency of DNA testing cases by a 50% national average. While Delhi has eliminated most of its case backlog, Maharashtra is upgrading facilities across regions like Aurangabad and Amravati as a response to the ever-increasing demand for DNA testing from law enforcement agencies and courts.

In the north, Delhi was facing a pendency of 9,000 DNA testing samples in 2017 but with concrete steps to upgrade infrastructure and manpower, the state FSL has managed to eliminate most of its backlog in over a year.

Similarly, in the western region, Maharashtra has been working on reducing a backlog that stood at 1,700 DNA cases in 2017 – a majority of which are related to sexual offences against women & children. The state receives 4,500 cases of DNA analysis in a year with demand increasing by nearly 20% annually and is expected to extend DNA testing facilities from presently five to all its eight forensic labs this year.

Dr Rajiv Giroti, Dy. Director CFSL, Hyderabad said, "There's been a huge impetus witnessed in forensic infrastructure across India's FSLs over the last one year, with rising demand for DNA testing in criminal investigation. This has led to substantial reduction in backlog of cases to nearly 50%. Delhi and Maharashtra have performed exceptionally well! They are seen to steadily and speedily work on expansion of district level facilities, stepping up workforce with more experts and technical staff with high-throughput equipment to expedite investigations and provide breakthroughs".

As per recent reports, DNA testing infrastructure is being upgraded across all state forensic science laboratories. Larger states like Maharashtra and Tamil Nadu are expanding facilities across districts to increase coverage and reduce the load on existing labs. In the south, Tamil Nadu is seen to expand a good number of regional level labs. Up north, Himachal Pradesh, has stepped up infrastructure with their two range forensic labs, and in the east, Guwahati too is expected to set up its FSL within next 6 months.

The central forensic science laboratories (CFSL) capability in India is also on an expansion mode. Pune is soon to rebuild and upgrade its CFSL in next 8-10 months. This would be in addition to its existing FSL facility in the region.

Tim Schellberg, Founder & President, Gordon Thomas Honeywell—GA notes, "It is good to see that India is building its forensic infrastructure to tackle the increasing demand for DNA testing. However, we must remember that 20,000 DNA

profiles is not near enough in a country of a billion people with half a million reported violent crimes every year. There is an immediate need to scaling that up by 10 times. I hope India continues the momentum in adopting the world's best crime fighting technology to build safer communities.

Dr Rajiv Giroti, Dy. Director CFSL, Hyderabad added, "With close to 28 state forensic labs having DNA testing facilities in the country today, we still have a long way to go in terms of making this technology accessible with a better lab-to-population ratio. India has a rich talent pool available in this field with reputed academic institutes in forensic biology, fully equipped to train them. By creating the right job opportunities therefore, we will be able to bridge the supply-demand gap".

Shortage of well-equipped, hi-tech laboratories and inadequate staff strength at forensic labs has long been responsible for the delay in forensic examination of suspects leading to rise in the backlog of court cases. According to Directorate of Forensic Science Services (DFSS), more than 12,000 DNA samples from sexual assault cases were awaiting examination in three of the six CFSLs across India till December 2017.

Last year however, saw a reversal of trend on back of a series of initiatives being announced to enhance the country's forensic infrastructure. The biggest step was taken by the Union Ministry of Women & Child Welfare to upgrade the Chandigarh CFSL with state-of-the-art 'Sakhi Suraksha' lab to expedite investigation and prosecution of violent crimes against women.

As per recent estimates, the number of DNA profiles developed from crime scene evidence has doubled over a year from 10,000 cases tested in 2017 to nearly 20,000 this year¹. This increase in DNA casework can be attributed to an upward trend in reporting of rape & sexual violence cases owing to public awareness and activism along with steps taken by the government to upgrade police and forensic infrastructure.

Forensic DNA has emerged as the most reliable crime fighting technology the world over. Many countries are effectively using forensic labs and protocols to collect, test and compare DNA at crime scenes with that of suspects with promising results. Where law machinery world over is increasingly relying on DNA forensics to solve crime, the pace in India has been slow. Lack of scientific methods in investigations and absence of a proper policy framework in the country continue to hamper justice.