



Annual Administrative Report (2021-22)



Directorate of Forensics Services Himachal Pradesh

dforensics-hp@nic.in

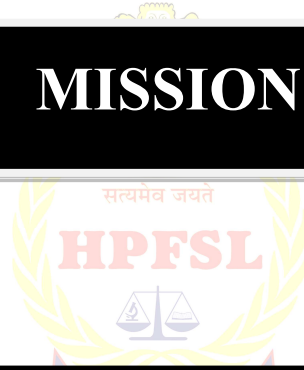
Website: www.himachal.nic.in/home



MOTTO

विज्ञानेन् सत्यान्वेषणम्
'Vigyanane Satya Anveshnam'
विज्ञान से सत्य की खोज
To dig out truth through science.

MISSION



Foremost mission of the HPFSL is to serve the society in a holistic manner by way of providing quality and timely reports in criminal and civil cases and in matters of public interest; create a vibrant and intellectual environment in the institution built on trust, commitment to promote good practices and inculcate ethical values and employ modern methods; empowerment of law enforcement agencies, judiciary and enquiry commissions with forensics knowledge for proper investigation and for better understanding, evaluation and appreciation of reports. HPFSL has to emerge as a temple of knowledge sharing with other institutions in the development of the state-of-art forensics in order to open new vistas.

VISION

- ◆ Quality reports, timely reports by adopting good practices and protocols with latest know-how conforming to national and international standards form the foundation principles of an institution for it to emerge as a premier institution.
- ◆ Achieve excellence in human resource development through training, by creating a congenial scientific ambience that encourages team spirit and ideal professional conduct.
- ◆ Fostering collaboration and co-operation with universities, research undertaking bodies, promoting R&D programmes so as to generate database and for developing state-of-the-art (infrastructure).
- ◆ Building Himachal Forensics into a professional service, enjoying public faith, exhibiting accountability, transparency in order to meet modern challenges of crime. To evolve a mechanism whereby forensic service is available in investigation of all heinous crimes, and whenever required in situations demanding public interest.
- ◆ Help in combating corruption, help in protecting environment and endangered species (flora & fauna), help in upholding human rights and help in preventing human trafficking.
- ◆ Creating public awareness by disseminating knowledge through media (print and electronic) about the cases solved with the forensic tools and techniques, means of a proactive forensics, which is deterrent to the wrong doers and potential criminals. Also, educating public about do's and don'ts on the spot, drug menace, save oneself from cyber crime and about road safety.
- ◆ Encouraging use of more forensic inputs to put investigation on the right track in the beginning itself so as to save police man hours and saving public from unwarranted inconveniences.
- ◆ Promoting ethics in forensics.

PREFACE

Forensics in the modern era is fast evolving and leading to development of new tools and techniques with a flavor of digital transformation to serve the law enforcement agencies and Police at large. The key factor of digital strategy is at Being digital and not just Doing digital, That encompasses three key layers i.e. 1) Digital work programme i.e. what we do 2.) Digital capability i.e. what we leave behind 3) Determine i.e. what we become, changing our culture in alignment with digital era we live in. Accordingly, it has become imperative to invest in and create proper technology architecture conforming to international quality standards.

A significant wave of digitization is well under way and Forensic Directorate is not behind rather keeping pace with changing scenario by way of a plan to digitize crime file record, implementing e- reports. The coding of the crime exhibits in their journey from the scene of crime, hospited in the forensic lab and after analysis from the forensic lab to the courts in conjunction with forensic analysis reports, would eliminate element of biasness, bringing transparency and fast track delivery of reports to the end users i.e the law enforcement agencies (police) and courts had become the need of the hour.

The Indian Government allocated Rs 7.29 Crore under the Nirbhaya Fund, MHA, GOI to enhance capabilities in DNA and Digital Forensics at State FSL and RFSL NR Dharamshala. Accordingly, the state -of- the art infrastructure facilities was created in DNA Division of State FSL and Digital Forensic Division of RFSL, NR.

During the COVID-19 pandemic, RFSL, CR, Mandi initiated RT-PCR based COVID-19 testing after developing necessary infrastructure and qualifying quality control standards.

The annual administrative report of Directorate of Forensics Services, Himachal Pradesh comprehensively detailed the achievements, advancements, and impactful contributions of the organization in the field of Forensic Science during the year 2021-2022.

(Dr. Meenakshi Mahajan)
Director Forensics Services, HP

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DIRECTORATE OF FORENSICS SERVICES

INTRODUCTION:

The journey of Directorate of Forensics Services commenced with the creation of State Forensic Science Laboratory on 13-12-1988 at Police Headquarters, Shimla. The organization primarily caters to the needs of investigation agencies viz. Police, Vigilance, CID. Also, rendering services to judiciary, universities, boards, banks, enquiry commissions and other government departments. Before it came into existence, the said departments were dependent on central government institutions: Central Forensic Science Laboratories, Government



Examiner of Questioned Documents and Serologist to the Government of India, Kolkata. The FSL started functioning from barracks of Police Complex Bharari, Shimla with two divisions encompassing four specialities namely Biology & Serology and Chemistry & Toxicology. Then moved to Junga in 1996 and started functioning from the premises of Police Training School. Two more divisions viz. Documents & Photography and Physics & Ballistics were created in 1997 and became functional in the year 2000. In order to ensure independent functioning of investigation agencies working on scientific principles, the laboratory was placed directly under Home Department in the year 2005. Thereafter in the first meeting of HP Forensic Science Development Board (2006) two new divisions viz. DNA and NDPS were created at State FSL, and two Regional Forensic Science Laboratories were created each in the Northern Range and Central Range at Dharamshala and Mandi. For the continuous development of Forensic Science in the Himachal Pradesh, the First Five year Perspective plan (2014-19) was approved in the 8th meeting of HPFSDB in the year 2014.

A First: Disaster Victim Identification (DVI) cells were established in State FSL & RFSLs in 2014-15 as per Interpol guidelines. Voice analysis & Digital Forensics at State FSL, DNA facility at RFSL, NR Dharamshala, RFSL, CR, Mandi and First District Forensic Unit (DFU) at Bilaspur were sanctioned in 2015-16 and subsequently operationalized. The Forensic Psychology Division was sanctioned in 2017 and the Digital Forensic and Forensic Auditing facilities, the latter being first of its kind in the country, to detect frauds through digital evidences was created at RFSL, NR, Dharamshala in 2017-18. Likewise, the voice analysis facility was extended to RFSL CR, Mandi. Himachal Forensics has taken a lead by making amendment in the HP Police Act, 2007 in the year 2018 to bring administrative reforms wherein the Forensics Directorate would be headed by the Director General (Forensics), Forensic set-up at Range would be headed by the Range Director and District Units would be headed by the Assistant Director/Dy. Director besides integration of Finger

Print Bureau with the Directorate of Forensics Services to bring all forensic facilities under one umbrella. Further, two more District Forensic Units one each in Northern Range and Southern Range were created and operationalised in Police District Nurpur and Police District Baddi (2019-21).

The Regional Forensic Science Laboratory, Northern Range, Dharamshala was notified as Examiner of Electronic Evidence U/S 79A IT Act 2000, by the Ministry of Electronics & Information Technology, Govt. of India for the analysis of computer storage devices and mobile phones in the year 2019. The Enforcement Directorate, Govt. of India is referring their digital evidences for the purpose of analysis in the lab.

The Director was declared Head of the Department in the year 2009 for more administrative and financial autonomy. The new nomenclature Directorate of Forensic Science (DFS) was approved by the Govt. in accordance with the HP Police Act, 2007 and notified in the Business of the Govt. of Himachal Pradesh (Allocation) Rules, 1971 in the year 2015-16. Now nomenclature of Directorate of Forensic Science (DFS) has been amended as Directorate of Forensics Services in the Business of the Govt. of Himachal Pradesh (Allocation) Rules, 1971 in January 2020.

A scheme was designed, approved and operationalised in 2017 for disposal of Bio-Medical Waste from the labs. The H.P. Forensic Document Examiner and Finger Print Examiner Authority (2017) for private practitioners were approved by the Government.

Himachal Forensics scaled new heights to emerge first amongst State & Central Forensic Labs in the country after becoming member of Asian Forensic Sciences Network (AFSN). Also DFS, HP appeared on the global map when succeeded in getting ISO/IEC 17025:2005(2018) and thereafter ISO/IEC 17025:2017 accreditation from NABL and became fifth State FSL & first RFSL NABL accredited labs in the country. Likewise, NDPS division of State FSL got registered with the United Nations Office on Drugs & Crime (UNODC) to participate in the International Collaborative Exercise (ICE) as a measure of quality assurance programme with the United Nation Lab.

Two Cyber Training Centres, State-of-the-art cyber forensic labs, at State FSL & RFSL Dharamshala were established with the funds received under Prevention of Cyber Crime against Woman & Children scheme (CCPWC/MHA, GOI) and strengthened the DNA and Cyber labs under Nirbhaya Fund MHA, GOI.

All the laboratories of the DFS H.P. are the approved centres for crime case analysis of Central Investigation Agencies viz. National Investigation Agency (NIA) and Central Bureau of Investigation (CBI) and the department earned appreciation from the NIA and many other investigation agencies of the state and the country.

ADMINISTRATIVE SET-UP

Hon'ble Chief Minister Himachal Pradesh

**Secretary (Home)
(Administrative Head)**

**Director Forensics Services
(Head of Department)**

RFSL, NR
Dharamshala

RFSL, CR
Mandi

Finger Print
Bureau, HP

State FSL
HP

DFU
Bilaspur

DFU
Baddi

DFU
Nurpur

State FSL

AD
(Bio &
Sero)

AD
(Chem
& Toxi)

AD
(DNA)

AD
(Phy &
Ball)

AD
(Docu &
Photo)

AD
(NDPS)

AD
(Psychology)

AD
(Voice
Analysis)

AD
(Digital
Forensic)

Dy. SP
Finger
Print
Breau

**Deputy Director (NR)
(Head of Office)**

**Deputy Director (CR)
(Head of Office)**

AD
(Bio & Sero)

AD
(Chem
&Toxi)

AD
(Docu & Photo,
Digital)
Forensic)

SO
(DNA)

AD
(Bio & Sero)

AD
(Chem &Toxi)

AD
(Phy & Ball,
Voice Analysis)

SO
(DNA)

MANDATE

- ◆ ANALYSIS OF CRIME EXHIBITS/CLUES IN THE LAB
- ◆ SCENE OF CRIME EXAMINATION & RECONSTRUCTION
- ◆ FORENSIC INTELLIGENCE & ADVISORY ROLE
(To put investigation on the right track in the beginning itself)
- ◆ EXPERT TESTIMONY IN COURTS/ENQUIRY COMMISSIONS
- ◆ TEACHING, TRAINING AND PUBLIC AWARENESS
- ◆ RESEARCH & DEVELOPMENT IN FORENSICS



Director Forensics Services Himachal Pradesh and Officers with trainee Judicial Officers

DUTIES AND RESPONSIBILITIES

Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of IOs/NGOs of Police Prosecution and Judiciary in Forensic Science.
- Any other scientific and administrative work assigned by the, senior officers /Government.
- Besides above duties, he is the head of the Directorate as well as Controlling Officer and has to perform duties related to it. He has to manage all the scientific matters for the overall scientific development of the Institution for the incorporation of new technology.

Deputy Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personnel in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the Director, Forensics Services in updating and introducing new technologies in the division(s).
- Any other work related to scientific or administrative nature assigned to him by the Director Forensics Service/Government.
- Besides above duties, he is required to assist the Director, Forensics Services in the matters of scientific and administrative nature. He is the supervisory officer and Divisional in-charge of at least two Divisions and has to guide the Scientists working under him. Management of Scientific and Administrative work has also to be looked after by him under the guidance of Director, DFS/HP.

Assistant Director

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personnel in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the D/DFS in updating and introducing new technologies in the division.
- Any other work assigned by senior officers/Govt.
- He/she is Divisional in-charge of his/her division. He also supervises and guide the scientific and technical staff of his division concerned in Administrative and scientific matters.

Scientific Officer

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To testify or give evidence before Judicial/Semi-judicial/Inquiry authority as and when required.
- Examination of scene of crime and submission of reports.
- Research in Forensic Science and related fields.
- Teaching and training of personnel in Forensic Science and related fields.
- He/she will be responsible for efficient working of the division(s) and expeditious disposal of work/cases pertaining to the division(s) by giving quality reports.
- He/she will render all assistance to the D/DFS in updating and introducing new technologies in the division.
- Any other work assigned by senior officers/Govt.
- He/she is also in-charge scientific unit of staff working under him /her and also has to guide and supervisor the Unit.

Scientific Assistant

- Examination, evaluation, comparison of clue materials and to submit scientific reports.
- To assist the officers/Experts in examination of scene of crime and the exhibits in the laboratory.
- Assistance in research in Forensic Science and related fields under the supervision of experts.
- Assistance in practical demonstration during teaching and training.
- Any other work assigned by the senior officers.
- He/she will also be assist in keeping the laboratory and equipments in order for scientific examination and shall help in expeditious disposal of work/cases pertaining to the division and also to help in the preparation of quality reports.
- He/she will also render all assistance to the senior officers in the division in updating and introducing new technology in the division.

Laboratory Assistant

- He/she is required to assist SA/SO/AD/DD and Director in examination evaluation and comparison of clue material especially for systematic arranging of exhibits and reagents.
- To maintain register of the division concerned for making entries of the exhibits/cases received in the division. He/she also has to maintain all the records of chemical, glassware and equipments and to prepare data whenever required.
- To perform another duties assigned by senior officers.

Laboratory Attendant

- To clean the laboratory tables / apparatus sinks, shelves, furniture and other items in the division.
- To hold and carry exhibits, glass-apparatus, reagents from where required.
- To cut open /seal the exhibits of the Division in the presence of experts and to carry them from one Division to another or to Crime branch.
- To perform any other duties assigned by senior officers for the cleanliness of the laboratory as a whole and for carrying materials and other items for the functioning of the laboratory.

HIMACHAL PRADESH FORENSIC SCIENCE DEVELOPMENT BOARD

The Government of Himachal Pradesh constituted Himachal Pradesh Forensic Science Development Board vide Notification No. Home (A)B(12)3/94 dated 09.12.2005 to augment forensics in Himachal Pradesh with specific terms of reference including implementation of National Human Rights Commission Core Group Report-1999 in a phased manner. The composition and terms of reference of H.P. Forensic Science Development Board is as under:

NOTIFICATION

The Governor, Himachal Pradesh, is pleased to constitute the Himachal Pradesh Forensic Science Development Board in the following manner in order to encourage the development and use of Forensic Science for investigation of crime in the state:-

Hon'ble Chief Minister, Himachal Pradesh.	Chairman
Chief Secretary to the Govt. of H.P.	Vice-Chairman
Advocate General, Himachal Pradesh, Shimla.	Member
Addl. Chief Secretary/Pr. Secretary (Finance) to the Govt. of Himachal Pradesh.	Member
Pr. Secretary (Home) to the Govt. of H.P.	Member
Director General of Police, Himachal Pradesh.	Member
Director-cum—Chief Forensic Scientist, Directorate of Forensic Science, MHA, GOI, New Delhi or Regional Forensic Science Lab. Chandigarh.	Member
Director, Vigilance, Himachal Pradesh.	Member
Director, Prosecution Govt. of Himachal Pradesh.	Member
Director, State Forensic Science Lab. H.P.	Member Secretary
Addl. Director General (APT), H.P. Shimla.	Member
Professor & Head, Deptt. Of Forensic Medicine, IGMC, Shimla.	Member

The Vice Chairman shall preside over meetings of the Board in the absence of the Chairman. The Board may co-opt experts for any meeting of the Board. TA/DA of members and experts,

if any, shall be borne by parent organization. The Board will be serviced from the Forensic Science Lab. Junga.

The Board shall meet quarterly to monitor development, proper functioning and progress of the Forensic Science set-up in Himachal Pradesh and shall approve a five year Perspective Plan as well as Annual Plans of Action for induction of Forensics into investigation and prosecution.

Terms of reference:

The terms of reference of the Board shall be as under:-

1. To lay down basic policies in application of Forensic Science to crime investigation and to ensure progressive development of Forensic Science services in the State in a time bound manner.
2. To oversee implementation of the recommendations contained in the National Human Rights Commission Core Group Report-1999, Plan for modernization of Forensic Science set-up in Himachal Pradesh 2000 and the two member committee report on Forensic Science submitted by Dr. M. S. Rao, Director-cum-Chief Forensic Scientist, Ministry of Home Affairs, Govt. of India, New Delhi on 31.3.2000 to Home Department in a phased manner.
3. To ensure autonomy, transparency, impartiality and credibility of the Forensic Science reports in the State and that of the Forensic Science institutions.
4. To identify needs for creation of different specialties/facilities in Forensic Science set-up in the State and providing facilities for the same. This will include creation of Regional Forensic Science Laboratories with mobile units at Range headquarters in Himachal Pradesh for providing quick response Forensic Science at the scene of crime.
5. To ensure that forensic inputs are effectively utilized in investigation and prosecution and to lay down training and communications policies for the purpose.
6. To analyze important cases of investigation/prosecution failure to identify additional forensic inputs that may be necessary to raise the success rate of conviction.
7. To approve the Annual Report of the Forensic Science Lab. and its contribution to investigation and successful Prosecution.

(BY ORDER)
Chief Secretary
to the Government of Himachal Pradesh

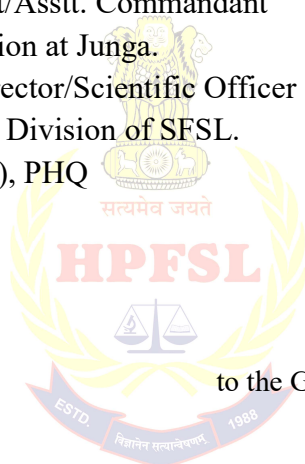
PURCHASE OF STORES

There is no separate wing to effect purchases in the department. In order to bring transparency, the Government vide notification No. Home-C(C)14-1/2 dated 13.3.2007 constituted a committee to have all major purchases in Machinery & Equipment and Material & Supply budget head through the purchase committee. The composition of the committee is as under:

NOTIFICATION

In supersession to this department notification of even number dated 27.2.2007, the Governor, Himachal Pradesh is pleased to re-constitute a purchase committee consisting of following officers in the office of State Forensic Science laboratory, Junga to effect purchases and authorization of expenditure in Machinery and Equipments/Material and Supplies from sources as required/necessitated in view of provisions contained in H.P. Financial Rules, 1971:-

- | | | |
|----|---|-----------------|
| 1. | Director, FSL | Chairman |
| 2. | Commandant/Asstt. Commandant
Police Battalion at Junga. | Member |
| 3. | Assistant Director/Scientific Officer
of concerned Division of SFSL. | Member |
| 4. | S.O. (Acctts.), PHQ | Member |



(BY ORDER)
Pr. Secretary (Home)
to the Government of Himachal Pradesh



State-of-the-Art Damaged Device Analysis Facility at RFSL, NR, Dharamshala

STATE FORENSIC SCIENCE LABORATORY

INTRODUCTION:

The State FSL is located at Junga. The Junga remained capital of erstwhile princely state Keonthal ruled by Chandrabansi dynasty. HH Hitender Sen, 77th Raja, was the last ruler of Keonthal state. Junga is strategically located at the centre of the triangle formed by Shimla, Chail and Kufri, famous tourist destinations, at an elevation of 5350ft.

The State FSL is located at a distance of 25 km from the state capital of Himachal Pradesh, where first Finger Print Bureau of the world remained (1905-1922) and the second oldest forensic institution in the world 'GEQD Shimla' was established in 1904. The weather at Junga remains pleasant throughout the year.

The State FSL complex comprises of an administrative block, laboratory blocks and residential blocks. The covered floor area of administrative & laboratories blocks is about 33000 square feet. The State FSL receives cases for examination from the districts of southern range viz. Shimla, Kinnaur, Solan and Sirmour. For Lie Detection, NDPS and Fingerprint cases, the State FSL caters to the needs of all the districts of Himachal Pradesh. Analysis of crime exhibits and research problems require consultation of literature, accordingly, a library with books and journals is available. To keep pace with international scenario, the institution subscribes to journals and is on the e- mailing list of Royal Canadian Mount Police Journal (RCMP) and FBI bulletin (U.S.A) since 2013.

A First: Expert testimony through Video Conferencing facility was established at Forensics Headquarters in 2015. A Pilot Project "One District one Police Station" (ODPS), first of its kind in the country, was extended to PS Sadar Shimla in 2017.

The NDPS division of State FSL is registered with the United Nation Office on Drugs & Crime (UNODC).

The construction of the Super-Speciality Block with an estimated cost of Rs.10 crores is coming up and likely to be completed in the year 2024.

WORKING:

There are ten scientific Divisions with fourteen specialties.

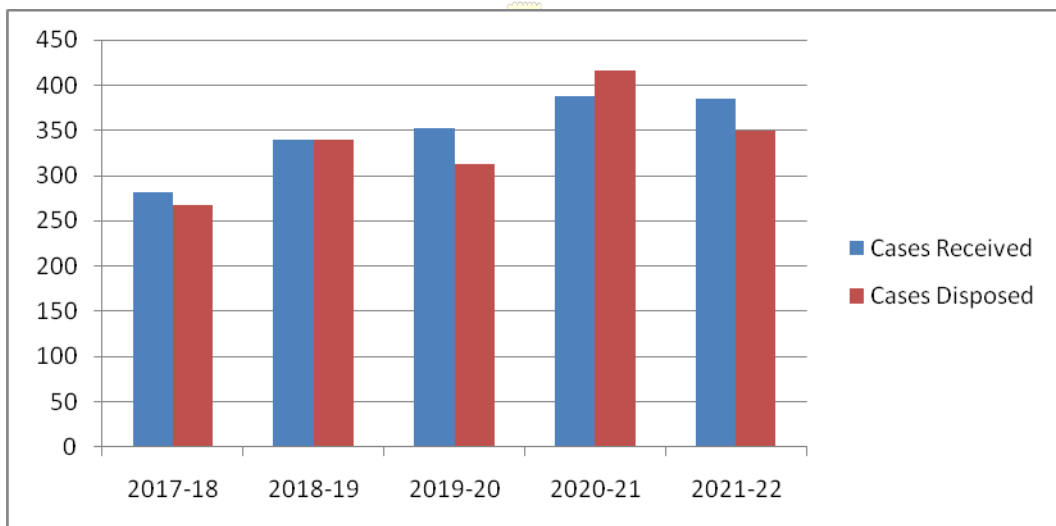
- Biology & Serology
- Chemistry & Toxicology
- Digital Forensics
- DNA
- Documents and Photography
- Finger Print Bureau
- Forensic Psychology
- NDPS
- Physics & Ballistics
- Voice Analysis

Biology & Serology Division

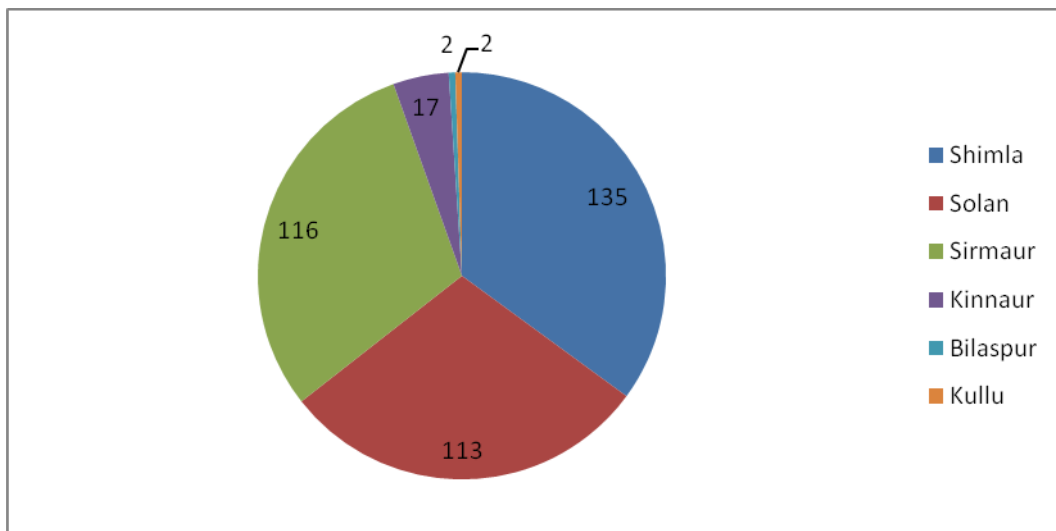
Evidences of biological origin play a vital role in cases of homicide, suicide or accidental death, sexual assaults and in cases of wildlife (flora and fauna) besides ante-mortem or postmortem drowning. The clues are examined for the purpose of identification and comparison with control samples. Types of evidences examined are given as under:

- ◆ Blood, semen and saliva
- ◆ Vomit, fecal matter
- ◆ Tissues and skin
- ◆ Bones
- ◆ Hair
- ◆ Maggots
- ◆ Wood and plant material
- ◆ Animal skin, blood, flesh etc.
- ◆ Diatom in drowning cases

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

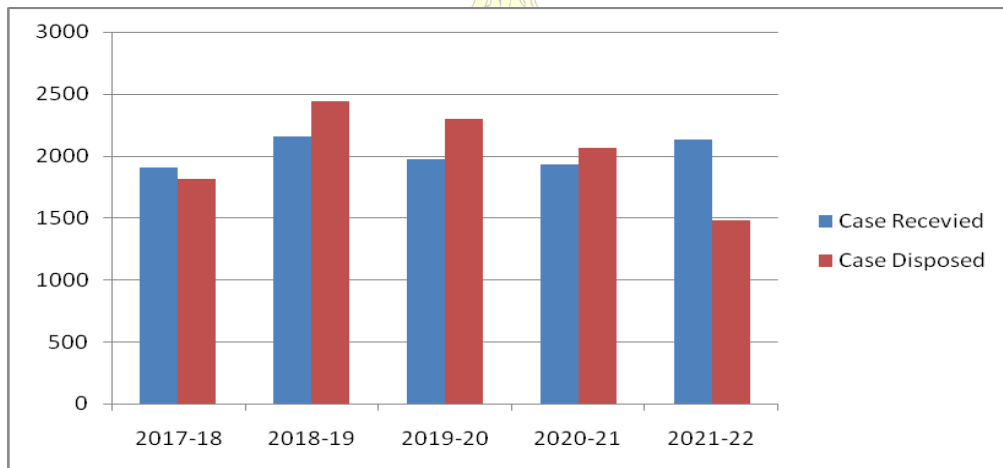


Chemistry & Toxicology Division

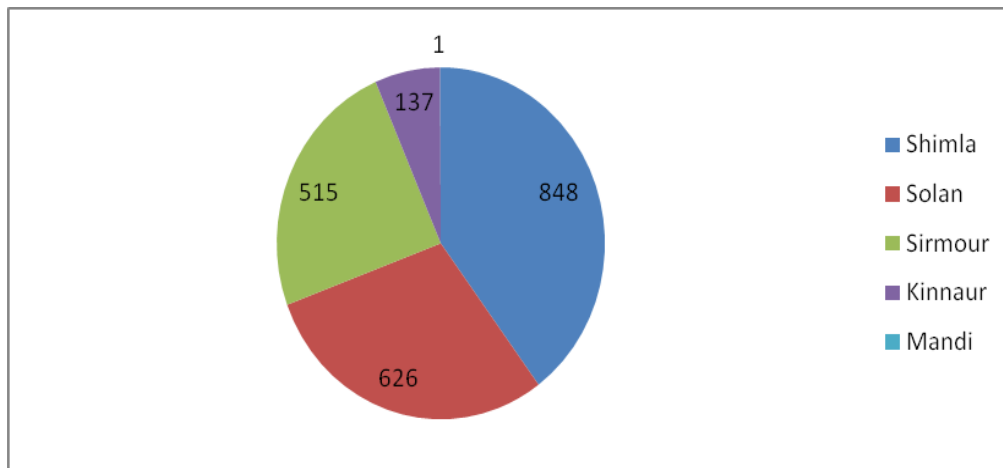
The insecticides and pesticides are widely used in the state for agricultural purposes. Thereby, making their accessibility easy for common man as poisons. In addition, large number of deaths per annum is reported during road accidents, thereby, contributing more viscera cases. Also, the division undertakes the examination of excise cases. The following clue materials are examined:

- Chemical identification of unknown substances
- Poisons from viscera samples
- Petroleum products residues in arson , dowry deaths & in adulteration cases
- Alcohol from blood and urine for drunkenness
- Acid and alkali attacks
- Grease, Wax, natural oils and resins
- Trap cases
- Hooch tragedy cases
- Cosmetics and organic dyes
- Liquor cases

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

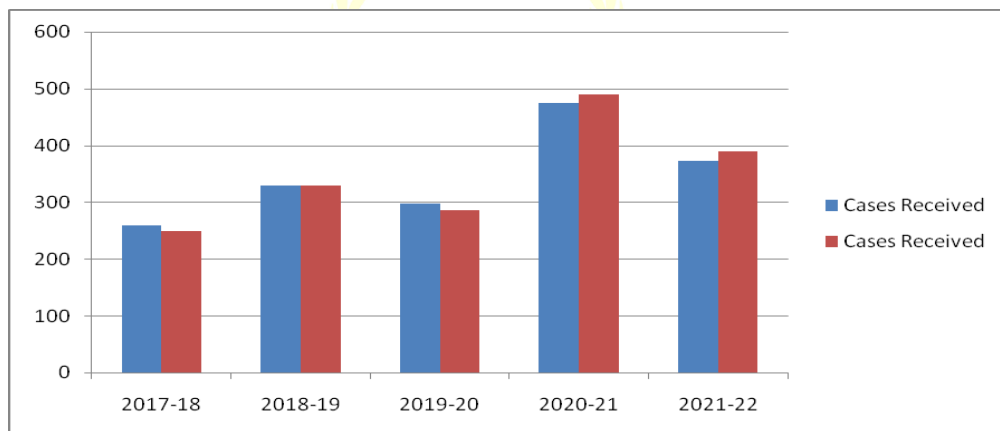


Physics & Ballistics Division

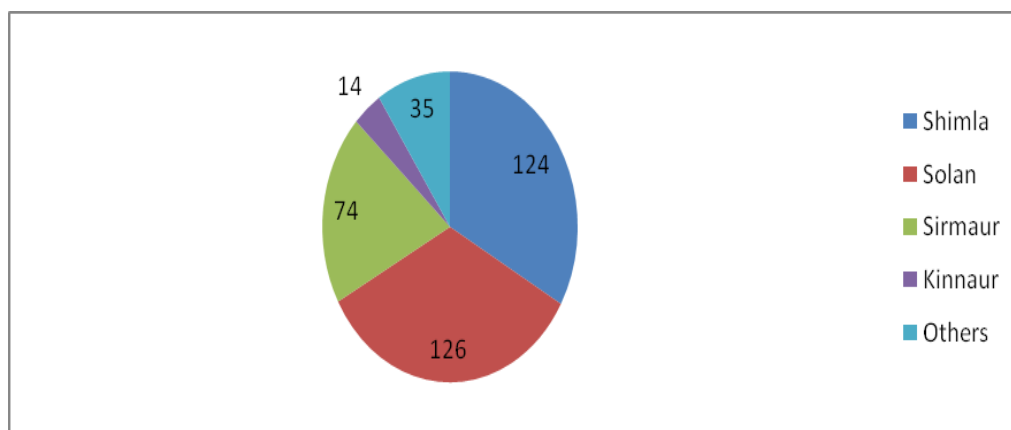
The founder Director of State FSL examined and reported crime exhibits related to Physics & Ballistics till September 1993. The work again started after creation of Physics and Ballistics Division and recruitment of scientific staff in the year 1999. Thereafter, the Voice Analysis facility started in Physics and Ballistics Division. This division undertakes examination of followings:

- Tool marks & cables
- Footprints, shoe prints & tyre marks, skid marks
- Paint and glass
- Building materials & Bitumen
- Paper & fiber
- Metal adulteration in jewellery
- Soil
- Electric short circuit clues
- Resuscitation of vehicle chassis and firearms numbers
- Firearms, ammunition & gunshot residues etc
- Voice Identification & Comparison
- Facial comparison

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)



Document & Photography Division

The founder Director of State FSL examined and reported cases of handwritings, frauds & forgery, alteration, obliteration, additions, substitutions etc., till September 1993. Thereafter, the examination work stopped and again commenced when new scientific posts were filled up by the State Government (2000). The Computer Forensic was started in the division in the year 2010. Later on, in view of increased receipt of crime cases, the separate division was created by Govt. of Himachal Pradesh. The crime cases analysis work related to Digital Forensics is also undertaken by the experts of this division. The followings are examined:

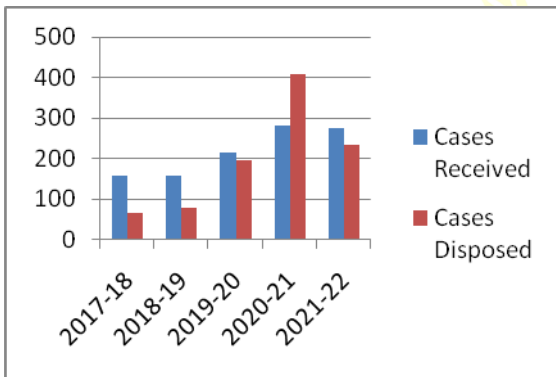
- Handwriting & signature
- Computers (RAM, ROM (HDD, SSD etc.)
- Type writing including electronic typewriting
- Cell Phone Devices
- Computer printout
- Cloud Storage
- Printed material
- SIM Cards
- Additions, Alteration, obliteration, substitutions, erasi
- Flash Drives
- Stamps & seals
- DVR/NVR
- Counterfeit currency
-
- Security documents
-
- Passports
-
- Financial Documents (Credit Card, Debit Card)
-
- Burnt & soiled documents
-



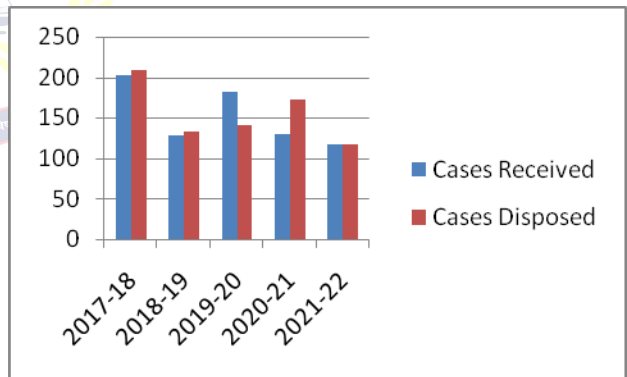
DOCUMENT & PHOTO

DIGITAL FORENSICS

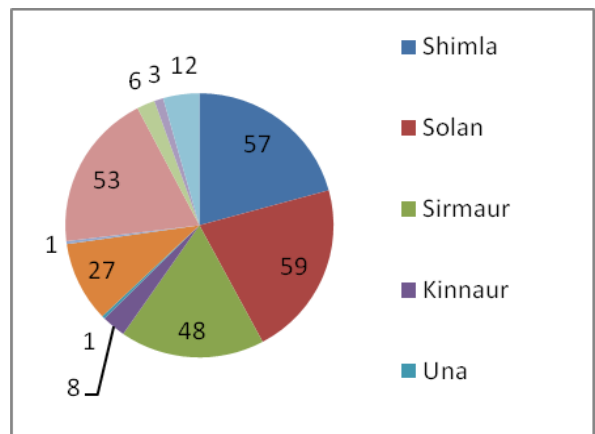
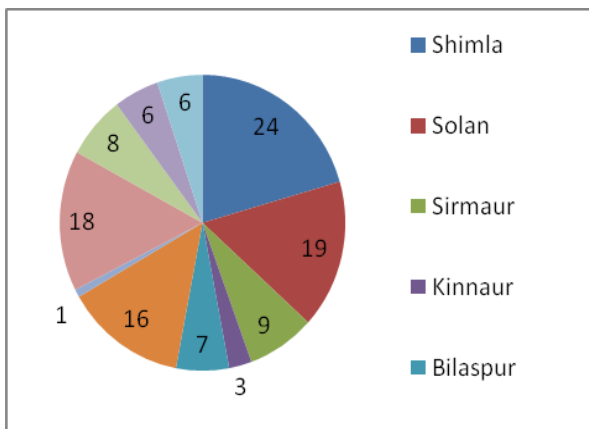
CASE STATISTICS



CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

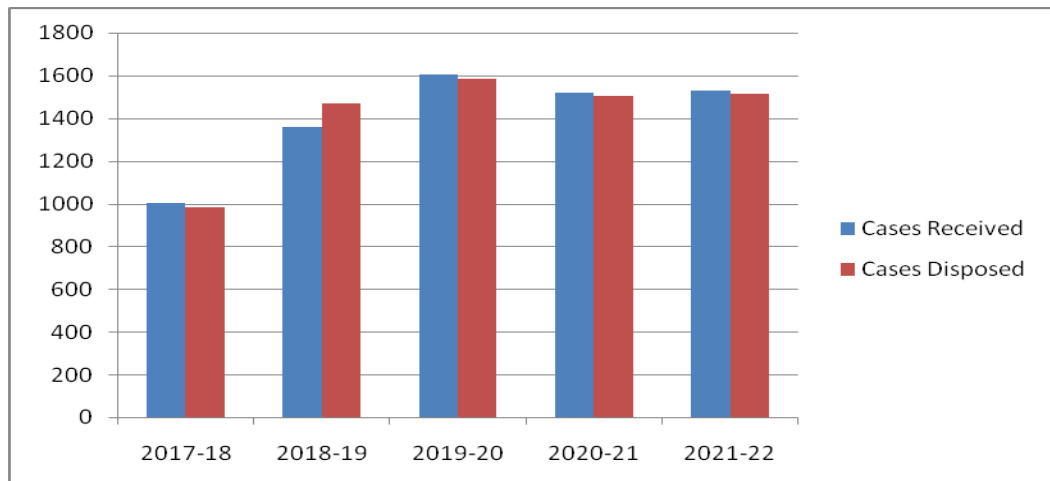


Narcotic Drugs and Psychotropic Substances (NDPS) Division

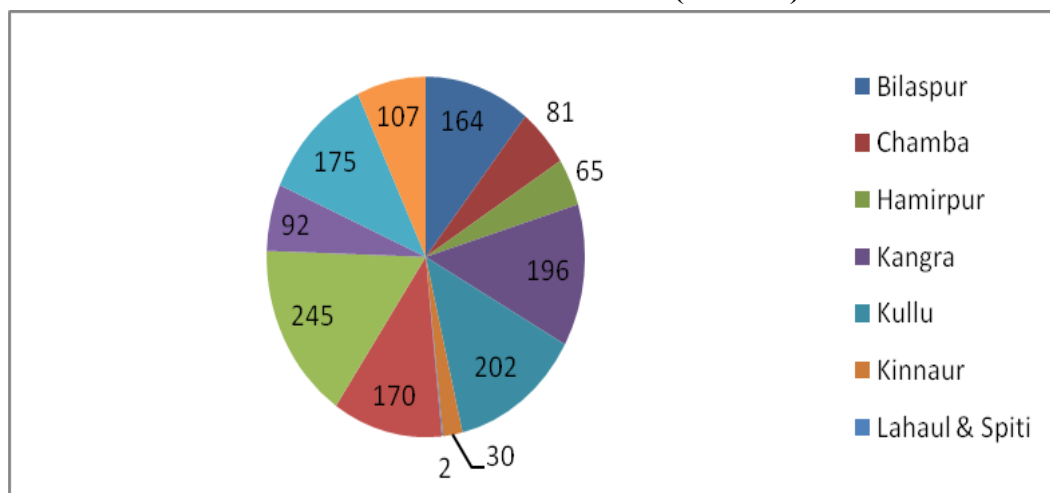
With the increase in the number of NDPS cases in the state due to influx of foreign nationals for world famous Malana cream (Hashish derived from the flower of female cannabis ‘Bhang’ plant), the Govt. established NDPS division in 2006. The substantial increase in the receipt of crime cases experienced during the year due to special drive launched by the Govt. against drug menace. The division undertakes examination of the followings:

- Opium, poppy straw, heroin/smack/brown sugar
- Charas, ganja, bhang & hashish oil
- Cocaine
- LSD, amphetamines & methamphetamines
- Benzodiazepines & prescription drugs
- Manufactured & Designer drugs

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

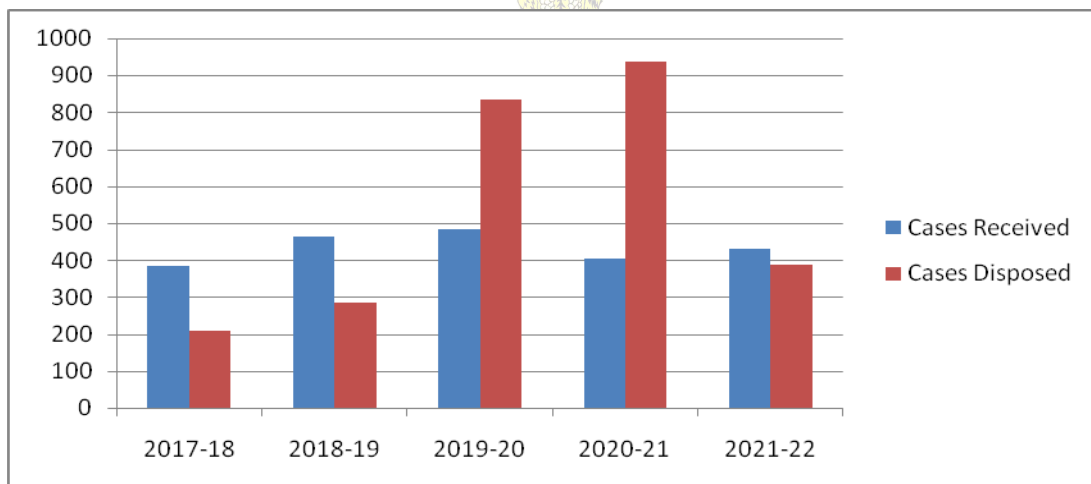


DNA Division

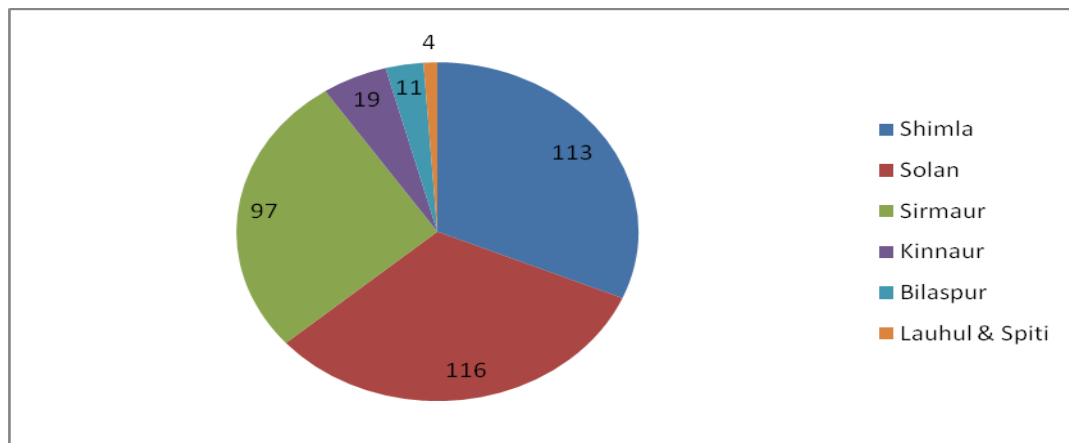
The Government of Himachal Pradesh created dedicated DNA division in the year 2006 to provide irrefutable linkage in the offences like sexual assaults (including cases registered under POCSO Act 2012), homicides, murder, unidentified dead bodies in mass disasters, paternity etc. The DNA profiling was firstly started in Biology & Serology division by after development of necessary infrastructure in the year 2008. The division undertakes DNA profiling of biological clues such as:

- Human body fluids (blood, semen, saliva, urine etc.)
- Human body tissues (hair, skin, flesh & bone)
- Nail bed materials
- Teeth
- Vomit
- Foetal remains & retained product of conception
- Saliva from cigarette/bidi butts
- Wildlife flora and fauna

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

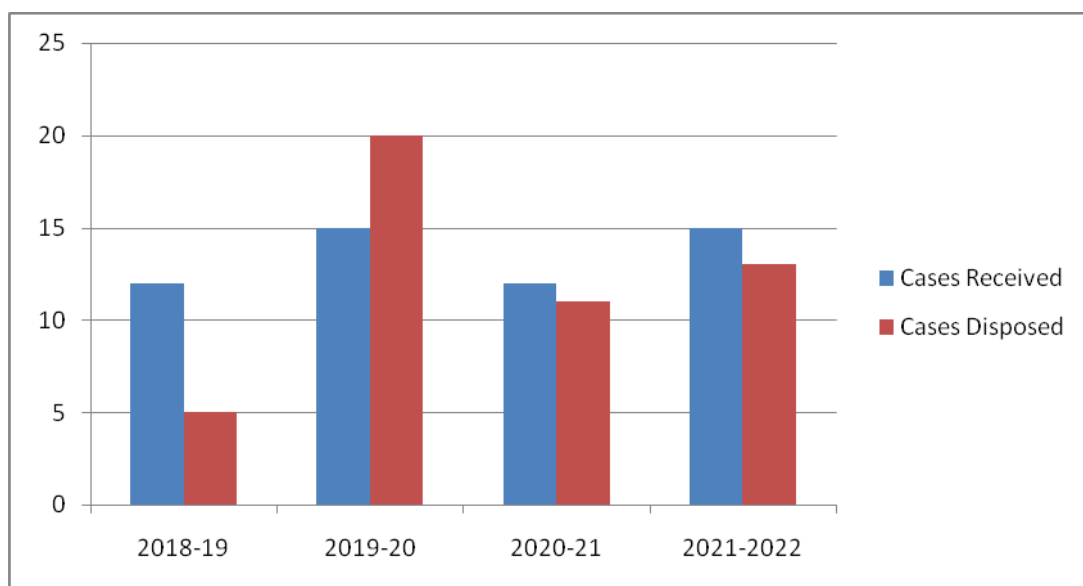


Forensic Psychology Division

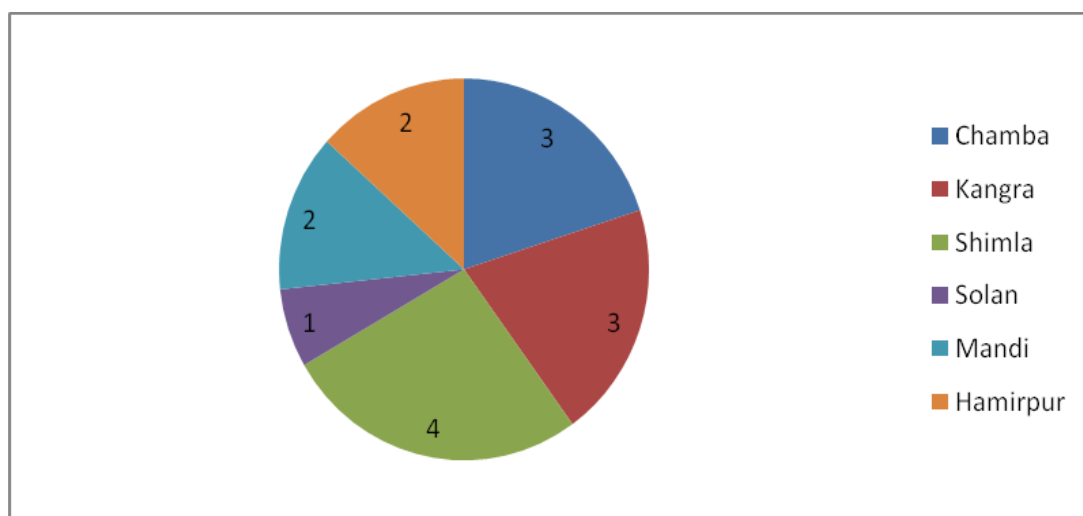
The Govt. of HP created Forensic Psychology Division (2018), operationalized in 2021. The division is now equipped with the State-of-the art infrastructure i.e. Layered Voice Analysis (LVA), Brain Electrical Oscillations Signature Profiling (BEOS), Polygraph (Lie Detection) as forensic intelligence investigation tool. This division evaluate:

- Veracity of statement of suspects, witnesses, complainants and victims of crime.

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

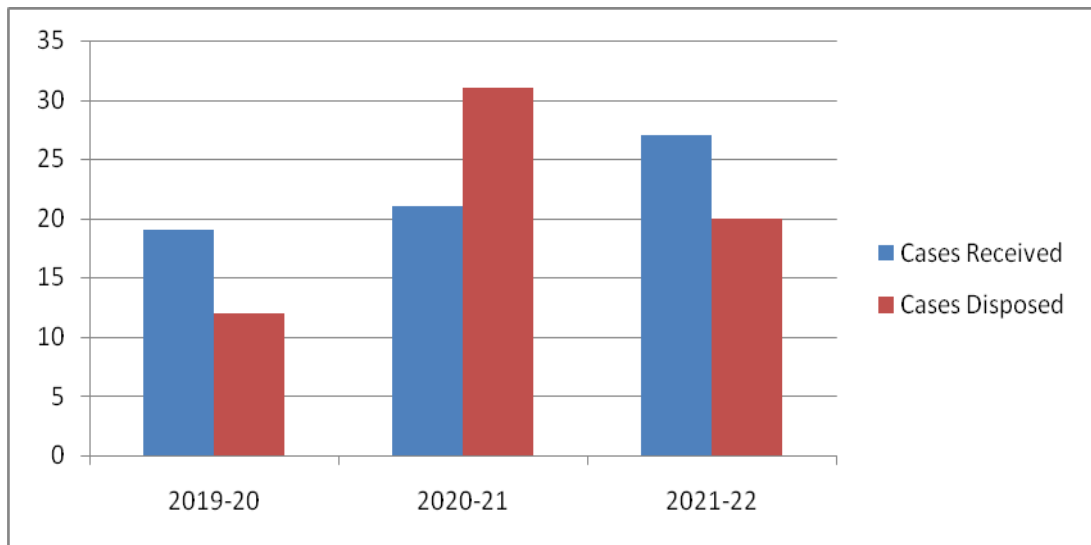


Voice Analysis Division

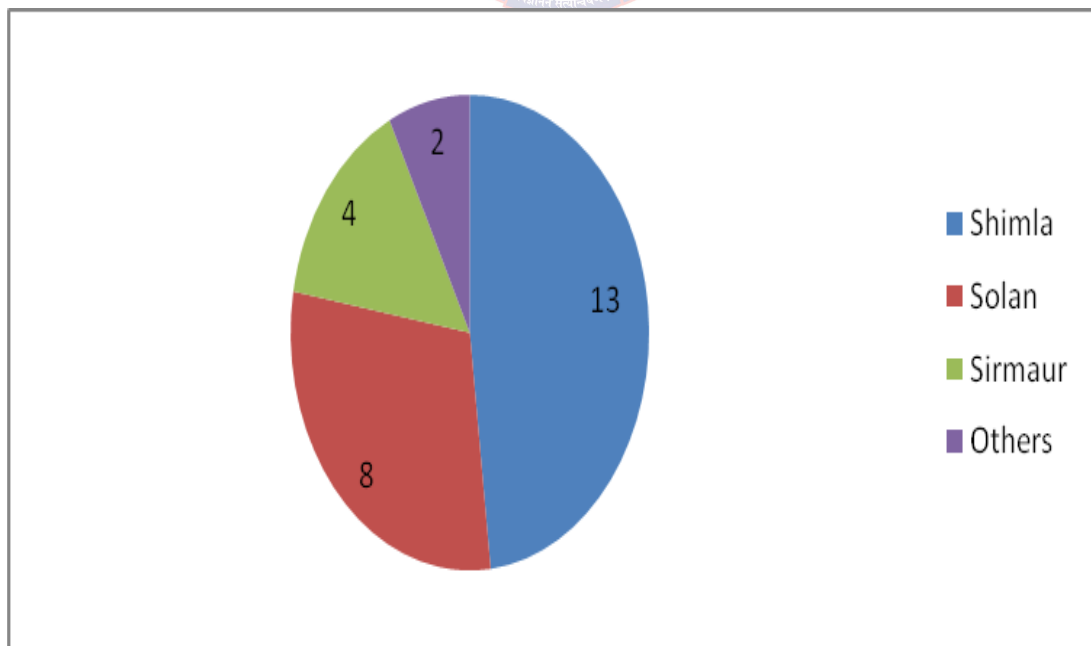
The work of analysis of voice samples is undertaken by the experts of Physics & Ballistics Division. The following clues are examined:

- Authentication of audio and video clips
- Matching of Voice samples
- Image authentication and comparison

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)

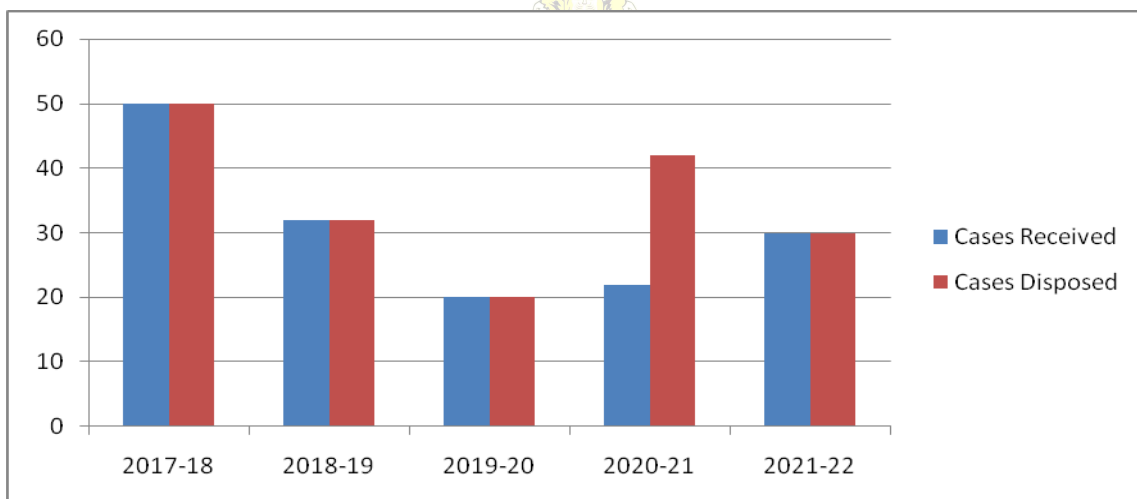


Finger Print Bureau, HP

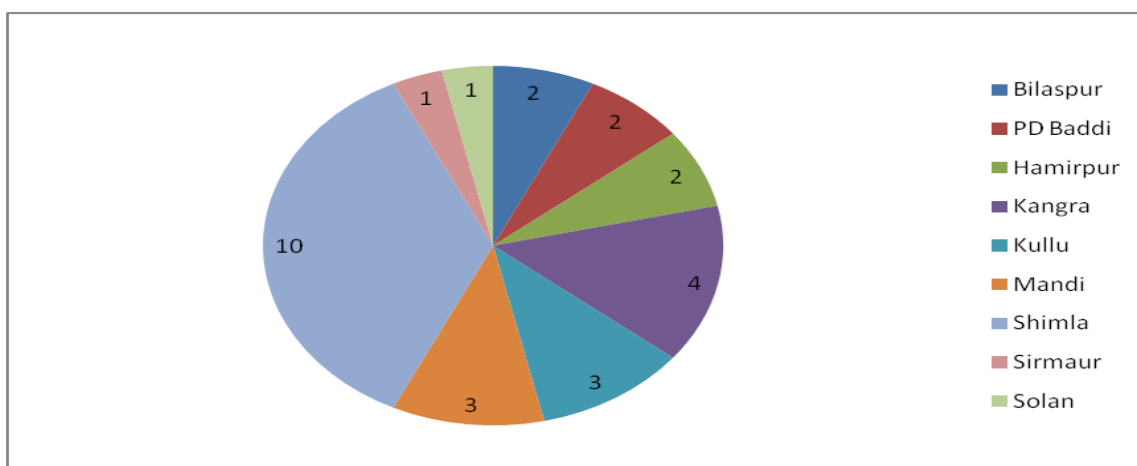
The Finger Print Bureau under the aegis of police in criminal investigating department was established in January 2003 in Himachal Pradesh. The state Govt. made amendments in the Police Act 2007 and placed the Finger print Bureau under the administrative control of Director Forensics Services Himachal Pradesh in the year 2018 to bring all scientific techniques under one roof. It was modernized with the National Automated Fingerprint Identification System (NAFIS) for generating database and access to National database. The Finger Print Bureau undertake the followings:

- The preservation of ten digit finger print slips of convicted criminals in the NAFIS
- The preservation of ten digit finger print slips of arrested criminals in the NAFIS
- Lifting of latent prints at scene of crime in the Southern range
- Comparison of chance prints

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)



TEACHING & TRAINING

Name & Designation	No. of lectures / demonstrations
Dr. V.S. Jamwal, AD (C & T)	11
Sh. Visheshwar Sharma, AD (D & P)	20
Dr. Vivek Sahajpal, AD (DNA)	16
Sh. Kapil Sharma, AD (NDPS)	09
Dr. SK Pal, AD (B & S)	36
Dr. Sanjeev Kumar, AD (P & B)	18
Dr. Shivalika Sharma, AD (Psych.)	20
Dr. Shivani Vats, SO (DNA)	04
Sh. Jaswant Singh, SA (D & P)	13
Sh. Mukesh Sharma, SA (P & B)	10
ASI Sanjeev Kumar, FPB	08

TRAININGS ATTENDED

Training is a key feature rather essential aspect of Human Resource Management. Training interventions often aim to affect the attitude as a way of honing up the skill and behavior. Accordingly, officers and officials are deputed from time to time to undergo training in different institutions.

Name	Remarks
Dr. Vivek Sahajpal AD (DNA)	<ul style="list-style-type: none"> • Course on Impact of Forensic Reports on Judicial Decisions in Criminal Trials, LNJN National Institute of Criminology and Forensic Science. Delhi w.e.f. 20-22.09.2021. • Webinar on Massively Parallel Sequencing for Forensic applications, speaker Dr. Jennifer Cihlar Assistant Professor, Microbiology, Immunology, and Genetics, Department, University of North Texas Health Science Center - Fort Worth USA on 21.10.2021. • Laboratory Assessor Training course (Level-2) from NABL w.e.f. 18- 20.08.2021. • Workshop for Advancement in Forensic DNA Workflow at Center of DNA Workflow at Center of DNA Fingerprinting and Diagnostics (CDFD), Hyderabad w.e.f. 15-17.12.2021.
Sh. Kapil Sharma AD (NDPS)	<ul style="list-style-type: none"> • Online training on The role of drug analysis laboratories in Early Warning Systems & How ICE participants can provide NPS data through the ICE portal organized by Laboratory & Scientific Section, UNODC, Vienna, Austria on 22.07.2021.
Dr. S K Pal AD (B & S)	<ul style="list-style-type: none"> • Online lecture on Advances in Chemical Development of Latent Fingerprints, SIFS, New Delhi on 05.09.2021

	<ul style="list-style-type: none"> • Webinar on Psychological Implication of Social Media SIFS, New Delhi on 19.09.2021. • Online lecture on Forensics: The Science Behind the Deaths of Famous People, SIFS, New Delhi on 20.09.2021. • Online lecture by IP Innovative Publication and Associated Academic Societies, New Delhi Editors Annual Training and Awards Certificate Program – 2022 on 07.03.2022. • Online lecture on Forensic Science and Criminal Justice System in Criminal Investigation, SIFS, New Delhi w.e.f. 16-17.07.2022.
Dr. Sanjeev Kumar AD (P & B)	<ul style="list-style-type: none"> • Training on ED XRF Analyzer at DFS, Junga, H.P from w.e.f. 5-8.04.2021.
Dr. Shivalika Sharma AD (Psych.)	<ul style="list-style-type: none"> • Online training on Layered Voice Analysis organised by S.S.B.I Ahmedabad w.e.f. 12-13.05.2021. • Training on Polygraph based Lie Detection, System Operation, Polygraph Techniques, Polygraph Recording and Polygraph Data Analysis organised by Axxonet System Technologies Private Limited Bangalore w.e.f. 10- 13.08.2021. • Training on Crime Scene Management including CCTV Analysis organised by NFSU (An Institute of National Importance) LNJN National Institute of Criminology & Forensic Sciences Delhi Campus w.e.f. 23-27.08.2021. • Polygraph Techniques at Central Forensic Science Laboratory/ Central Bureau of Investigation/New Delhi w.e.f. 14-30.09.2021. • Polygraph Techniques and Brain Electrical Oscillation Signature Profiling at Directorate of Forensic Science, Gandhinagar w.e.f. 01-15.12.2021.
Sh. Nasib Singh, Patial SO (P & B)	<ul style="list-style-type: none"> • Training on ED XRF Analyzer at DFS, Junga, H.P from 5-8.04.2021.
Sh. Jaswant Singh SA (D & P)	<ul style="list-style-type: none"> • Training on New Techniques Applied in the Examination of Scanned Document prepared by using Electronic Gadgets w.e.f 28.06.2021 - 02.07.2021.
Smt. Nisha Devi SA (B & S)	<ul style="list-style-type: none"> • Tools and Techniques for analysis of different types of crime cases in Forensic Biology. Training was imparted in Biology & Serology Division of SFSL, Directorate of Forensics Services, Himachal Pradesh w.e.f. 21-30.06.2021.
Sh. Mukesh Sharma SA (P & B)	<ul style="list-style-type: none"> • Training on ED XRF Analyzer at DFS, Junga, H.P from 5-8.04.2021.

CONFERENCE/SEMINAR/WORKSHOP/SYMPOSIUM ATTENDED

Name	Remarks
Sh. Kapil Sharma AD (NDPS)	<ul style="list-style-type: none"> • Virtual workshop on Method Validation organized by Illicit Drugs Working Group (IDWG) & Quality Assurance & Standard Committee (QASC), Asia Forensic Science Network held at Singapore on 30.06.2021 • Virtual meeting on UNODC ICE programme organized by Laboratory & Scientific Section, UNODC, Vienna, Austria on 22.07.2021. • Virtual 13th AFSN IDWG Business Meeting, Asia Forensic Science Network, Philippines on 11.10.2021. • Online Presentation on India Drugs Situation as Country Representative was made in workshop on Illicit Drugs, Asia Forensic Science Network, Philippines on 15.10.2021.
Dr. SK Pal AD (B & S)	<ul style="list-style-type: none"> • 4th International e-Conference on Fingerprint Analysis on 24.04.2021 to 25.04.2021 organised by International Association of Scientists & Researchers (IASR) and AFOHR.org (In-virtual-presence). • 8th International e-conference on Forensic Medicine and Toxicology organised by IASR (In-virtual-presence) on 28-29.08.2021 • 13th Asian Forensic Sciences Network (AFSN) Annual Meeting and Symposium (Crime Scene Investigation Workgroup Scientific Session) Theme: Forensic Science in the Midst of Pandemic: Challenges, Lessons, and Best Practices held in Philippines (In-virtual- presence) w.e.f. 12-15.10.2021.
Dr. Shivalika Sharma AD (Psych.)	<ul style="list-style-type: none"> • International Forensic Forum 2021 Traversing through the Crime, Criminal Mind to the Courtroom organised by Sharda University, New Delhi w.e.f 28-30.06.2021. • 7th International e-Conference on Forensic Psychology organised by International Association of Scientists and Researchers w.e.f 24-25.07.2021.

COURT EVIDENCES DEPOSED

Name	Number
Dr. V.S. Jamwal, AD (C & T)	04
Sh. Visheshwar Sharma, AD (D & P)	23
Dr. Vivek Sahajpal, AD (DNA)	06
Sh. Kapil Sharma, AD (NDPS)	06
Dr. Shivani Vats, SO (DNA)	01
Sh. Sanjeev Kumar, ASI	10

SCENE OF CRIMES ATTENDED

Name	Number
Dr. V.S. Jamwal, AD (C & T)	11
Dr. Vivek Sahajpal, AD (DNA)	05
Sh. Visheshwar Sharma, AD (C & T)	02
Dr. S.K. Pal, AD (B & S)	13
Dr. Sanjeev Kumar, AD (P & B)	10
Dr. Shivani Vats, SO (DNA)	07
Sh. Ajay Rana, SA (B & S)	05
Sh. Mukesh Sharma, SA (P & B)	10
Sh. Sanjeev Kumar, ASI	30

RESEARCH PUBLICATIONS

- Sahajpal, V., Singh, A., Thakur, M., Bhandari, D., Sharma, S., 2022. Insight into the genetic and forensic attributes of Brahmin population of Himachal Pradesh, India, Gene Reports, 27 Elsevier, Netherlands.
- Singh, A., Sahajpal, V., Thakur, M., Sharma, L. K., Chandra, K., Bhandari, D., & Sharma, A. (2021). Applicability of Human-specific STR systems, GlobalFiler™ PCR Amplification Kit, Investigator 24plex QS Kit, and PowerPlex® Fusion 6C in Chimpanzee (Pan troglodytes). BMC research notes, 14(1), pp.1-5. UK.
- Singh, A., Sahajpal, V., Kumar, S., Shukla, M., Bhandari, D., Sharma, S., Sharma, L.K. and Thakur, M., 2021. Key genetic and forensic attributes of Uttarakhand population of India. International Journal of Legal Medicine, 135(6), pp.2311-2314.

- Sharma, S., Yadav, R., Sahajpal, V., Kumari, L. and Yadav, C., 2021. Y-Chromosome and its future implications: A Review. *Annals of the Romanian Society for Cell Biology*, 25(6), pp.17116-17124.
- Dixit, S., Shrivastava, P., Dash, H.R., Kaitholia, K., Sahajpal, V., Sahoo, S., Srivastava, V., Rani, H.S., Mishra, A., Choudhary, S.K. and Thekkatavan, A., 2021. Assessment of significance and forensic relevance of SE33 (ACTBP2) locus in five Indian populations. *Gene Reports*, 24, p.101293. Elsevier, Netherlands.
- Chauhan, K., Mahapatra, B.K., Sharma, A., Dagar, S., Bhandari, D & Sahajpal, V. 2022. Y-STR Data leads to Individualization of Accused in a Sensational Rape and Murder Case. *Journal of Forensic Identification*, 72(0), pp. 133-140. THEIAI, USA.
- Sharma, A., Kumar, N., Bhardwaj, A., Sahajpal, V., Kumawat, R.K., Dixit, S., Chaubey, G. and Shrivastava, P., 2021. Molecular characterization and forensic relevance of the autosomal STRs for the population of North Indian geographical province Himachal Pradesh, India. *Legal Medicine*, 53, pp.101958-101958. Tokyo, Japan.
- Sharma, S., Yadav, R., Sahajpal, V., Singh, M., Rang S., Kadian, L., Yadav, C., Patial, A., Devi, N., & Ahuja, P., 2022., Y-23 mediated genetic data analysis of endogamous Brahmin population of Rajasthan, India, *Data in Brief*, Volume 42, 108061. Elsevier, Netherlands.
- Das T., Harshey A., Nigam K., Yadav V., Sharma K., Sharma A., Srivastava A. Analysis of the Ex-vivo transformation of Semen, Saliva and Urine as they dry out using ATR-FTIR spectroscopy and chemometric Approach. *Scientific Reports*, 2021: 11:11855
- Prakash, K., Sharma, S., & Sharma, S. (2021). Psychological Impact of Covid-19 and Lockdown in General Population of Himachal Pradesh. *World Journal of Pharmaceutical and Medical Research*, 2021,7(1), 169-175.

BOOK CHAPTERS

- Sahajpal, V., Mishra, S. and Bhandari, D., 2021. Forensic Analysis in Wildlife Crime Cases: Microscopy, DNA Profiling and Isotope Analysis. In *Forensic Analysis-Scientific and Medical Techniques and Evidence under the Microscope*. IntechOpen. UK.

INTERNSHIP/TRAINING

Sr. No.	Institute/ University	Course Date	Division	No. of Students
1.	Punjabi University	05.04.2021 to 11.04.2021	Digital Forensics	01
2.	Amity University, Noida, (U.P.)	12.07.2021 to 04.08.2021	Chem & Toxi DNA NDPS	04
3.	Amity University Gurugram , Haryana	15.07.2021 to 07.08.2021, 15.07.2021 to 05.08.2021 19.07.2021 to 05.08.2021	Bio. & Sero., Digital Forensics and Physics & Ballistics	06
4.	Chandigarh University, Mohali, (Punjab)	02.08.2021 to 31.08.2021	Phy. & Ball., Chem & Toxi Bio. & Sero.	09
5.	Carrier point university Hamirpur	13.09.2021 to 12.10.2021	DNA	01
6.	LNJN NICFS	23.12.2021 to 10.01.2022	Digital Forensics	04
7.	LNJN NICFS (NFSU Delhi Campus)	28.03.2022 to 08.04.2022	DNA Biology & Serology	04
Total				29

COURSES ORGANIZED

With the aim to enhance use of forensics in police investigation, also mandated in the terms of reference of HP Forensic Development Board & by the enactment of HP Police Act, 2007, courses were organized. By adopting scientific means, professionalism in crime investigation is bound to increase. Similarly, it has become imperative to impart training to the officers of Judiciary and the prosecution department for better understanding, evaluation and appreciation of forensic reports in dispensation of justice.

Course Details
Two weeks course on Forensic Science for Investigation Officers of the Distt./Units of Southern Range w.e.f. 16-28.08.2021 and 21.03.2022 to 02.04.2022
Two weeks course on Forensic Science for Investigation Officers of the Distt./Units of Southern Range w.e.f. 21.03.2022 to 02.04.2022
Five days theoretical as well as practical Training Programme for newly appointed civil Judges w.e.f. 20-24.09.2021.

SESSION CHAIRED/RADIO TALK/TV TALK/INVITED TALK

Name & Designation	Activity
Dr. Vivek Sahajpal AD (DNA)	<ul style="list-style-type: none"> Teaching module on Forensic DNA and Biology for National Law University, Delhi under project 39 A. The same is to be used by Judges and Lawyers for open learning.
Sh. Kapil Sharma AD (NDPS)	<ul style="list-style-type: none"> Narcotic Drugs: Their Classification & Screening Tests etc. & Forensic Aspects <i>vis a vis</i> NDPS Cases in Training Programme on Investigation of ND&PS Cases for the Police Officers at Himachal Pradesh Judicial Academy, Shimla on 12.07.2021. TV talk on Forensic Science & its Scope in a Live show at Doordarshan Kendra, Shimla on 21.01.2022. Key note speaker in National Symposium Recent Trends in Narcotic Drugs & Psychotropic Substances on National Science Day at Raksha Shakti University, Gandhinagar, Gujarat on 28.02.2022.
Dr. Sanjeev Kumar AD (P & B)	<ul style="list-style-type: none"> Invited lecture on Forensic Physics with special reference to tool marks and trace evidence and Crime related to Firearms to Deputy District Attorney (Mid-Career) at HIPA, Shimla, H.P on 17.09.2021.

ACHIEVEMENTS, PROFESSIONAL EXCELLENCE AND MAJOR INITIATIVES

Dr. Vivek Sahajpal, AD (DNA)

- Successfully passed NABL Technical Assessor examination and empanelled as Technical Assessor (Biological Sciences).
- Received appreciation for the DNA based identification of Relics of Indian Army personnel in a case of avalanche in Lahaul and Spiti.
- Expert Member in the Haryana Public Service Commission for selection of different categories of the scientific posts.
- Successfully participated in the International Quality Assurance test of DNA testing and proficiency, tenth Asian AICEF DNA Proficiency test – 2021, conducted by AICEF, Spain.

Sh. Kapil Sharma, AD (NDPS)

- Qualified International Collaborative Exercise (ICE) programme under International Quality Assurance Programme of United Nation Office on Drugs & Crime (UNODC), Vienna, Austria.

Dr. Sanjeev Kumar, AD (P & B)

- Being Quality Manager of the lab, successfully completed re-assessment as per ISO /IEC 17025:2017 for the period upto 25.09.2023.

RFSL, NR, DHARAMSHALA

INTRODUCTION:

In the first meeting of the Himachal Pradesh Forensic Science Development Board, the Government approved setting up of Regional Forensic Science Laboratory, Northern Range to cover the farthest ends and to expedite delivery of forensic reports from the lab. In the beginning (2008), the RFSL, NR Dharamshala was temporarily housed in a rented accommodation, then the RFSL moved to its own complex in 2012. Later-on, to house new specialities viz DNA and Digital Forensics, another block adjacent to the existing complex was constructed with the floor area of about 14,000 square feet. The CCTV and the fiber Network installed in the new DNA & Cyber block. Another advanced instrument lab is also coming up. The RFSL, NR, Dharamshala caters to the needs of the districts viz. Kangra, Chamba, Una for chemistry & Toxicology, Biology & Serology and DNA; and six districts viz. Kangra, Chamba, Una, Hamirpur, Kullu and L&S for Documents & Photography and Digital Forensics. Besides this, the digital forensics cases from Enforcement Directorate, Govt. of India and CBI are also examined from the laboratory. The One District One Police Station: A Pilot Project was firstly launched from the premises of RFSL, Dharamshala in the year 2013 for Police station Dharamshala in district Kangra and thereafter extended to Sadar Chamba in district Chamba in the year 2016.

The RFSL, NR is the First Regional forensic science laboratory in the country to get ISO/IEC17025:2005 NABL Accreditation in the year 2018 and thereafter ISO/IEC17025:2017 NABL Accreditation in 2020. The laboratory is successfully maintaining the accreditation till date and ensuring quality reports from the lab. Also, the laboratory became first to get notification of Examiner of Electronic Evidence u/s 79A of IT Act, 2000 by Ministry of Electronics and Information Technology, GOI in 2019 for examination of Computer storage media and Cell phone devices. Accordingly, the cases of Forensic Electronics and Computer Forensics and Cell phone from Enforcement Directorate are undertaken in the Digital Forensic specialty. The experts from MeITY annually conduct assessment for maintaining the notification of Examiner of Electronic Evidence u/s 79A of IT Act 2000, and the lab is successfully getting the same.

The laboratory has established unique facility of examination of damaged Cell phone & Flash Drives under Nirbhaya Fund provided by the Govt. of India, which is first of its kind in the Northern India.

The forensic experts are rendering services in the field of scene of crime examination and providing regular faculty to the Police Training College, Daroh. The RFSL is on the mailing list of RCMP journal (Canada) and FBI bulletin (USA).

The Forensic experts of Forensic Documents successfully participating in Proficiency Testing Programmes (PT) organized by Asia's best Govt. Forensic Lab in Hong-Kong, AFSN Beijing China, NFS South Korea since 2016-17.

The RFSL, NR became first RFSL in the country to have its own residential complex comprising of twelve (12) no. staff quarters, four no each of Type IV, III and II for the officers and officials to ensure 24x7 availability of its experts for scientific examination of scene of crime.

The laboratory has three divisions and eight specialties:

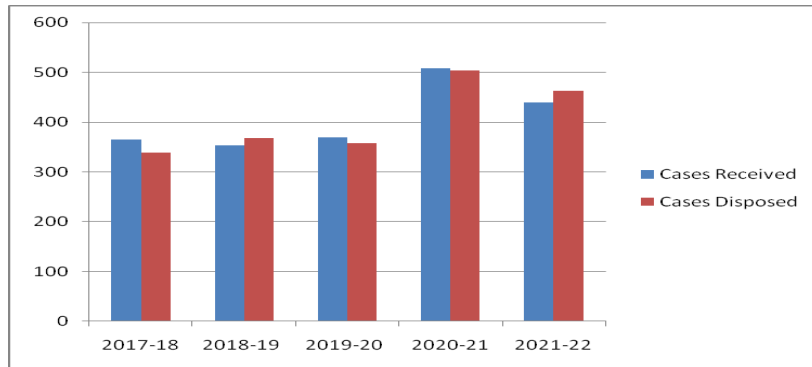
- **Biological Sciences**
 - ✓ Biology
 - ✓ Serology
 - ✓ DNA Unit
- **Chemical Sciences**
 - ✓ Chemistry
 - ✓ Toxicology
- **Physical Sciences**
 - ✓ Document
 - ✓ Photography
 - ✓ Digital Forensics



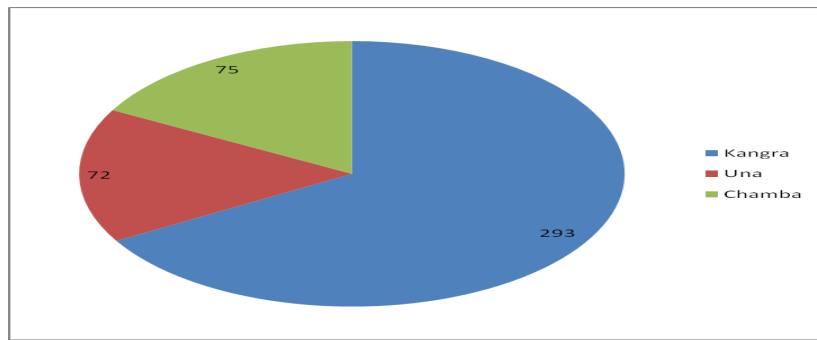
The functioning of the different specialties of the Laboratory is similar to the respective specialties of the State FSL. However, the crime case statistics of different specialties is depicted below:

Biology & Serology Division

CASE STATISTICS

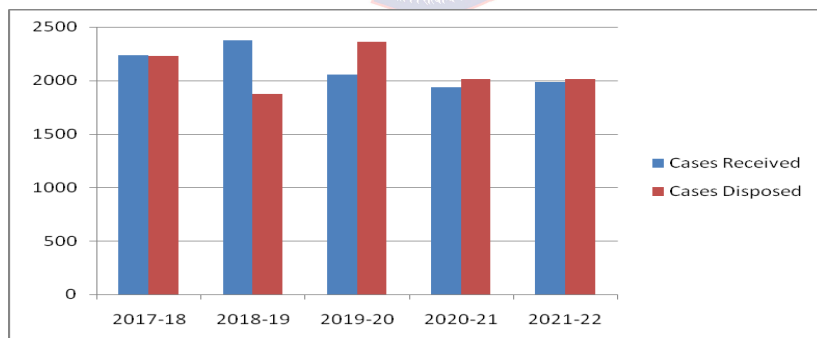


DISTRICT WISE CASE RECEIPT (2021-22)

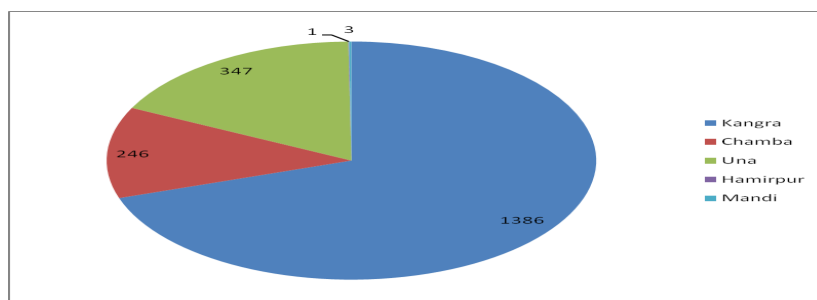


Chemistry & Toxicology Division

CASE STATISTICS



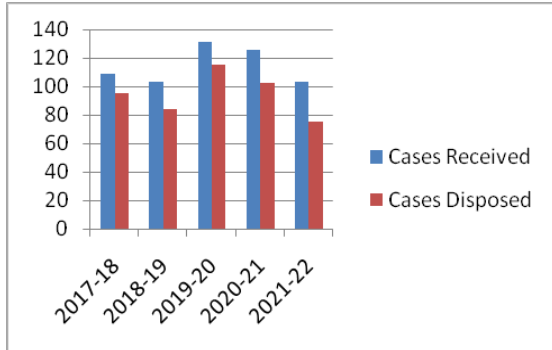
DISTRICT WISE CASE RECEIPT (2021-22)



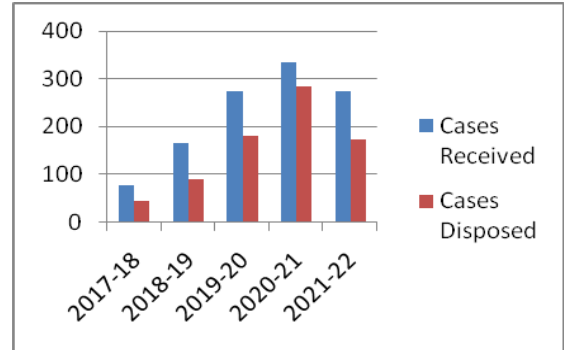
Document & Photography Division

CASE STATISTICS

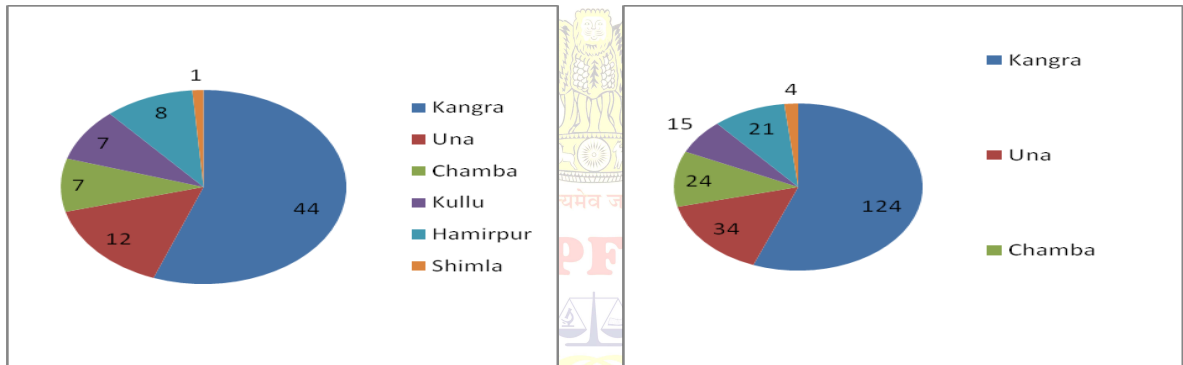
Document Cases



Cyber Cases

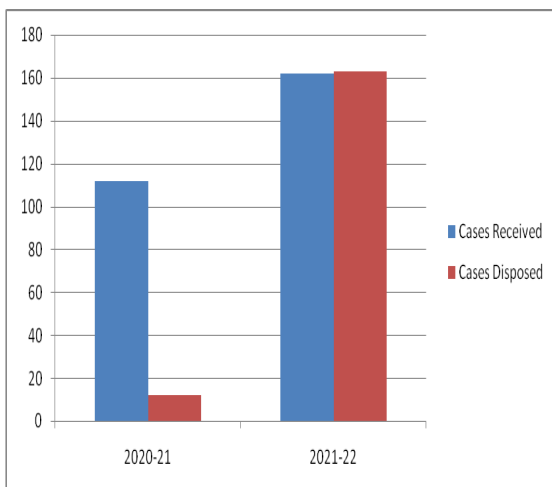


DISTRICT WISE RECEIPT (2021-22)

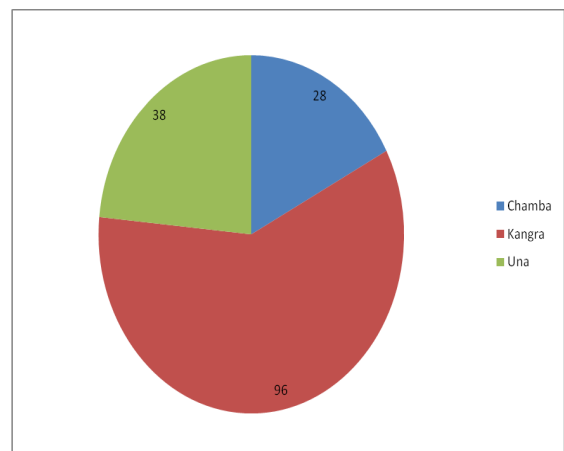


DNA Profiling

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)



TEACHING & TRAINING

NAME & DESIGNATION	No. of lectures/demonstrations
Dr. Meenakshi Mahajan, Deputy Director, NR	35
Sh. Ajay Kumar Sehgal, AD (B & S)	25
Dr. Rakesh Soni, AD (C & T)	01
Sh. Rajesh Kumar, SO (C & T)	03
Sh. Mam Raj Sharma, SO (D & P)	06
Dr. Ashwani Bhardwaj, SO (DNA)	05
Dr. Naresh Sharma, SO (B & S)	23

TRAININGS ATTENDED

Name	Course
Dr. Meenakshi Mahajan Deputy Director, NR	<ul style="list-style-type: none"> • Online course on investigation of Road Accident organized by NICFS, New Delhi w.e.f. 12-15.07.2021. • Webinar on understanding Crypto Currency and Investigating Block Chain organized by Raksha Shakti University, Gujarat on 23.06.2021.
Dr. Rakesh Kumar AD (C & T)	<ul style="list-style-type: none"> • Webinar on Liquid Chromatography- The Basics by RESTEK Pure Chromatography on dated 24.03.2022. • Course on Expert Testimony in Criminal Trial at LNJNI National Institute of Criminology and Forensic Science, New Delhi on dated 26- 29.07.2021
Dr. Ashwani Bhardwaj SO (DNA)	<ul style="list-style-type: none"> • Webinar on implementation of Rapid DNA in law enforcement on 28.04.2022.

CONFERENCE/SEMINAR/WORKSHOP/SYMPOSIUM ATTENDED

Name	Remarks
Dr. Meenakshi Mahajan Deputy Director, NR	<ul style="list-style-type: none"> • 6th International e-Conference on Cyber & Digital Forensics organized by International Association of Scientists & Researcher, Delhi w.e.f. 26-27.06.2021.

COURT EVIDENCES DEPOSED

Name	Number
Dr. Meenakshi Mahajan, Deputy Director, NR	21
Sh. Ajay Sehgal, AD (B &S)	26
Dr Rakesh Soni, AD (C & T)	03
Sh. Rajesh Kumar, SO (C &T)	05
Dr. Naresh Sharma, SO (B & S)	02
Sh. Mam Raj Sharma, SO (D & P)	07
Dr. Ashwani Bhardwaj, SO (DNA)	02

SCENE OF CRIMES ATTENDED

Name	Number
Dr. Meenakshi Mahajan, Deputy Director, NR	20
Sh. Ajay Kumar Sehgal, AD (B & S)	22
Dr. Rakesh Kumar, AD (C & T)	08
Dr. Naresh Sharma, SO (B & S)	14
Sh. Mam Raj Sharma, SO (D & P)	01
Sh. Rajesh Kumar, SO (C & T)	15
Dr. Ashwani Bhardwaj, SO (DNA)	06
Sh. Ajay Singh Rana, SA (B & S)	29
Sh. Ankush Kumar, SA (B & S)	03
Sh. Rajat Choudhary, SA (D & P)	02

SEMINAR /WORKSHOP/ COURSES ORGANIZED

<ul style="list-style-type: none"> • Course on Forensics Science for Dy.SP.s, Prob. and P/SI on Forensic Science w.e.f. 27-31.7.2021
<ul style="list-style-type: none"> • Course on Cyber Forensics for the officers of Police Department w.e.f. 24-26.03.2022.
<ul style="list-style-type: none"> • Workshop on Cyber Security Awareness on 23.10.2021

SESSION CHAIRED/RADIO TALK/TV TALK

Name & Designation	Activity
Dr. Meenakshi Mahajan, Deputy Director, NR	<ul style="list-style-type: none"> • Keynote speaker (virtually) in the first International conference on Digital Forensics organized by Jain University Bangalore. • Invited talks in the International workshop on Emerging Trends in Forensic Science in India and Abroad on the Cyber Forensics FORENSIA-2021 w.e.f. 18.10.21 & 22.10.21

RESEARCH PUBLICATIONS

- Kaur Navjot, K.S. Abi, Priyanka Verma, and Meenakshi Mahajan. An Elemental Analysis of Indian Automotive Paint using SEM-EDS: Materials Today: Proceedings 48 (2022): 1748-1753.
- Amanpreet Kaur, R.K. Garg, Meenakshi Mahajan. Comparison of Gurumukhi and Latin Scripts in Handwriting Identification: A Forensic Perspective. Problems of Forensic Sciences 2021, vol. 125, 5–17.
- Amanpreet Kaur and Meenakshi Mahajan. A Forensic Study on the effect of Atypical Surfaces and Writing Instruments on Handwriting Characteristics, presented in 13th meeting and symposium of Asian Forensic Science Network (AFSN) w.e.f. 12-15.10.2021.
- Meenakshi Mahajan, Rajat Choudhary, Asheesh Maihla and Ajay Rana. Complainant turn out Accuse in case of viral Audio and Video poster presented (virtually) in 13th meeting and symposium of Asian Forensic Science Network (AFSN) w.e.f. 12-15.10.2021.
- Sharma A, Kumar N, Bhardwaj A, Sahajpal V, Kumawat RK, Dixit S, Chaubey G, Shrivastava P. Molecular characterization and forensic relevance of the autosomal STRs for the population of North Indian geographical province Himachal Pradesh, India Leg Med (Tokyo). 2021 Nov;53:101958. doi:10.1016/j.legalmed.2021.101958.



ACHIEVEMENTS

- Successfully passed NABL Technical Assessor examination and empanelled as first Technical Assessor in the field of Forensic Electronics and Computer Forensics, Physical Sciences etc.
- Successfully passed the Proficiency Testing Program in the 14th Asian Proficiency Test – 2020 and also participated in the 15th Asian Proficiency Test – 2021. Also, International Proficiency testing in the field of Questioned Documents consecutively for fourth year was successfully completed on the samples sent by the National Forensic Services, Republic of South Korea, which is a unique distinction.
- The construction works of DNA & Cyber block and type-IV residential quarters got completed.
- To immediate start functioning of DFU, the matter of allotment of temporary govt accommodation to newly promoted and appointed officer taken up with SDM Nurpur and space got allotted in mini secretariat, Nurpur and DFU was operationlised.
- The Digital Forensic facility strengthened in terms of equipments and lab established in new premises.



RFSL CR, Mandi

INTRODUCTION:

The RFSL, CR, Mandi was established in the year 2008, consequent upon its creation in the first meeting of HP Forensic Science Development Board held on January 2006. The lab caters to the crime needs of five districts of Himachal Pradesh i.e. Mandi, Kullu, Lahaul-Spiti, Bilaspur, and Hamirpur. There are three specialties viz. Biological Sciences, Physical Sciences and Chemical Sciences. The laboratory examines the crime exhibits referred to the lab in eight different specialties i.e. Biology, Serology, Chemistry, Toxicology, DNA, Physics, Ballistics and Voice. The One District One Police Station Pilot project was extended to Police Station Sadar Mandi Distt. Mandi in the year 2021. To ensure the quality of test reports from the lab and their admissibility in the international courts, ISO/IEC 17025:2017 NABL accreditation granted to the lab (2021).

During the COVID-19 pandemic period, the lab after creating necessary infrastructure, making liason with PGIMER, Chandigarh, qualified competency testing conducted by PGIMER, Chandigarh and ICMR, New Delhi and the DNA expert provided RT-PCR based COVID testing facility for Distt. Kullu and Lahaul-Spiti area.

The construction of new complex for housing DNA and Voice analysis facility is in progress.

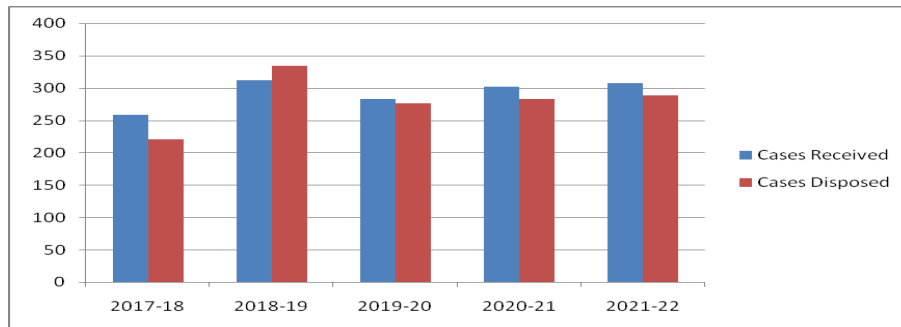
The laboratory has three divisions and eight specialties:

- **Biological Sciences**
 - ✓ Biology
 - ✓ Serology
 - ✓ DNA Unit
- **Chemical Sciences**
 - ✓ Chemistry
 - ✓ Toxicology
- **Physical Sciences**
 - ✓ Physics
 - ✓ Ballistics
 - ✓ Voice analysis

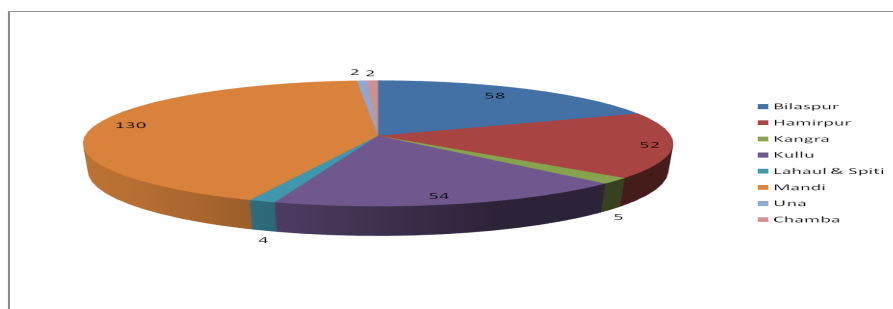
The functioning of the different specialties of the Laboratory is similar to the respective specialties of the State FSL. However, the crime case statistics of different specialties is depicted below:

Biology & Serology Division

CASE STATISTICS

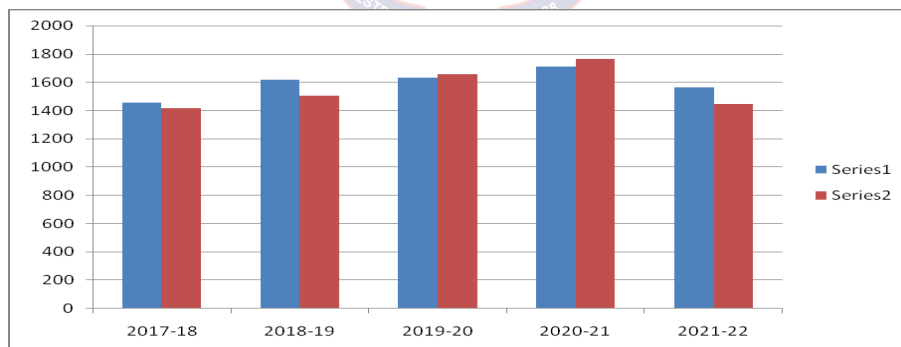


DISTRICT WISE RECEIPT (2021-22)

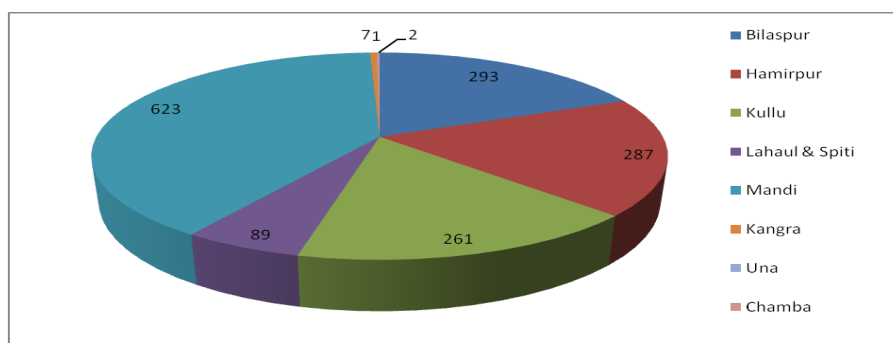


Chemistry & Toxicology Division

CASE STATISTICS

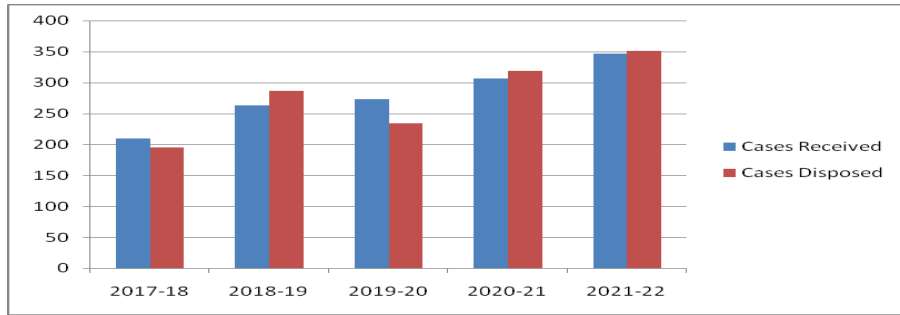


DISTRICT WISE RECEIPT (2021-22)

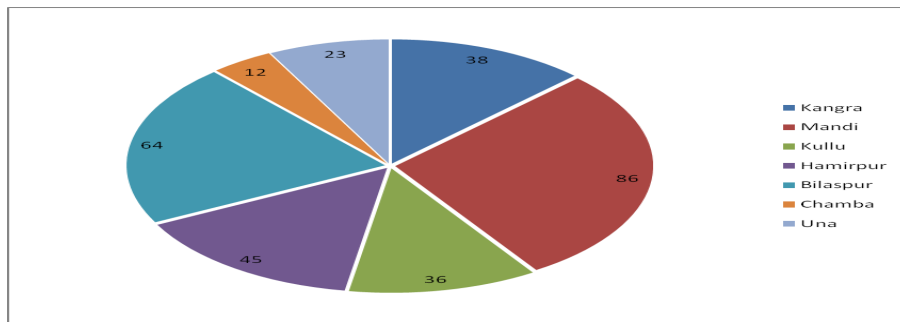


Physics & Ballistics Division

CASE STATISTICS

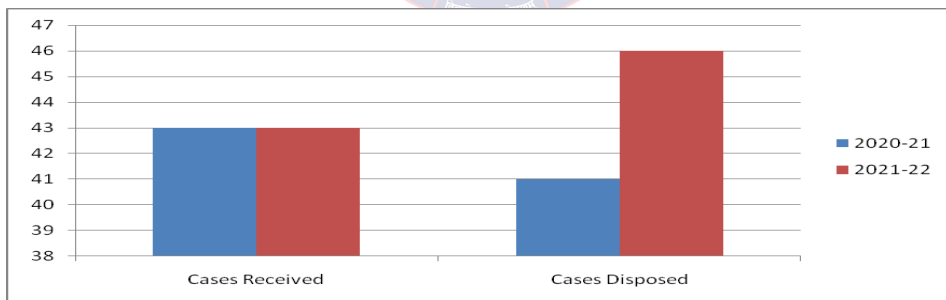
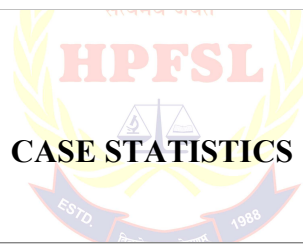


DISTRICT WISE RECEIPT (2021-22)

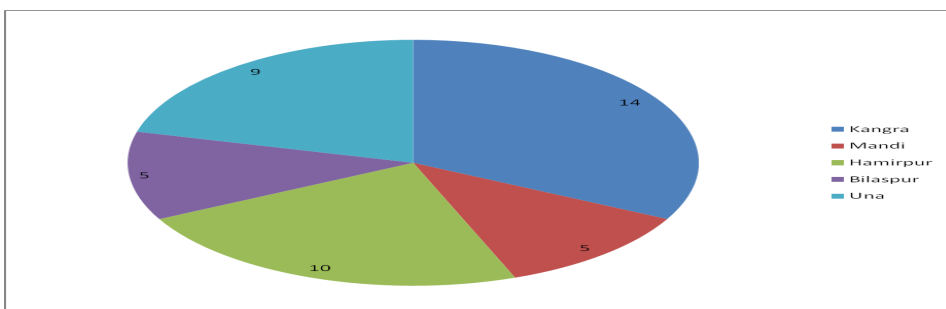


Voice Analysis

CASE STATISTICS



DISTRICT WISE RECEIPT (2021-22)



TEACHING & TRAINING

Name & Designation	No. of lectures/demonstrations
Dr. Rajesh Kumar, Deputy Director, CR	15
Dr. N.P. Dubey, AD (C & T)	07
Sh. Tek Chand, AD (B & S)	02
Sh. Hari Krishan, So (B & S)	04
Sh. Dev Raj, SA (B & S)	05

TRAININGS ATTENDED

Name	Course
Dr. N.P. Dubey AD (C & T)	<ul style="list-style-type: none"> • Online course on Analytical Instrument & Quality Control Norms for FSLs w.e.f. 5-7. 07. 2021. • E-learning course on ISO/IEC 17025:2017 General Requirements for (Laboratory Quality System & Internal Audit) the Competence of Testing & Calibration Laboratories, TCB Cell, Quality Council of India.

CONFERENCE/SEMINAR/WORKSHOP/SYMPOSIUM ATTENDED

Name	Remarks
Dr. Rajesh Kumar Deputy Director, CR	<ul style="list-style-type: none"> • Workshop on statistical thinking for forensic practitioners. • Webinar on calibration in Forensic Science by Aston University, UK on 03.06.2021. • Webinar on portable spectroscopy within forensics, law enforcement safety and security. • Webinar on contemporary and futuristic approaches of video analytics.

COURT EVIDENCES DEPOSED

Name	Number
Dr. Rajesh Kumar, Deputy Director, CR	01
Dr. N.P. Dubey, AD (C & T)	04
Sh. Tek Chand, AD (B & S)	05
Sh. Dev Raj, SA (B & S)	01

SCENE OF CRIMES ATTENDED

Name	Number
Sh .Rajesh Kumar, AD (P & B)	02
Dr. N.P. Dubey, AD (C & T)	03
Sh .Tek Chand, AD (B & S)	03
Sh. Nasib Singh, AD (P & B)	14
Sh. Sanjeev Singh, SO (P & B)	04
Sh. Hari Krishan, SO (B &S)	05
Sh. Dev Raj, SA (B & S)	06
Sh. Chander Kant, SA (P & B)	04
Sh. LaxmiDutt, SA (P & B)	04

SEMINAR /WORKSHOP/ COURSES ORGANIZED

- A two weeks training programme for the Investigating Officers of the districts of central range, Mandi was organized w.e.f. 22.11.2021 to 04.12.2021. The course was attended by the eleven Investigating officers.

SESSION CHAIRED/RADIO TALK/TV TALK

Name & Designation	Activity
Dr. Rajesh, Kumar Deputy Director, CR	<ul style="list-style-type: none"> • Keynote talk on overview of Digital and Multimedia Forensics at the 6th International e-conference on Cyber and Digital Forensics on 26-27.06.2021 organized by the IASR. • Keynote talk on challenges in Forensic Voice Comparison in the 12th International e-conference on Forensic Physics w.e.f. 11-12.2021.

RESEARCH PUBLICATIONS

- T. Arora, R. Verma, R. Kumar, R. Chauhan, B. Kumar, V. Sharma. Chemometrics based ATR-FTIR spectroscopy method for rapid and non-destructive discrimination between eyeliner and mascara traces. *Microchemical Journal*, 164, 106080.
- MNM Asri, NF Nestrigan, NAM Nor, R Verma. Discrimination of inkjet, laser and photocopier printed documents using Raman spectroscopy and chemometrics: Application in forensic science *Microchemical Journal*, 165, 106136.
- A. Sharma, R. Chauhan, R. Kumar, P. Mankotia, R. Verma, V. Sharma. A rapid and non-destructive ATR-FTIR spectroscopy method supported by chemometrics for discriminating between facial creams and the classification into herbal and non-herbal brands. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 258, 119803.
- MNM Asri, R Verma, MH Ibrahim, V Sharma, NAM Nor. Rapid non-destructive techniques to identify the traces of Kajal using chemometrics; A comparison of ATR-FTIR and Raman spectroscopy *Microchemical Journal* 169, 106556.
- R Verma, N Bhardwaj, PD Singh, ABhavsar, V Sharma. Estimation of sex through morphometric landmark indices in facial images with strength of evidence in logistic regression analysis. *Forensic Science International: Reports* 4, 100226.
- V Sharma, M Bains, R Verma, N Verma, R Kumar. Novel use of logistic regression and likelihood ratios for the estimation of gender of the writer from a database of handwriting features. *Australian Journal of Forensic Sciences*, 1-18.
- MNM Asri, R Verma, MH Ibrahim, NAM Nor, V Sharma, D Ismail. On the discrimination between facial creams of different brands using Raman Spectroscopy and partial least squares discriminant analysis for forensic application. *Science & Justice* 61 (6), 687-696.

ACHIEVEMENTS

- Dr. Rajesh Kumar, Deputy Director included resource person in 15 days online refresher course organized by Amity University.
- Dr. Naresh Kumar qualified competency test for conducting RT-PCR based COVID-19 testing conducted by PGIMER, Chandigarh and ICMR, New Delhi and provided COVID-19 testing for patients from District Kullu and Lahaul & Spiti.

DISTRICT FORENSIC UNITS

The Forensic Services network was expanded to District level in Himachal Pradesh in pursuance to the recommendations of National Human Right Commission (NHRC, 1999): the State-of-the Art Forensic Sciences: For Better Criminal Justice System and Plan for Modernization of Police Forces, Bureau of Police Research, MHA, Govt. of India (2000), to meet out the increasing requirements for forensic intervention in collection and preservation of evidences originating from scene of crime itself. The First District Forensic Unit was announced in the budget speech for the year 2015-16 for Central Range at Bilaspur followed by in the Southern Range at Police District Baddi and in the Northern Range at Police District Nurpur during the budget speech 2019-20 to ensure the instant availability of the scientists at the scene of crime and help the field Police Officers. Each District Forensic Unit is headed by the Officer of the rank of Assistant Director in accordance with the HP Police Act, 2007 amendments (2018).

The brief introduction and functioning of each unit is elucidated below:

District Forensic Unit (DFU) Bilaspur:

The District Forensic Unit, Bilaspur started its functioning from State FSL Junga, in the year 2015. Thereafter, the temporary accommodation got transferred from the district administration, and converted to laboratory, subsequently operationalised from the district headquarter after granting promotion to the eligible incumbents. The process of acquiring land to have its own complex of DFU Bilaspur is in progress. DFU Bilaspur undertakes the crime scene analysis works of District Bilaspur & Hamirpur.

District Forensic Unit (DFU) Nurpur:

The District Forensic Unit, Nurpur was created in the year 2018. Thereafter, the land to house DFU was searched, identified and acquired in the name of the Department in 2019-20. The officer was deployed in the year 2021 and was made functional in temporary accommodation provided in the Mini Secretariat, Nurpur. Also, another Govt. building was taken to house the laboratory in 2021. The jurisdiction for scientific examination of scene of crime of DFU Nurpur is Police District Nurpur & District Chamba.

District Forensic Unit (DFU) Baddi:

The District Forensic Unit, Baddi was created in the year 2018. Thereafter, the land to house DFU was searched, identified and acquired in the name of the Department in 2020-21. The crime scene of the Police District Baddi, SDPO Parwanoo, District Solan & SDPO Paonta Sahib of District Sirmaur are examined by DFU, Baddi.

Statistics

Sr. No.	Activity	DFU Bilaspur	DFU Baddi	DFU Nurpur
1.	Scene of Crime	28	-	34
2.	Lectures	02	-	-
3.	Court Evidences	04	-	-

CASE STATISTICS

STATE FORENSIC SCIENCE LABORATORY (2021-22)

Name (Division)	Pending cases (01.4.21) (A)	Received cases (B)	Total (C=A+B)	Examined cases (31.3.22) (D)	Pending cases (31.3.22) (E=C-D)
Biology and Serology	45	385	430	350	80
Chemistry and Toxicology	180	2127	2307	1480	827
Physics and Ballistics	36	373	409	387	22
Documents and Photography	32	117	149	117	32
NDPS	50	1529	1579	1562	17
DNA	102	431	533	386	147
Digital Forensics	140	275	415	408	07
Voice Analysis	02	27	29	20	09
Forensic Psychology	02	15	17	13	04
Total	589	5279	5868	4723	1145

FINGER PRINT BUREAU

Name (Division)	Pending cases (01.04.19) (A)	Received cases (B)	Total (C=A+B)	Examined cases (31.03.20) (D)	Pending cases (01.04.20) (E=C-D)
Record Section	0	75	75	0	75
Search Section	0	542	542	0	542
Document Section	42	30	72	30	42
Total	42	647	689	30	659

REGIONAL FORENSIC SCIENCE LABORATORY, NR, DHARAMSHALA

Name (Division)	Pending cases (01.4.21) (A)	Received cases (B)	Total (C=A+B)	Examined cases (31.3.22) (D)	Pending cases (31.3.22) (E=C-D)
Biology & Serology	43	440	483	463	20
Chemistry & Toxicology	327	1983	2310	2014	296
Documents and Photography	24	79	103	75	28
Cyber	51	222	273	173	100
DNA	100	162	262	163	99
Total	545	2886	3431	2888	543

REGIONAL FORENSIC SCIENCE LABORATORY, CR, MANDI

Name (Division)	Pending cases (01.4.21) (A)	Received cases (B)	Total (C=A+B)	Examined cases (31.3.22) (D)	Pending cases (31.3.22) (E=C-D)
Biology and Serology	46	307	353	289	64
Chemistry and Toxicology	160	1563	1723	1444	279
Physics and Ballistics	43	347	390	351	39
Total	249	2217	2466	2084	382

BUDGET ALLOCATIONS 2021-22

The Government has sanctioned funds under plan and non-plan budget heads. The details are as below:

1 2055-Police-116-Forensic Science-01-State Forensic Science Laboratory-SOON-V-NDP under Demand No. 7

Directorate of Forensics Services and its Regional FSLs

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
01-Salary	₹ 6,22,41,000	₹ 3,36,13,000	₹ 1,65,50,000	₹ 1,20,78,000
02-Wages	₹ 5,09,000	₹ 2,16,000	₹ Nil	₹ 2,93,000
03-Travel Expenses	₹ 2,15,000	₹ 1,15,000	₹ 50,000	₹ 50,000
05-Office Expenses	₹ 30,62,000	₹ 18,95,000	₹ 4,10,000	₹ 7,57,000
06-Medical Reimb.	₹ 2,81,000	₹ 1,71,000	₹ 60,000	₹ 50,000
09-Advertisement & Publicity	₹ 1,59,000	₹ 1,59,000	₹ Nil	₹ Nil
10-Hospitality & Entertainment	₹ 17,000	₹ 12,500	₹ 1,500	₹ 3,000
12-Professional & Special Services	₹ Nil	₹ Nil	₹ Nil	₹ Nil
15-Training	₹ 42,000	₹ 25,000	₹ Nil	₹ 17,000
20-Other Charges	₹ 12,53,000	₹ 8,37,000	₹ 2,35,000	₹ 1,81,000
21-Maintenance	₹ 10,00,000	₹ 9,14,000	₹ Nil	₹ 86,000
30-Motor Vehicle	₹ 6,26,000	₹ 4,21,000	₹ Nil	₹ 2,05,000
33-Material & Supply	₹ 38,85,000	₹ 35,85,000	₹ 1,50,000	₹ 1,50,000
64-Transfer Expenses	₹ Nil	₹ Nil	₹ Nil	₹ Nil
65-ReOutsourcing	₹ 1,18,000	₹ Nil	₹ Nil	₹ 1,18,000
Total	₹ 7,34,08,000	₹ 4,19,63,500	₹ 1,74,56,500	₹ 1,39,88,000

2. 2059-Police Works-01-Office Building-053-Maintenance & Repair-41-Maintenance of Vigilance and Forensic Laboratory Buildings-SOON-V-NDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
21-Maintenance	₹ 6,14,000	₹ 5,64,000	₹ Nil	₹ 50,000
Total	₹ 6,14,000	₹ 5,64,000	₹ Nil	₹ 50,000

3. 2216-Housing-06-Police Housing-053-Maintenance & Repair-02-Manitenance of Residential Building of State Forensic Laboratory-SOON-V-NDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
21-Maintenance	₹ 4,89,000	₹ 4,89,000	₹ Nil	₹ Nil
Total	₹ 4,89,000	₹ 4,89,000	₹ Nil	₹ Nil

4. 4055-Capital Outlay on Police Housing-00-211-Police Housing-05-Constriction of State Forensic Laboratory-SOON-V-SDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
31-Machienry & Equipment	₹2,50,00,000	₹ 2,48,03,000	₹ Nil	₹ 1,97,000
37-Major Works	₹ 1,97,62,400	₹ 1,97,62,400	₹ Nil	₹ Nil
Total	₹ 4,47,62,400	₹ 4,45,65,400	₹ Nil	₹ 1,97,000



5. 4216-Capital Outlay on Police Housing-01-Govt. Residential Building-106-General Pool Acomodation-18-Constriction of Residential Building State Forensic Laboratory-SOON-V-SDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
37-Major Works	₹ 4,02,37,600	₹ 4,02,37,600	₹ Nil	₹ Nil
Total	₹ 4,02,37,600	₹ 4,02,37,600	₹ Nil	₹ Nil

6. 4055-Capital Outlay on Police Housing-00-789-Scheduled Caste Development Development Plan -03-Constriction of State Forensic Laboratory-SOON-V-SDP under Demand No. 32

Figures in Rupees				
Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
31-Machienry & Equipment	₹ 1,00,00,000	₹ 1,00,00,000	₹ Nil	₹ Nil
37-Major Works	₹ 1,50,00,000	₹ 1,50,00,000	₹ Nil	₹ Nil
Total	₹ 2,50,00,000	₹ 2,50,00,000	₹ Nil	₹ Nil

7. 2235-Social Security and Welfare-60-Other Social Security and Welfare Programmes-800-Other Expenditures-94-Pensioners of Directorate of Forensic Science-SOON-V-NP under Demand No. 19

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
06-Medical Reimb.	₹ 56,000	₹ 46,000	₹ 10,000	₹ Nil
Total	₹ 56,000	₹ 46,000	₹ 10,000	₹ Nil

8. 2055-Police-116-Forensic Science-02-Cyber Crime Prevention against Women and Children State Forensic Science Laboratory-COON-V-NDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
15-Training	₹ 2,34,000	₹ 2,34,000	₹ Nil	₹ Nil
65-Re.Outsourcing	₹ 6,70,000	₹ Nil	₹ Nil	₹ 6,00,000
Total	₹ 9,04,000	₹ 2,34,000	₹ Nil	₹ 6,00,000

9. 2055-Police-116-Forensic Science-03-Stethrining of State Forensic Science (Nirbhaya Fund)-COON-V-NDP under Demand No. 7

Object Code/SOE	Sanctioned Budget	State FSL, HP, Junga	RFSL Mandi	RFSL Dharamshala
33-Material & Supply	₹ 60,20,000	₹ 60,20,000	₹ Nil	₹ Nil
65-Re.Outsourcing	₹ 40,74,000	₹ 30,74,000	₹ Nil	₹ 10,00,000
Total	₹ 1,00,94,000	₹ 90,94,000	₹ Nil	₹ 10,00,000

Revenue earned in r/o Internship Training Fee and Case Examination fee

Sr. No.	Particulars	Amount Received		
		SFSL Junga	RFSL, NR	RFSL, CR
1.	Internship Training Fee	₹ 93,100	₹ 1,11,100	-
2.	Case Examination Fee	₹ 11,000	₹ 20,000	-
	Grand Total	₹ 1,04,100	₹ 1,31,100	-

FUTURE VISION

- ◆ DNA Database
- ◆ Digitization of Crime Records
- ◆ Construction of own complex of DFU Nurpur and Baddi
- ◆ Strengthening of Human Resource



Knowledge has always been the prime mover of prosperity and power.

-APJ Abdul Kalam





A Complex of RFSL, NR, Dharamshala



A Complex of RFSL, CR, Mandi

