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**Narcotic Drugs and Psychotropic Substances:
Disposal of Seized Drugs in India**

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Digital Forensics in Criminal Investigations**

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Narcotic Drugs and Psychotropic Substances: Disposal of Seized Drugs in India

Karuna Dasari Subramanyam^{*} & Rajender Pal Singh, IPS^{**}

Abstract:

The objective of the study is to explore the Narcotic Drugs and Psychotropic Substances of the disposal of seized drugs in India. This paper has attempted to address the disposal of seized Narcotic Drugs and Psychotropic Substances in our country. The present study is based on the exploratory research design. The data sources are from the Narcotics Control Bureau, Annual Report published by the Ministry of Home Affairs, Government of India. The data has been analyzed statistically from the year 2012 to 2020. With the strict controls and monitoring of the sale, purchase, storage, etc., of certain drugs, there is evidence indicating diversion of Narcotic Drugs and Psychotropic Substances. The researcher has addressed the seizures and cases of Narcotic Drugs and Psychotropic Substances disposal have increased based on findings. To effectively combat the misuse and abuse of Narcotic Drugs and Psychotropic Substances in India, cooperation and concentrated measures are required.

^{*}Doctoral Research Scholar, School of Law, Rights and Constitutional Governance, Tata Institute of Social sciences, Deonar, Mumbai - 400088.

^{**}Director General of Police, Economic Offences Wing & Special Investigation Team, Lucknow, Uttar Pradesh-226010.

Keywords:

Narcotic Drugs, Psychotropic Substances, Disposal, and India.

Introduction:

The seized stock of Narcotic Drugs and Psychotropic Substances is used as case property or exhibited during the court trial as a key indicator of possession and trafficking. This will affect and postpone the disposition of the stocks until the trial and, in some cases, the appeal proceedings are completed. Theft, replacement, and loss of seized Narcotic Drugs and Psychotropic Substances are all possibilities. As a result, the seized stocks must be disposed of at regular intervals (HB-NCB, 2014).

In exercising the authority provided by Section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985 (61 of 1985), hereby referred to as the said Act, and in supersession of notification number G.S.R. 339(E) dated 10 May 2007, except as to items done or neglected to be done before such supersession, the Central Government, about the hazardous characters, vulnerability to theft, replacement and restrictions of suitable storage space, in respect of any Narcotic Drugs and Psychotropic Substances, hereby specifies the Narcotic Drugs, and Psychotropic Substances that will be disposed of by the officers who will dispose of them as soon as possible after their seizure, and how they will be disposed of (NDPS, 2017) as per the directions of the Narcotics Control Bureau, Head Quarters, New Delhi or Regional Offices Kolkata, Mumbai, and New Delhi.

The Drug Law Enforcement Officer prepares an inventory of seized Narcotic Drugs, and Psychotropic Substances by (see Annexure – I) of the notification and submits it to any Magistrate in the format of (see Annexure-II) Section 52A (2) of the Narcotic Drugs and Psychotropic Substances Act, 1985. The Drug Law Enforcement Officer keeps the certified inventory, pictures, and samples drawn in front of the Magistrate as major evidence for the case once the Magistrate approves the application and takes action. The Drug Law Enforcement Officer creates a list of all such consignments that are ripe for disposal after following the procedures in Section 52A of the Narcotic Drugs and Psychotropic

Substances and permitted by the court for disposal as the officer in charge of the godown or case officer. He then gives the specifics of the stock to the Drug Disposal Committee, who will decide whether or not to dispose of it (HB-NCB, 2014).

- Section 52A of Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Disposal of seized Narcotic Drugs and Psychotropic Substances”*).
- Section 52A (2) of Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Where by Narcotic Drugs, Psychotropic Substances, controlled Substances or Conveyances has been seized and forwarded to the officer-in-charge of the nearest police station or to the officer empowered under Section 53 of Narcotic Drugs and Psychotropic Substances Act, 1985”*).
- Section 53 of Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Power to invest officers of certain departments with powers of an officer-in-charge of a police station”*).

Objective:

The objective of the study is to explore the Narcotic Drugs and Psychotropic Substances of the disposal of seized drugs in India. This paper has attempted to address the disposal of seized Narcotic Drugs and Psychotropic Substances in our country.

Methodology:

The present study is based on the exploratory research design. The data sources are from the Narcotics Control Bureau, Annual Report published by the Ministry of Home Affairs, Government of India. The data has been analyzed statistically from the year 2012 to 2020.

Results and Analysis:

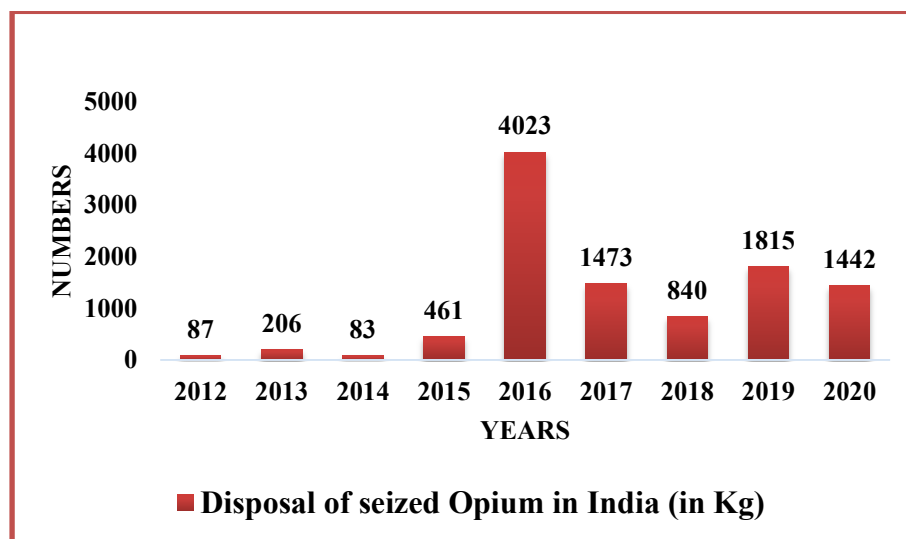
Due to their vulnerability to theft, replacement, lack of sufficient storage space, and other factors, the Narcotics Control Bureau disposed of

different seized Narcotic Drugs and Psychotropic Substances during each calendar year.

- Narcotic Drugs include; (1) Opium, Morphine, Codeine, Heroin (2) Cannabis, Bhang, Ganja, Hashish, and (3) Coco leaf, Cocaine.
- Psychotropic Substances include; (1) Amphetamine Type Stimulants (2) New Psychoactive Substances and (3) Benzodiazepines.
- Precursor Chemicals include; (1) Acetic anhydride (2) Anthranilic acid (3) N-Acetylanthranilic acid (4) Ephedrine and (5) Pseudoephedrine.
- Pharmaceutical drugs include; (1) Tablets (2) Powders (3) Capsules (4) Syrups and (5) Injections.

Figure 01

Details of Disposal of Seized Opium in India from 2012 to 2020

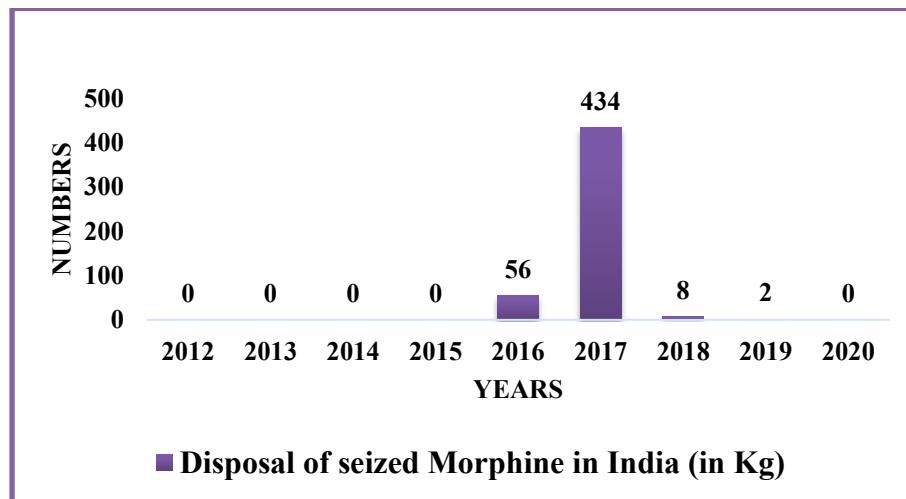


Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Opium disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Opium reported in 2016 was 4023 kgs. Opium disposed of in 2020 was 1442 kgs. The comparative figures for the last nine years are presented (see Figure 01). While there has been a decreasing trend in the number of reported Opium disposal compared to the previous year, 2019, the quantity of Opium disposal has decreased from 1815 kgs to 1442 kgs.

Figure 02

Details of Disposal of Seized Morphine in India from 2012 to 2020

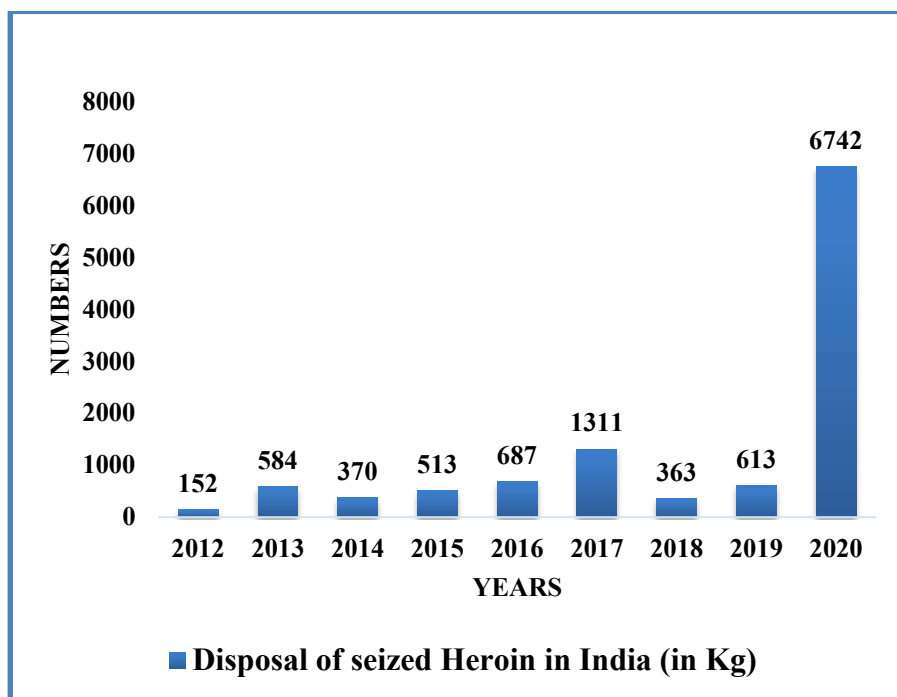


Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Morphine disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Morphine reported in 2017 was 434 kgs. Morphine disposed of in 2020 was zero. The comparative figures for the last nine years are presented (see Figure 02). While there has been a decreasing trend in the number of reported Morphine disposal compared to that of the previous year, 2019, the quantity of Morphine disposal has decreased from two kgs to zero kg.

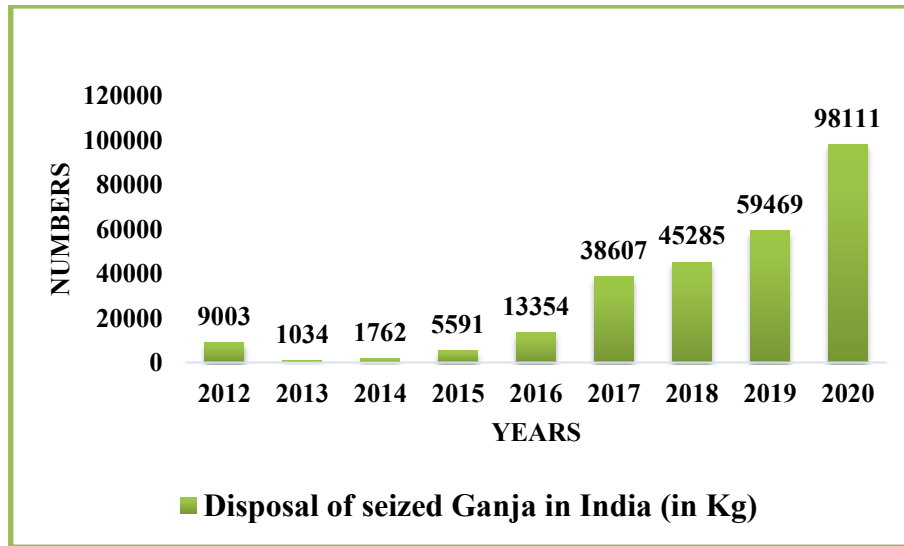
Figure 03

Details of Disposal of Seized Heroin in India from 2012 to 2020



Source: “Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report” - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

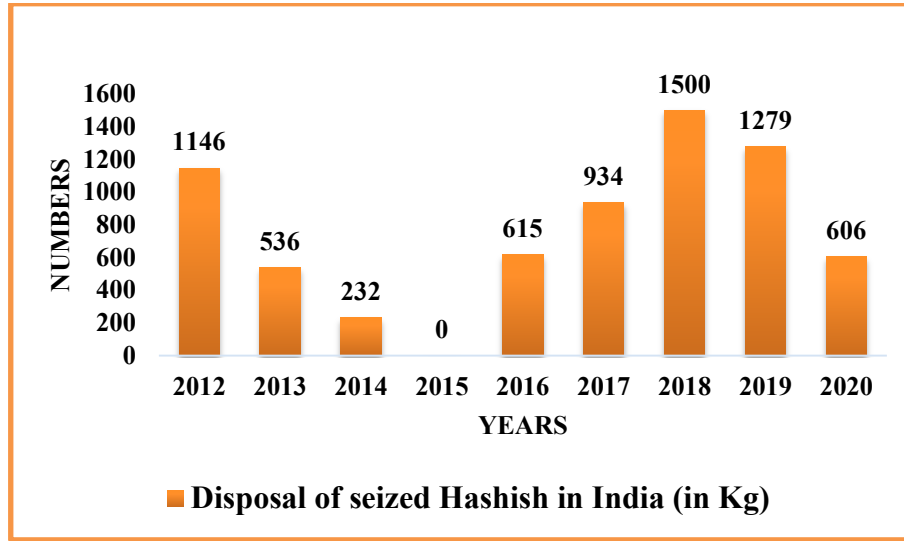
The quantity of Heroin disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Heroin reported in 2020 was 6742 kgs. The comparative figures for the last nine years are presented (see Figure 03). While there has been an increasing trend in the number of reported Heroin disposal compared to that of the previous year, 2019, the quantity of Heroin disposal has increased from 613 kgs to 6742 kgs.

Figure 04**Details of Disposal of Seized Ganja in India from 2012 to 2020**

Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

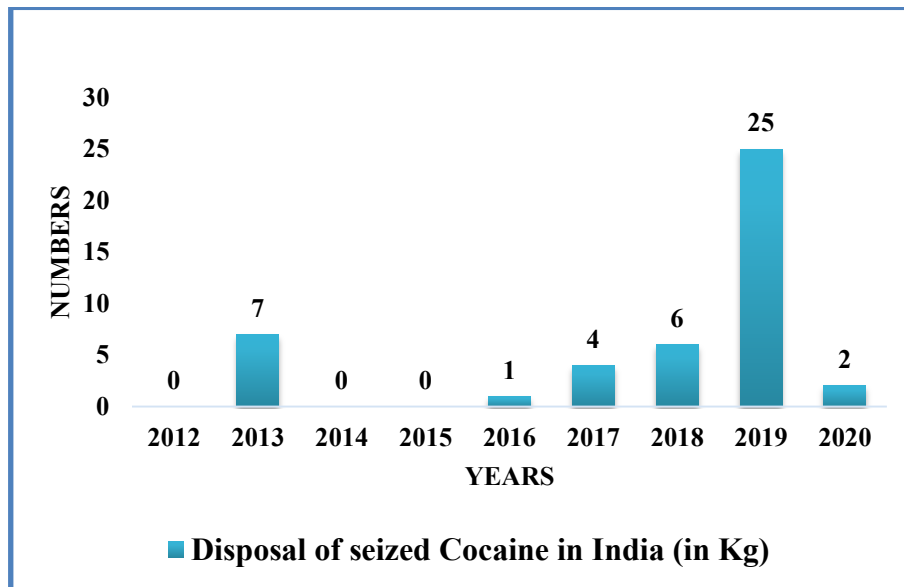
The quantity of Ganja disposal in India has increased from 2012 to 2020, and the highest removal of seized Ganja reported in 2020 was 98111 kgs. The comparative figures for the last nine years are presented (see Figure 04). While there has been an increasing trend in the number of reported Ganja disposal compared to the previous year, 2019, Ganja disposal has increased from 59469 kgs to 98111 kgs.

Figure 05
Details of Disposal of Seized Hashish in India from 2012 to 2020



Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Hashish disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Hashish reported in 2018 was 1500 kgs. Hashish disposed of in 2020 was 606 kgs. The comparative figures for the last nine years are presented (see Figure 05). While there has been a decreasing trend in the number of reported Hashish disposal compared to that of the previous year, 2019, the quantity of Hashish disposal has decreased from 1279 kgs to 606 kgs.

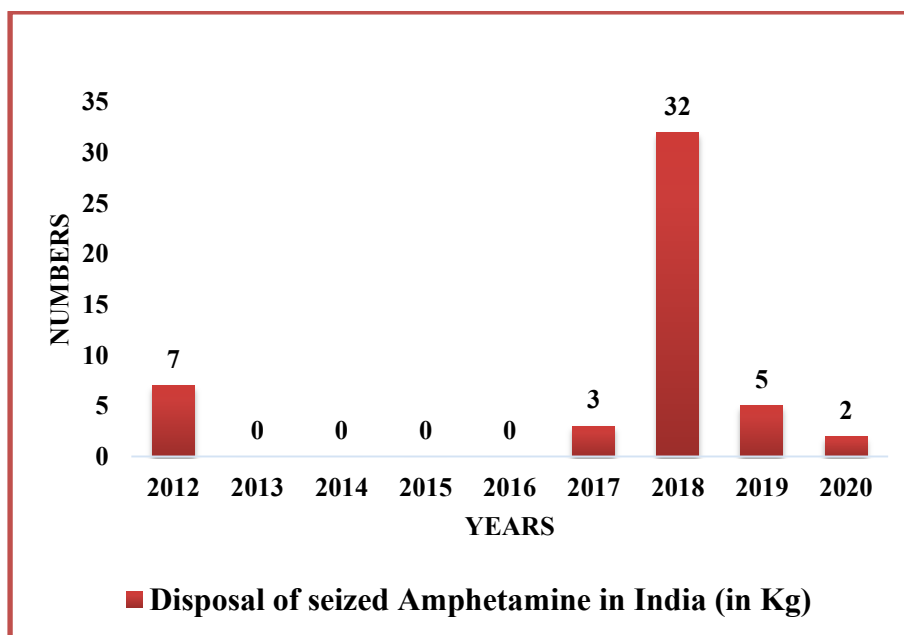
Figure 06**Details of Disposal of Seized Cocaine in India from 2012 to 2020**

Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Cocaine disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Cocaine reported in 2019 was 25 kgs. Cocaine disposed of in 2020 was two kgs. The comparative figures for the last nine years are presented (see Figure 06). While there has been a decreasing trend in the number of reported Cocaine disposal compared to that of the previous year, 2019, the quantity of Cocaine disposal has decreased from 25 kgs to two kgs.

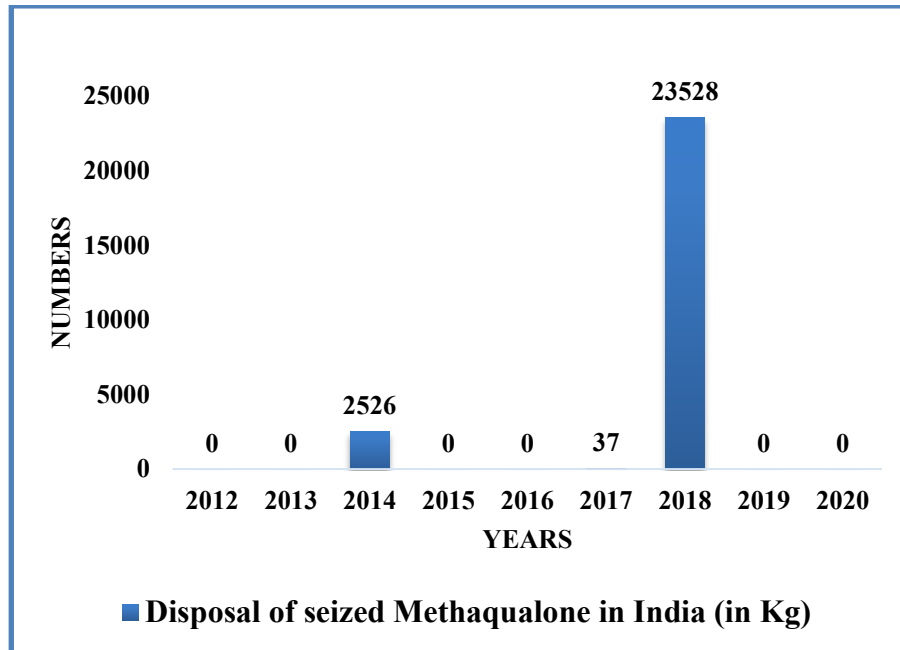
Figure 07

Details of Disposal of Seized Amphetamine in India from 2012 to 2020



Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

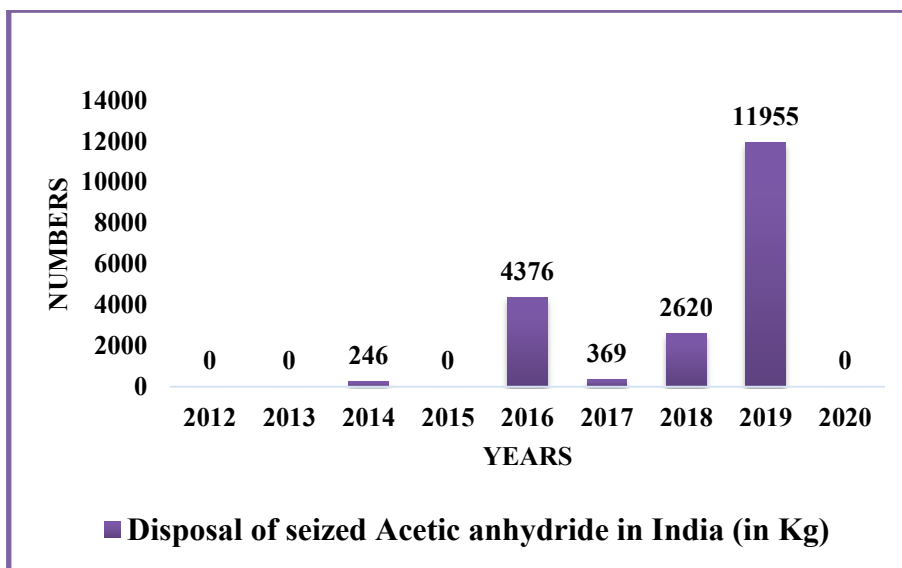
The quantity of Amphetamine disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Amphetamine reported in 2018 was 32 kgs. Amphetamine disposed of in 2020 was two kgs. The comparative figures for the last nine years are presented (see Figure 07). While there has been a decreasing trend in the number of reported Amphetamine disposal compared to that of the previous year, 2019, the quantity of Amphetamine disposal has decreased from five kgs to two kgs.

Figure 08**Details of Disposal of Seized Methaqualone in India from 2012 to 2020**

Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

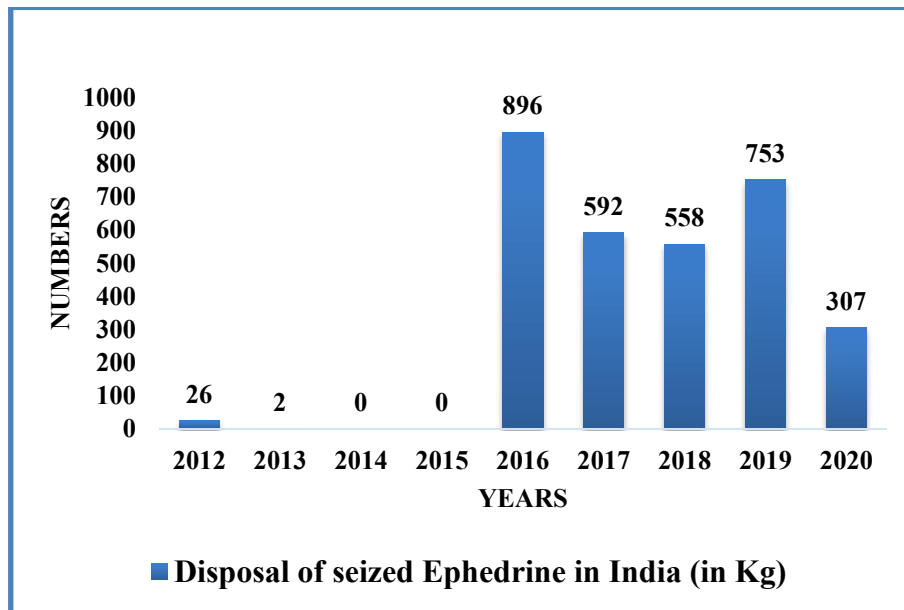
The quantity of Methaqualone disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Methaqualone reported in 2018 was 23528 kgs. Methaqualone disposed of in 2020 was zero. The comparative figures for the last nine years are presented (see Figure 08). While there has been an equal number of reported Methaqualone disposal compared to that of the previous year, 2019, the quantity of Methaqualone disposal has equal from zero kg to zero kg.

Figure 09
Details of Disposal of Seized Acetic Anhydride in India from 2012 to 2020



Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Acetic anhydride disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Acetic anhydride reported in 2019 was 11955 kgs. Acetic anhydride disposed of in 2020 was zero kgs. The comparative figures for the last nine years are presented (see Figure 09). While there has been a decreasing trend in the number of reported Acetic anhydride disposal compared to that of the previous year, 2019, the quantity of Acetic anhydride disposal has decreased from 11955 kgs to zero kg.

Figure 10**Details of Disposal of Seized Ephedrine in India from 2012 to 2020**

Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p. 82 and 2017, p. 82 and 2018, p. 78 and 2019, p. 94 and 2020, p. 98.

The quantity of Ephedrine disposal in India has fluctuated from 2012 to 2020, and the highest removal of seized Ephedrine reported in 2016 was 896 kgs. Ephedrine disposed of in 2020 was 307 kgs. The comparative figures for the last nine years are presented (see Figure 10). While there has been a decreasing trend in the number of reported Ephedrine disposal compared to that of the previous year, 2019, the quantity of Ephedrine disposal has decreased from 753 kgs to 307 kgs.

Table 01
Details of Disposal of Drugs Region-wise in India from 2016 to 2020

Regions	Details	2016	2017	2018	2019	2020
North Region	Narcotics	46.5893 kgs	2363.547 kgs	1209.853 kgs	2007.976 kgs	454.753 kgs
	Psychotropic's	0	6.525 kgs	25.280 kgs	4.700 kgs	0
	Precursors	0	410.71 kgs	0	12528.860 kgs	0
	Pharmaceutical	790 kgs 27160 no.s	255 no.s	0.320 kgs	0	0
	Cases	18	77	•	•	52
East Region	Narcotics	5294.0719 kgs	5729.5014 kgs	6470.598 kgs	10521.4686 kgs	2435.783 kgs
	Psychotropic's	1.006 kgs	0.217 kgs	2.898 kgs	0.1905	2.37814 kgs 21438 no.s
	Precursors	887.527 kgs	113.7 kgs 761926 no.s	138.401 kgs	0	57.655 kgs
	Pharmaceutical	10872 no.s 8752 ml	42311 no.s	0.449 kgs 43005 no.s	0.014 kgs 874123 no.s 595 no.s	0.49357 kgs 25017 no.s
	Non - NDPS	0	0	0	0.94778 kgs	38.20 kgs
	Cases	31	68	•	•	67
South West Region	Narcotics	0	1468.115 kgs	2673.624 kgs	392.852 kgs	0
	Psychotropic's	0	0	2.436 kgs	0	0
	Precursors	4370 kgs	58.68 kgs	0	153312.57 kgs	0
	Pharmaceutical	0	0	0	0	0
	Cases	1	25	•	•	0
Total	Narcotics	5340.6612 kgs	9561.1634 kgs	10354.075 kgs	12922.2966 kgs	2890.536 kgs
	Psychotropic's	1.006 kgs	6.742 kgs	30.614 kgs	4.8905 kgs	2.37814 kgs 21438 no.s
	Precursors	5257.527 kgs	583.09 kgs 761926 no.s	138.401 kgs	165841.43 kgs	57.655 kgs

	Pharmaceutical	790 kgs 38032 no.s 8752 ml	42566 no.s	0.769 kgs 43005 no.s	0.014 kgs 874123 no.s 595 no.s	0.49357 kgs 25017 no.s
	Non - NDPS	0	0	0	0.94778 kgs	38.20 kgs
Totals		11389.194 2 kgs 38032 no.s 8752 ml	10150.995 4 kgs 804492 no.s	10523.85 9 kgs 43005 no.s	178769.578 88 kgs 874123 no.s 595 no.s	2989.2627 1 kgs 25017 no.s 21438 no.s
Cases		50	170	•	•	119
Note : (• = Not Reported) Source: Data released by Director General, Narcotics Control Bureau, Ministry of Home Affairs, Government of India. Annual Report - 2016, p.42 and 2017, p. 42 and 2018, p. 38-39 and 2019, 44-46 and 2020, p.50-51.						

The quantity of disposal of Narcotic Drugs in India has fluctuated over the period from 2016 to 2020. The Eastern Region disposed of more amounts Narcotic Drugs in 2019. The number of Narcotic drugs disposed of was 10521.4686 kgs, and these disposals of seized Narcotic drugs were in Guwahati, Imphal, Kolkata, and Patna. In the South-West Region, disposal of seized Narcotic drugs in 2018 was 2673.624 kgs, and these disposals of seized Narcotic drugs were in Ahmedabad and Indore. In the Northern Region, disposal of seized Narcotic drugs in 2017 was 2363.547 kgs, and these disposals of seized Narcotic drugs were in Chandigarh, Delhi, Jodhpur, and Lucknow. Narcotic drugs disposed of in 2020 were 2890.536 kgs. The comparative tables for the last five years are presented (see Table 01). While there has been a decreasing trend in the quantity of reported Narcotic drugs disposal compared to that of the previous year, 2019, the amount of Narcotic drugs disposed of has decreased from 12922.2966 kgs to 2890.536 kgs. Narcotic drugs disposed of in the Eastern Region (30451.4229 kgs) were higher compared to that of the North Region (6082.7183 kgs) and the South-West Region (4534.591kgs) of the country.

The quantity of disposal of Psychotropic Substances in India has fluctuated from 2016 to 2020. The Northern Region disposed of more amounts of Psychotropic Substances in 2018. The quantity of

Psychotropic Substances disposed of was 25.280 kgs, and these disposals of seized Psychotropic Substances was in Ajmer alone. In the Eastern Region, disposal of Psychotropic Substances in 2020 was 2.37814 kgs and 21438 no.s, and these disposals of seized drugs were in Kolkata and Patna. In the South-West Region, disposal of Psychotropic Substances in 2018 was 2.436 kgs, and the disposal of seized Psychotropic Substances was in Ahmedabad alone. Psychotropic substances disposal in 2020 was 2.37814 kgs and 21438 no.s. The comparative tables for the last five years are presented (see Table 01). While there has been an increasing trend in the quantity of reported Psychotropic Substances disposal compared to that of the previous year, 2019, the amount of Psychotropic Substances disposed of has increased from 4.8905 kgs to 2.37814 kgs and 21438 no.s. Psychotropic Substances disposed of in the Northern Region (36.505 kgs) were higher compared to that of the Eastern Region (6.68964 kgs and 21438 no.s) and South-West Region (2.436 kgs) of the country.

The quantity of disposal of Precursor Chemicals in India has fluctuated from 2016 to 2020. The South-West Region disposed of more Precursor Chemicals in 2019 was 153312.57 kgs, and this disposal was from seized Precursor Chemicals in Mumbai alone. In the Northern Region, disposal of Precursor Chemicals in 2019 was 12528.860 kgs, and the disposals were from seized Precursor Chemicals in New Delhi alone. In the Eastern Region, disposed of Precursor Chemicals in 2017 was 113.7 kgs and 761926 no.s, and these disposals were from seized Precursor Chemicals in Guwahati and Kolkata. Precursor chemicals disposal in 2020 was 57.655 kgs. The comparative tables for the last five years are presented (see Table 01). While there has been a decreasing trend in the quantity of reported Precursor Chemicals disposal compared to that of the previous year, 2019, the amount of Precursor Chemicals disposed of has decreased from 165841.43 kgs to 57.655 kgs. Precursor Chemicals disposed of in the South-West Region (157741.25 kgs) were higher compared to that of Northern Region (12939.57 kgs) and East Region (1197.283 kgs and 761926 no's) of the country.

The quantity of disposal of Pharmaceutical Drugs in India has fluctuated from 2016 to 2020. The Eastern Region disposed of Pharmaceutical Drugs in 2019 was 0.014 kgs and 874123 no.s and 595 no.s, and these disposals were seized Pharmaceutical drugs in Imphal, Kolkata, and Patna. In the Northern Region, disposal of Pharmaceutical Drugs in 2016 was 790 kgs and 27160 no.s, and these disposals were seized Pharmaceutical Drugs in Chandigarh, Delhi, Jodhpur, and Lucknow. In South-West Region, there is no disposal of Pharmaceutical drugs from 2016 to 2020. Pharmaceutical drug disposal in 2020 was 0.49357 kgs and 25017 no.s. The comparative tables for the last five years are presented (see Table 01). While there has been an increasing trend in the quantity of reported Pharmaceutical drugs disposal compared to that of the previous year, 2019, the amount of Pharmaceutical drugs disposed of has increased from 0.014 kgs and 874123 no.s and 595 no.s to 0.49357 kgs and 25017 no.s.

Pharmaceutical drugs disposed of in the Northern Region (790.320 kgs + 27415 no.s.) were higher compared to that of the Eastern Region (0.95657 kgs and 995923 no.s and 8752 ml) and South-West Region (zero) of the country.

The highest number of disposed of cases reported in the Northern Region in 2017 was 77, followed by the Eastern Region at 68, and South-West Region was 25. Narcotic Drugs and Psychotropic Substances disposed of cases in 2020 was 119. The comparative tables for the last five years are presented (see Table 01). While there has been a decreasing trend in reported disposal compared to the previous year, 2017, the number of cases has decreased from 170 to 119. In 2018 and 2019, the number of Disposal cases was not reported.

Findings:

- The disposal of seized Narcotic Drugs, Psychotropic Substances, Precursor Chemicals, and Pharmaceutical Drugs increased in India.
- Eastern Region, the disposal of seized drugs was in Guwahati, Imphal, Kolkata, and Patna.

- Northern Region, the disposal of seized drugs was in Chandigarh, New Delhi, Jodhpur, Lucknow, Ajmer,
- South-West Region, the disposal of seized drugs was in Ahmedabad, Indore, and Mumbai.

Discussion:

The Drug Law Enforcement Officer is aware of Section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985, which allows for pre-trial disposition (*“Disposal of seized Narcotic Drugs and Psychotropic Substances”*) (NDPS, 2017). However, after seizure and arrest, the usual procedure is to file a criminal complaint and submit the offending products as well as the offenders (accused persons) to judicial inspection. Following an intricate and, at times, very protracted trial court determines the offence and sentence. After the trial, the court determines whether or not the accused(s) is or are guilty. Whether the offending goods are subject to confiscation under Section 60 of the Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Liability of illicit drugs, substances, plants, articles, and conveyances to confiscation”*) or Section 61 of the Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Confiscation of goods used for concealing illicit drugs or substances”*) or Section 62 of the Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Confiscation of sale proceeds of illicit drugs or substances”*). Whether the Court finds the defendant guilty or not, the court determines the commodities’ Confiscability and issues a confiscation order Section 63 of the Narcotic Drugs and Psychotropic Substances Act, 1985 (*“Procedure in making confiscations”*) (HB-NCB, 2014).

The unclaimed cases are cases where Narcotic Drugs, Psychotropic Substances, and Controlled Substances have been confiscated but no claimant has been discovered, either immediately or after investigations. In such cases, the Drug Law Enforcement Officer should apply to the Court within one month of the seizure, detailing the facts of the case and the efforts made to identify the accused, as well as the fact that such persons could not be known or identified, and requesting that the goods be confiscated Section 63 of the Narcotic Drugs and Psychotropic

Substances Act, 1985 (*“Procedure in Making Confiscations”*) (HB-NCB, 2014).

Other than Narcotic Drugs, Psychotropic Substances and Controlled Substances, or Narcotic plants like Opium Poppy, Cannabis plant or Coca leaf, the Drug Law Enforcement Officer seizes anything perishable and susceptible to rapid and natural decay. An application for early seizure and disposal by the sale can be brought to the Court, and the Court will issue orders of confiscation under Sections 60, 61, and 62 of the Narcotic Drugs and Psychotropic Substances Act, 1985. If the seized goods are later ordered by the Court to be confiscated, the sale proceeds will be confiscated instead of the original goods, and if the goods are found harmless and must be returned to the owner, the sale consideration will be returned to the owner instead of the goods, as provided by Section 63(2) of the Narcotic Drugs and Psychotropic Substances Act, 1985 (HB-NCB, 2014).

The Drug Law Enforcement Officer shall make its information available to the Drug Disposal Committee and initiate the process for their disposal after the Court issues an order confiscating Narcotic Drugs, Psychotropic Substances, and Controlled Substances under Section 63 of the Narcotic Drugs and Psychotropic Substances Act, 1985.

The Head of the Department appoints the Drug Disposal Committee. Such a committee is led by a Zonal Director of Narcotics Control Bureau or Superintendent of Police, Joint Commissioner of Customs and Central Excise or Joint Director, Directorate of Revenue Intelligence or officers of equal rank, with two other members holding the rank of Assistant Superintendent of Police or Assistant or Deputy Commissioner or Director. The Committee can only order disposal of up to a certain amount. If there is a large quantity, the Head of Department may appoint a High-Level Drug Disposal Committee to handle the disposal (HB-NCB, 2014).

The Drug Disposal Committee has the authority to order the disposal of seized products up to the quality or value specified in the (see Annexure-III), provided that if the consignments are in greater quality or value than those specified in the (see Annexure-III). The Drug Disposal

Committee will submit its suggestions to the Department Head, who will direct that they be disposed of by a high-level Drug Disposal Committee created specifically for this purpose (NDPS, 2017).

Transferring Opium, Morphine, Codeine, and Thebaine to the Government Opium and Alkaloid works under the Chief Controller of Factories is how they are disposed of. In all other cases involving drugs, the Chief Controller of Factories will be notified, and he or she will determine within 15 days whether any drug or quantity of drug is necessary for supply as samples under Section 67B of the Narcotic Drugs and Psychotropic Substances Act, 1985. The requisitioned medications will be delivered to the Chief Controller of Factories, and the rest will be disposed of. The Head of the Department must be informed about the destruction (disposal) program at least 15 days in advance, so that he or she can undertake surprise checks directly or through other officers (HB-NCB, 2014).

Drugs will be disposed of through incineration (burning) in incinerators that operate with the permission and approval of State Pollution Control Boards or Pollution Control Committees. In the presence of the Drug Disposal Committee, the destruction should take place. The Drug Disposal Committee shall prepare a Certificate of Destruction in triplicate following the destruction (see Annexure-IV). The original will be stored in the godown register by the Drug Law Enforcement Officer, the duplicate in the case file by the Drug Disposal Committee, and the triplicate with the Drug Disposal Committee for their records. The Narcotics Control Bureau will receive monthly Master Reports detailing the disposal of Narcotic Drugs and Psychotropic Substances (HB-NCB, 2014).

Conclusion:

There was evidence of diversion of Narcotic Drugs and Psychotropic Substances due to stringent regulations and surveillance of the sale, purchase, storage, and other aspects of particular drugs. The current drug trafficking trends, patterns, and challenges of legitimate to illegitimate Narcotic Drugs and Psychotropic Substances should be kept in mind by

Drug Law Enforcement officials. According to the data, the number and incidents of Narcotic Drugs, and Psychotropic Substances disposal has increased in India. To effectively combat the misuse and abuse of Narcotic Drugs and Psychotropic Substances in India, cooperation and concentrated measures are required.

References:

- Annual Report. 2016. Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- Annual Report. 2017. Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- Annual Report. 2018. Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- Annual Report. 2019. Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- Annual Report. 2020. Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- Drug Law Enforcement, Field Officers Handbook. (2014). Narcotics Control Bureau, Ministry of Home Affairs. New Delhi: Government of India.*
- The Narcotic Drugs and Psychotropic Substances Act, 1985. (2017). Gurgaon: Universal law Publishing Lexis Nexis (A Division of RELX India Pvt Ltd).*

ANNEXURE – I

**INVENTORY OF SEIZED NARCOTIC DRUGS, PSYCHOTROPIC SUBSTANCES,
CONTROLLED SUBSTANCES AND CONVEYANCES**

[under section 52A(2) of the Narcotic Drugs and Psychotropic Substances Act, 1985]

Case No:

Seizing agency:

Seizing officer:

Date of seizure:

Place of seizure:

Name and designation of the officer preparing this inventory:.....

TABLE

Sl. No	Narcotic Drugs /Psychotropic Substances/ Controlled Substances/ Conveyance	Quality	Quantity	Mode of packing	Mark and Numbers	Other identifying particulars of seized items or packing	Country of origin	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

.....
Signature, Name and Designation of the officer.

CERTIFICATION BY THE MAGISTRATE UNDER SUB-SECTION (3) OF SECTION 52A OF THE NARCOTIC DRUGS AND PSYCHOTROPIC SUBSTANCES ACT, 1985.

Whereas the above officer applied to me under sub-section (2) section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985 to certify the above inventory, and sub-section (3) of that section requires any Magistrate to whom an application is made to allow the application as soon as may be, I, having been satisfied that the above inventory is as per the seizure documents and the consignments of seized goods related to the case presented before me, certify the correctness of the above inventory.

.....
Signature, Name and Designation of the Magistrate.

ANNEXURE – II

APPLICATION FOR DISPOSAL OF SEIZED NARCOTIC DRUGS, PSYCHOTROPIC SUBSTANCES, CONTROLLED SUBSTANCES AND CONVEYANCES UNDER SECTION 52A(2) OF THE NDPS ACT, 1985.

[Application to be made by the officer-in-charge of a police station or an officer empowered under section 53 of the Narcotic Drugs and Psychotropic Substances Act, 1985 who has custody of the seized Narcotic Drugs, Psychotropic Substances, Controlled Substances And Conveyances]

To,

Learned Magistrate,

.....

Sir,

Subject: *Application for certification of correctness of inventory, photographs and samples of seized Narcotic Drugs, Psychotropic Substances, Controlled Substances and Conveyances.*

1. All Narcotic Drugs, Psychotropic Substances, Controlled Substances and Conveyances have been identified by the Central Government under section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985 as vulnerable to theft and substitution *vide* Notification No. dated.....
2. As required under sub-section (2) of section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985, I submit the enclosed inventory of seized Narcotic Drugs, Psychotropic Substances, Controlled Substances and /or Conveyances and request you to _____
 - (a) Certify the correctness of the inventory;
 - (b) Permit taking, in your presence, photographs of the seized items in the inventory and certify such photographs as true; and
 - (c) Allow drawing of representative samples in your presence and certify the correctness of the list of samples so drawn.
3. I request you to allow this application under sub-section (3) of section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985 so that the seized Narcotic Drugs, Psychotropic Substances, Controlled Substances and/ or Conveyances can thereafter be disposed of as per sub-section (1) of section 52A of the said Act retaining the certificate, photographs and samples as primary evidence as per sub-section (4) of section 52A(4).

.....
Yours faithfully,

.....
Signature, Name and Designation of the officer.

Date:.....

CERTIFICATE BY THE MAGISTRATE UNDER SUB-SECTION (3) OF SECTION 52A OF THE NARCOTIC DRUGS AND PSYCHOTROPIC SUBSTANCES ACT, 1985.

I allow the above application under sub-section (3) of section 52A of the Narcotic Drugs and Psychotropic Substances Act, 1985 and, hereby, certify the correctness of the enclosed inventory, the enclosed photographs taken and the list of samples drawn in my presence.

.....
Signature, Name and Designation of the Magistrate.

Date:.....

ANNEXURE - III

**DETAILS OF POWER OF DRUG DISPOSAL COMMITTEE FOR
DISPOSAL OF SEIZED ITEMS.**

S.No	Drugs	Quantity per Consignment
1	Heroin	5 Kg
2	Hashish	100 Kg
3	Hashish oil	20 Kg
4	Ganja	1000 Kg
5	Cocaine	2 Kg
6	Mandrex	3000 Kg
7	Poppy straw	Up to 10 Meters
8	Other Narcotic Drugs, Psychotropic Substances, Controlled Substances or Conveyances	Up to the value of Re. 20 lakhs

Source: The Narcotic Drugs and Psychotropic Substances Act, 1985. (2017). Gurgaon:
Universal law Publishing Lexis Nexis (A Division of RELX India Pvt Ltd) p. 196.

ANNEXURE – IV

CERTIFICATE OF DESTRUCTION

[See Paragraph 11 of Notification No. dated the]

This is to certify that the following Narcotic Drugs, Psychotropic Substances and Controlled Substances, were destroyed in our presence.

1. Case No:
2. Narcotic Drugs/Psychotropic Substances/Controlled Substances:
3. Seizing agency:
4. Seizing officer:
5. Date of seizure:
6. Place of seizure:
7. Godown entry number:
8. Gross weight of the drug seized:
9. Net weight of the Narcotic Drugs/Psychotropic Substances/Controlled Substances destroyed (after taking samples, etc):
10. Where and how destroyed:

.....
Signature(s), Name(s) and Designation(s) of

Chairman/Members of the Drug Disposal Committee.

Author's Profile:

Rajender Pal Singh, IPS

Director General of Police, Economic Offences Wing & Special Investigation Team, Lucknow, Uttar Pradesh-226010.

Karuna Dasari Subramanyam

Doctoral Research Scholar, School of Law, Rights and Constitutional Governance, Tata Institute of Social sciences, Deonar, Mumbai - 400088.



Sardar Vallabhbhai Patel
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Equipment Interference – The New Search Paradigm

Rupin Sharma, IPS*

In the past three decades electronic equipment have traversed the journey from luxury to necessity and from unnecessary adjuncts to essentials from being mere tools of communication to our own selves. Our laptops and smartphones with features like synchronisation and internet connectivity perhaps know more about us than we could conceivably remember. This interface narrows the gap between what can be termed as public and private – numerous activities which are ordinarily within the private domain could become a source of embarrassment if put in the public domain. These could include intimate private moments – within a smaller social circle of a family or friends to exclusively private moments and also business plans or strategies where others could be impacted. Naturally, therefore, the line between what is permissible and legal and what is not needs to be revisited.

Virtual and Physical Self are Now One - Goldmine or Landmine:

We carry more with us and on our bodies and smartphones than ever in the past. A smartphone is both a goldmine and a landmine depending on which side of the law one finds himself - the distance between a bona-fide action and what can be construed as mala-fide or criminal is on the

*1992 Batch Nagaland Cadre, Director General, of Prisons and HG/CD.

verge of a meltdown. Even a perfectly bona-fide action, viewed in a different context or from a different perspective could be construed as mala-fide and jeopardise individual freedom, liberty, privacy, and social behaviour. Since all virtual-space interactions do not present a holistic picture, the danger is elevated.

Benign to Criminal – the fading divide:

While certain actions could easily fall within the domain of criminal conspiracy, others which are purely defensive acts for self-preservation including consultation with legal counsels or family members could be misconstrued as criminal and conspiratorial. On the other hand, there is also the tricky question of the devices and communications being used for committing crimes or planning them. The possibilities of the evidence of criminal conspiracy being obliterated or interfered with cannot be ruled out too.

Striking a Balance – Law enforcement and Privacy-Liberty

Between these extremes and the need to balance between the needs of the society and the sacrosanct private space of an individual is the domain of law enforcement.

With electronic equipment being used as instruments of crime, proceeds of crime and property of crime besides their being used as intermediaries to facilitate crimes, with increasing frequency, there is a crying need for putting in place mechanisms where the balance between the privacy-liberty aspect is balanced with that of the well-being of the society and the needs of law enforcement, public order, and national security.

Law Enforcement Needs

While some legal backup is available, there are still gaps which allow for almost unbridled use and abuse of discretion on the one hand and literally „cage“ the law enforcement efforts on the other.

Law enforcement, security, and intelligence efforts may require the agencies to „collect“ or „farm“ data from individuals or corporates. Individual data may exist on „equipment“ which may be under the direct

control of the user or may be available elsewhere. While some degree of control over personal information is natural, numerous other identifiers and parameters exist „away“ from our personally held devices by way of what may be called „meta-data“. This meta- data, whether it is IP addresses or call data or even „exif-data“ or the like is available with service providers and intermediaries through which we connect or to whom we give permissions while downloading and using the „apps“. Although one may argue that these are the „costs“ of using the services but it is debatable whether such „service providers“ and intermediaries should have an absolute and unfettered right to use such data. Such data can be used for law enforcement purposes but also for targeted advertising and business. The End User License Agreements (EULAs) are wide-ranging and hardly anyone ever reads the EULAs except the ones who prepare them. Moreover, the user does not have any option to exclusively and selectively accept the terms of the EULAs which he or she prefers – these are usually a „my way or highway“ arrangements.

Personal Data Beyond Personal Control:

A lot of personal data exists with the service providers and can be accessed by the law enforcement and security agencies. This access to the „meta-data“ for the law enforcement agencies is almost exclusive. Even the individual user does not have access to most such meta-data except where such data is resident on his equipment and his own interface. Thus, what an individual does not have access to himself is available for others and with others. Even for a simple crime like a mobile phone having been stolen, the individual user cannot access the meta-data based on the IMEI number or IP addresses. Similarly, where an individual's social media account or a mobile phone has been compromised or hacked, he cannot seek or access such data. The user's option is limited to approaching the law enforcement or police agencies who may not evince much interest in cases which they consider of a „petty“ or „routine“ nature.

In contrast, security and law enforcement agencies can not only seek the meta- data from the „service providers“ but also seize any equipment

which they deem appropriate for purposes of investigation. Usually, such equipment and data are seized by following the due process. Two broad categories of legal options are available – conduct of search themselves or conduct of searches under „search warrants“ obtained from courts.

Most service providers have appointed designated „nodal officers“ for coordination with law enforcement and security agencies but despite their best efforts to cooperate, most such service providers follow stringent protocols before they share data – being particularly hesitant unless there are criminal cases registered for investigations and often insisting on „proper authorisations“. Their hesitation is partly on account of their own internally prescribed procedures and partly because they are overly cautious not to be acting in contravention of legal requirements. Lastly, there are corporates who put individual liberty, privacy, and freedom of speech at a premium. These, naturally, are impediments in the law enforcement work.

The Hanumans of Law Enforcement:

While law enforcement and legal procedures enable the officials to collect and seize or take into custody equipment which may be of any evidentiary value, often, the law enforcement agencies proverbially act like Lord Hanuman fetching the „*Dronagiri*‘ mountain – unable to know which of the herbs is the lifesaving ‘*sanjeevani*‘ i.e., unable to know which equipment would contain information/data which may be of evidentiary value. Most of our law enforcing Hanumans lift entire sets of electronic devices and equipment and leave it to the *Sushena vaidyas* – the cyber forensic experts to extract the cyber-forensic „*sanjeevanis*“ – the evidence.

When equipment and devices are seized in bulk, the accused, or the witnesses or even the victims are needlessly inconvenienced and isolated in the modern world. Investigation agencies do make „images“ of the data and equipment seized for further investigation, but the inconvenience and disruption caused may be disproportionate.

Digital Data and Pre-Emptive Requirements:

Next come the instances where the investigation, security and intelligence agencies have to consider pre-emptive measures to prevent greater harm to the society or the national interests. Such pre-emptive action may involve what is categorised as „lawful interception“ or „authorised interception“. There are well laid down procedures with decent checks and balances for „lawful or authorised interception“ of telephone communications. Except in exceptional cases, the system has worked well. However, the system has its limitations and has probably outlived its utility – a very small proportion of communication now takes place by traditional voice-telephony or text-sms messages. The law enforcement and security agencies are clearly disadvantaged.

Given these limitations, the law enforcement agencies hands are tied, and the scope of pre-emptive and preventive action gets reduced. They have to adopt a more circuitous and time-consuming path and the chances of security being jeopardised get higher. Except by way of bulk data analysis and meta-data analysis, the agencies cannot intervene.

The Five-Eye Capabilities – an Insight into Bulk -Data Analysis:

Some countries, like the “Five-Eyes” consortium, sit on „mass-data“ which they collect almost on a global basis by sitting on and collecting data from the big-data pipeline. These countries, virtually sit on all the data generated on the Internet, anywhere in the world. However, despite the data being available, to „dive-into“ the data itself is a humungous task, requiring specific inputs from the „seekers“. Data extraction from these require complicated and sophisticated algorithms some of which were revealed by Edward Snowden after his heist.

In some cases, however, the Five-Eyes, Russia and even China carry out live online surveillance of the Internet traffic on a „real-time“ bases. This real-time surveillance and monitoring again is a sophisticated task and required massive capabilities both human and technical and even based on artificial intelligence. Aspects like multiple usages of terms/

words/phrases, use of code-words and cryptography queer the pitch further for the law enforcement and security agencies.

The Grey World of Security-Intelligence Agencies:

While in the world of law enforcement, there is a defined and definite legal procedure and some procedural safeguards exist, the world of security and intelligence work is murkier and quirkier – only bordering on the unconventional and impossible. Most intelligence work is carried out in almost absolute secrecy and unless there are disclosures – voluntary or by whistle-blowers, it is impossible to even envision the limits – even human fantasies could fail in the domain of the world of intelligence. Even when there are legal limits imposed, the cloak of secrecy could enable almost anything to squeeze through. Despite the piles of data which they sit upon, the quality of output would depend on the quality and specificity of queries – once the queries are good, any possible linkages could be unearthed. Where human memory fails, data would succeed.

Data Misuse and Pilferage/Leakage – Need for Specificity:

In a similar vein *albeit* on a smaller level, when the law enforcement or security agencies lawfully seize electronic equipment and devices, despite the fact that the seizures may pertain to particular instances which are the subject of investigation or prosecution, there is a risk of the data available or obtained from such devices being used or abused.

The data may help connect the dots for the investigation but the resident data which often sits in the privacy domain and „non-criminal“ nature could be used to ascribe or attribute criminality where none may initially exist – a virtual „witch-hunt“. This elucidates the importance of maintaining some degree of „exclusivity of use of data“ which is obtained so that privacy and liberty are not sacrificed at the altar of prosecution. Indeed, this line can be extremely thin, often depending on where the „tilt“ lies. There is, thus a crying need for a „specificity clause“ in the laws so that attempts at persecution can be forestalled. The international law and Indian law on extradition has accepted this paradigm – „Doctrine of

Specificity” – a person extradited for one or some offences cannot be prosecuted for any other offences unless the extraditing country assents or unless the person has been afforded an opportunity to return. This principle has acted as a balance to persecution.

Striking a Balance:

While I have dealt with issues of individual liberty and privacy, it is also necessary to strike a balance between the needs of the society at large and the law enforcement agencies through whose unprejudiced action the law is sought to be implemented. Advances in cyber-forensics have meant that there is less „equipment deprivation” because images can be taken of the devices for investigation. However, since humans have shifted a significant proportion of their selves to the virtual world, naturally, major linkages, evidence and information would be available in the virtual world and devices which enable the interaction.

Indian laws do not currently authorise any legal interference in the virtual world by law enforcement agencies save by way of seizure of the devices. While the law does provide for lawful interception of telephone communications on a real time basis, such interference in the virtual world is neither enabled nor permissible legally. Most of what is either done or attempted currently is either post-incident or bordering on the illegal. Any attempts to interfere with communications or devices or systems are illegal and criminal.

IT Act Limitations

As things stand today, any access, damage, or downloading copying or extracting data, introduction of any computer virus or contaminant or disruption of any communication device, computer, computer network, computer resource or computer system or electronic record or intermediaries without permission of the owner or any other persons who is in-charge thereof are offences punishable under the Information Technology Act. There is no legal immunity, exemption or privilege bestowed upon the law enforcement and intelligence agencies in case they violate the provisions of the IT Act.

The Act, however, is silent on the powers of the law enforcement officers and does not even circumscribe the powers ordinarily available under the Criminal Procedure Code. The virtual world, meanwhile, has opened-up a parallel world of communications and criminals have adeptly used these channels to communicate and hatch conspiracies and fly beneath the radar of the law enforcement and security agencies. Unless the agencies receive the old- fashioned „tip-offs“, it is well-nigh impossible for the agencies to combat the criminals. The agencies are clearly handicapped.

Need for a Legally Enabling Framework:

There is a compelling need for devising and putting in place a mechanism which enables the law enforcement and security agencies to effectively discharge their duties without having to adopt tactics which are in the realm of dark and grey.

The UK Experience:

The United Kingdom (UK) has enacted the Investigatory Powers Act in 2016 which attempts to empower the law enforcement and security agencies and circumscribe their limits in one go. **It is an attempt at undertaking a journey to bridge the gap between the black-grey end of the spectrum to the white end – from extra-legal to legal.**

Even if the UK legislation is to be considered as a reference point to be improved upon and not implemented in toto, there are significant provisions which could be adopted, adapted and improved upon: the number of agencies who can be empowered; the circumstances in which the powers can be invoked; the list of authorities empowered to invoke the powers; the mechanism to be adopted for individual equipment interference as well as bulk equipment interference; targeted equipment interference warrants and targeted examination warrants; the purposes and safeguards under which the data obtained may be used by the security and intelligence agencies or law enforcement agencies. The statute provides for an Investigatory Powers Commissioner to oversee

the safeguards and any breaches of the safeguards can be reported to the Investigatory Powers Commissioner besides the appointment of Judicial Commissioners or Investigator Powers Tribunal.

Privileged Communications – Safeguards and Procedures:

The law incorporates safeguards for privileged communications between legislatures and their constituents in some cases, communications between lawyers and their clients (Privilege is not lost where a professional legal adviser is advising a person who is suspected of having committed a criminal offence); on questions of physical or mental health or to spiritual counselling, consultations between a health professional and a patient, or information from a patient's medical records, confidential personal or constituency business information, journalistic sources or information etc. However, these privileges are not absolute and warrants for bulk equipment interference can only be issued if the issuing authority is satisfied that there are exceptional and compelling circumstances that make the warrant necessary and if the Judicial Commissioner approves the decision to issue the warrants only for the limited purposes of targeting such material for the purpose of preventing death or significant injury or in the interests of national security.

Where privileged material is obtained as a result of any warrants, it needs to be **clearly marked as 'privileged'** and the Investigatory Powers Commissioner informed about it and while disseminating such legally privileged material to an outside body it should be accompanied by a clear warning that it is subject to legal privilege. In another safeguard, the equipment interference authorities are mandated to maintain records of targeted warrants issued against persons who may enjoy protection as „privileged communications“ – lawyers, legislators, counsels, medical/ health consultants, journalists etc.

Equipment Interference Warrants – Bulk and Targeted – Grounds:

The grounds for obtaining equipment interference warrants – bulk interference, targeted warrants - include the interests of national security, for the purpose of preventing or detecting serious crime, in the interests of the economic well- being of the UK so far as those interests are relevant to national security or in the interest of the prevention of death or injury. **Some restrictions apart, material obtained through equipment interference may be used as evidence in criminal proceedings in the same manner as for ordinary criminal proceedings.** When information obtained under an equipment interference warrant is used as evidence in criminal proceedings, the equipment interference authority would be required to demonstrate how the evidence has been obtained, to the extent required by the relevant rules of evidence and disclosure.

Bulk equipment interference warrants can be authorised by the Secretary of State, or someone authorised on his behalf. However, the Secretary of State must still personally and expressly authorise the issue of the warrant. In emergency case authorisations too, however, even in such cases the Judicial Commissioner would have the power to review it within three working days. Usually, however, the bulk warrants would have to go through a Judicial Commissioner. In case the Judicial Commissioner refuses to continue the warrant, the issuing authority can appeal to the Investigatory Powers Commissioner.

Before a warrant for equipment interference is issued an elaborate application is required to be prepared by the agency seeking the warrant. This application should contain background to the application, a general description of the equipment to be interfered with and the communications, information and equipment data that is to be (or may be) obtained and also whether the information sought to be obtained passes the tests of necessity and proportionality especially that what is sought to be achieved by the warrant could not reasonably be achieved by other less intrusive means. If the request is for an urgent authorisation,

the reasons need to be detailed separately too. **All collateral material obtained by way of bulk warrants needs to be destroyed.**

Bulk Interference – Disclosure of Operational Grounds:

The bulk interference warrant must specify the operational purposes for which any material obtained under the warrant may be selected for examination. Needless to mention that data acquired through bulk interference would have to be subjected to targeted and subsequent examination, the detailed purposes of which also need to be specified while obtaining the warrants. By way of safeguard, thus **bulk warrants help obtain bulk-data but the agencies are only authorised to ‘select’ material which is set out in the original warrant and not any other information.** Examination safeguards are essential for bulk warrants but the audit and scrutiny by Investigatory Powers Commissioners are also imperative.

The Secretary of State may authorise bulk equipment interference warrants only if he considers that the main purpose of the warrant is to obtain overseas- related communications, overseas-related information, or overseas-related equipment data. The powers of the Secretary of State to authorise a bulk equipment interference warrant is not unbridled but must be approved by a Judicial Commissioner who is entitled to have access to the same application for the warrant as the Secretary of State although in the event of the Judicial Commissioner not issuing the warrant, the Investigatory Powers Commissioner can be approached, and the latter’s decision is final.

In case the warrants are to be extended or modified, the Judicial Commissioners may authorise the same subject to whatever condition it may impose, including but not limited to destruction or retention of the evidence or material which was previously obtained. **The bulk warrants are initially valid for a period of six months.** The warrants can be cancelled at any time before the date of expiry of the warrants if the continuation is not necessary for the operational purposes they were supposed to serve.

On the other hand, **the Chiefs of the law enforcement agencies may issue warrants that combines a targeted equipment interference warrant with a directed surveillance authorisation, or an intrusive surveillance authorisation or a property interference authorisation.** Additionally, the Police Chiefs can only issue interference warrants on applications made by their own officers unless there are collaborative measures with other police forces in place and a similar arrangement applies to the other law enforcement agencies. If equipment interference requires a foreign partner, this fact needs to be incorporated in the application for warrant itself for the warrant to work collaboratively.

Bridging the Missing Link – Intelligence to Prosecution: A vital loophole plugged by this legislation is that material obtained through equipment interference may be used as evidence in criminal proceedings subject to the usual rules governing admissibility of evidence and safeguards, including ensuring the continuity and integrity of evidence and the equipment interference authority being able to demonstrate how the evidence has been obtained, to the extent required by the relevant rules of evidence and disclosure.

Law enforcement agencies can make requests to the intelligence agencies for bulk interference and data but before doing so, they ought to have exhausted all other means of progressing the operation or investigation, including the use of powers available otherwise to them. In making such requests, the law enforcement agencies should list out the reasons for so seeking assistance of the intelligence agencies especially adequate reasons and material to help the intelligence agencies determine the proportionality and necessity of rendering such assistance. **Needless to mention that since this process is documented and officially carried out, the procedure for admissibility of the material and evidence becomes easy and legal and the intelligence agencies are not required to hide behind the veil or the ‘iron-curtain’ at all. Once requested in this manner, the process of intelligence and material sharing by way of copying, sharing and storage becomes easy and**

shifts to the realm of legality than being considered as grey or dark or out of bounds.

The Investigatory Powers Act talks about two kinds of warrants - (a) targeted equipment interference warrants, and (b) targeted examination warrants.

A „targeted equipment interference warrant“ is a warrant which authorises or requires the person to whom it is addressed to secure interference with any equipment for the purpose of obtaining either/or communications, and/or equipment data and/or any other information. When a targeted equipment interference warrant is issued, it must also authorise or require the person to whom it is addressed to secure the obtaining of the communications, equipment data or other information to which the warrant relates; and may also authorise that person to secure the disclosure, in any manner described in the warrant, of anything obtained under the warrant.

For obtaining the communications or other information, the person authorised may undertake monitoring, observation or listening to a person’s communications or other activities besides recording anything which is monitored, observed or listened to.

The targeted equipment interference warrant would also authorise various other forms of conduct in addition to the conduct described in the warrant which is necessary to undertake in order to do what is expressly authorised or required by the warrant, including conduct for securing the obtaining of communications, equipment data or other information.

The warrants also authorise any conduct by any person or on behalf of the person to whom the warrant is addressed to be provided with assistance in giving effect to the warrant.

A targeted equipment interference warrant may not, usually authorise or require a person to engage in conduct, in relation to a communication other than a stored communication, which would constitute an offence. **However, by their nature and terms, some warrants may authorise conduct which may otherwise be unlawful to undertake. Thus, any conduct which is carried out in accordance with a warrant under the**

provisions for targeted equipment interference warrants is lawful for all purposes.

Conclusion:

With the changing face and nature of communications, there is a need to adopt modern technology and legal paradigms to deal with the increasing dependence on digitised communications. There is a need to strike a balance between the needs of the State and the society on the one hand with the needs of the privacy and liberty of citizens in a democracy. Rather than working in an environment of ambiguity, flux and uncertainty, firm legal parameters need to be prescribed – both the enablers and the constraints. With a better enabled environment, the law enforcement and security-intelligence agencies, given their exemptions and immunities would also be able to deliver better results.

With a well laid out legal-executive procedure, the fears of the activists about privacy and liberty can also be alleviated.

Author's Profile:

Rupin Sharma, IPS is a 1992 Batch Nagaland Cadre
Director General of Prisons and HG/CD.



Sardar Vallabhbhai Patel
National Police Academy
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Policing and Social Media: A Perspective

Harmeet Singh, IPS* & Salik Khan**

Abstract:

The advent of the Printing Press in the 15th century ushered in an era of Information, changing the way the world communicated. It can perhaps be called the second most important invention in the history of mankind after the wheel. But the arrival of Social Media transformed the world of information like never before, shaking up all existing norms and changing methodologies of communication beyond recognition.

With Social Media changing the way we communicate and the idiom, in which we do, it would be foolhardy of any organisation to ignore the medium. Social Media can not only serve as a valuable tool for communicating with the citizenry but more importantly as a vehicle of an enhanced Police-Public relationship. Apart from being a platform for positive engagement and delivery of citizen-centric services, the Social Media ecosystem on the converse can also pose a threat to public safety and law and order. This intersectionality of Social Media and Policing is not only enigmatic but also bewildering. For the first time, the medium is not only a source of credible evidence but also as a possible theatre of crime.

*Commissioner of Police, Guwahati & Spl. DGP Assam In Charge, Assam Police Smart Social Media Centre - 'Nagrik Mitra'

**Creative Consultant, Assam Police Smart Social Media Centre - 'Nagrik Mitra'

Social Media and Community - Oriented Policing:

The Father of Modern Policing, Sir Robert Peel, in his principles of policing, argued¹ that “the power of the Police to fulfil their functions and duties is dependent on public approval of their existence, actions and behaviour.” Social Media can transform the way Police interact and engage with the citizens to develop trust, transparency, and open communications. Effective use of Social Media allows law enforcement agencies to develop trustworthy relationships and transparent communication with the community. It also ensures transparency in the department’s online reputation and makes sure that facts are brought forth in real-time, so that emerging narratives are not skewed. From providing a forum for grievance redressal to countering fake rumours and humanising the Police, Social Media is an important tool for community-oriented policing. Taking a leaf out of Sir Robert Peel’s 9 Principles of Policing, we thus propose the following 9 Principles, which highlight the importance of Social Media in modern day-policing.

Social Media and Policing: 9 Principles:

1. To develop trust, transparency, and open communications.
2. To make sure that facts are brought forth in real-time, so that emerging narratives are not skewed.
3. To provide a forum for grievance redressal and showcase good police work.
4. To issue alerts, engage with the community and extend help to victims of crimes.
5. To provide situational information and seamless online communication during crisis situations.
6. To break the shackles of old stereotypical images/perceptions and talk to the audience in their idioms - Memes.
7. To be cautious and judicious while using Social Media to avert any form of controversy.
8. To use Social Media in achieving important policing objectives -

¹ Peel’s Principles of Law Enforcement:

<https://www.sjpd.org/home/showpublisheddocument?id=284>

intelligence gathering and investigations.

9. To strike a fine balance between privacy and security. It's a thin line to walk - with usual disclaimers.

According to a study² by Urban Institute, 94% of law enforcement agencies use Facebook, followed by Twitter at 71%. Unlike traditional unilateral communications, Social Media extends an opportunity for a two-way dialogue with citizens and provides assistance in the delivery of citizen-centric services. Over the years, we have seen how various Police departments across the country have started using Social Media for communication and day-to-day policing.

This integrated approach of using Social Media to issue alerts, engage with the community and extend help to citizens has greatly benefited the policing apparatus. From providing situational information during floods to a seamless online communication during a crisis situation and tackling misinformation, Social Media has enabled the law enforcement agencies to better serve the citizens. The Covid19 Pandemic showed us how tech intervention by various police departments across the country not only helped in mitigating citizen concerns, it also helped in changing the negative perception of the police in India.

While Social Media can be a powerful tool, it's important to harness and integrate its use properly. For law enforcement agencies, Social Media is as valuable as it is for contemporary brands. However, just as with brands, Police Departments should be cautious and judicious while using Social Media to avert any form of controversy. Today, in the era of „Cancel Culture“, a small misstep on Social Media, no matter how well-intentioned, can cause serious damage to the reputation of the department. A seemingly innocuous tweet or a hashtag can and does backfire. Similarly, Police Departments should also ensure that the officers and personnel use Social Media responsibly. Their misadventures can reflect poorly on the department as a whole. Do's and Dont's of Social Media use in the context of Policing are still not well

²*Social Media Guidebook for Law Enforcement Agencies:*
https://www.urban.org/sites/default/files/publication/99786/social_media_guidebook_for_law_enforcement_agencies_0.pdf

established, thus, it's also important for Police Departments to frame a robust Social Media Policy to ensure uniformity and avoid any form of online embarrassments.

Truth to be told, thanks to Social Media, the Police have begun dismantling stereotypes, which have been cemented by celluloid caricatures. In breaking that proverbial image, where real-time communication has been a major factor, the use of Memes has played a very important and key role. The use of an idiom that the young generation understands, from Mumbai to UP, to Bengaluru and Assam, the „Meme-fication“ of communications and awareness messages have transformed the police-public relationship. Coined by evolutionary biologist Richard Dawkins³ in his 1976 Book, „*The Selfish Gene*“, Memes are the language of the Internet and they make content delivery impactful. Described as a unit of cultural inheritance and analogous to traditional units of heredity, genes, Internet memes break the shackles of old stereotypical images/perceptions and talk to the audience in their idioms. Since Memes are essentially a unit of cultural information, the ideas and references governing this „Meme-fication“ differ greatly among all cultures, but they reflect general social behaviourism.

In the era of networked individualism⁴, people use memes to simultaneously express both their uniqueness and their shared connectivity. Assam's geopolitical rumblings are unique too. The challenges and possible interpretations run deep.

Revamping its Social Media Presence in July 2018, the Assam Police created the Smart Social Media Centre, „Nagarik Mitra“, for a proactive and quick response mechanism. The purpose was not only to ensure the safety and security of the citizens in real-time but also to prevent vested interests from vitiating the peaceful environment in the State by attempting to create artificial faultlines.

³Dawkins, R. *The Selfish Gene*. Oxford:

<https://www.oxfordreference.com/view/10.1093/acref/9780195120905.001.0001/acref-9780195120905-e-187>

⁴Limor Shifman, *Memes in Digital Culture*. MIT Press:

<https://direct.mit.edu/books/book/2214/Memes-in-Digital-Culture>

While it's true that on the Internet, the distinction between communicator and audience is thin, the spread of misinformation can be controlled by establishing oneself as a credible source of information. A lot of misinformation flourishes because of the absence of credible, trustworthy information. One of the most basic components of risk communication is being considered trustworthy by the citizens. Following a multi-pronged strategy, we not only disseminated authentic information regularly, we have also taken appropriate action, both legal and counselling, against individuals/entities spreading rumours and misinformation.

Assam Police's active communication strategy of positive and multilingual engagement has allowed us to communicate effectively. One of our initiatives, #The Think Campaign, won the Social Media for Empowerment Award by DEF India⁵ (in collaboration with Facebook and UNESCO) for Community Mobilization. The Think Campaign was also the official Indian entry to World Summit Awards 2019, Austria.

Social Media, for Assam Police, today has become a positive vehicle to reach out and help the citizens during adverse situations like the most recent Covid19 Pandemic and ensure public peace when vested interests tried to vitiate the security situation by spreading false narratives on the NRC and CAA issues.

Apart from platforms like Facebook and Twitter, the Assam Police has also augmented an interconnected WhatsApp network to reach the last man standing. Through these WhatsApp groups, we can disseminate information across the length and breadth of the state in a matter of a few seconds.

Pandemic And The Art Of Communication:

Unlike previous pandemics, when communication mediums remained largely one way and could only reach a fixed audience, COVID-19 happened in the era of the Internet, where information travels with the speed of light. Like previous crisis situations, the Assam Police Social

⁵East MoJo: <https://www.eastmojo.com/news/2019/08/03/assam-police-wins-def-social-media-for-empowerment-award/>

Media Communication strategies worked well in the interests of all concerned and allowed us to create an effective two-way communication channel, a medium of meaningful conversation.

Additionally, with a multilingual content creation strategy, Assam Police was able to put forth and augment Covid awareness campaigns with memes, modern-day idioms, humour, and pop culture references, which at the time had gone viral⁶. Key messaging points like Social Distancing and wearing Face Masks, when pushed through the language of the Internet, create a stronger impact on the psyche of today's smartphone generation. Apart from memes, another key component of our communications has been the awareness video songs, which we produced. Imbibing the cultural milieu in communications, from recreating the iconic „We are in the same boat brother“ by Bhupen Hazarika and „We Shall Overcome“ into songs of hope: Using in-house talent we collaborated with a large number of the local artistes, singers, and music composers to raise awareness on key Covid-19 directives. This was perhaps one of the noble experiments in communications during this pandemic. Our targeted and multi-dimensional content creation has been a success story.

Social Media And Operational Efficiency:

While Social Media has changed the way people commit crimes and spread false narratives to vitiate the situation or radicalise populations, it also provides new means to assist law enforcement agencies in achieving important policing objectives. It enables specifically targeted information to be shared publicly with a single click.

Time-sensitive information, such as advisories and important alerts, can now be delivered directly to the citizens in real-time. False narratives on social and security issues can be nipped in the bud and tackled immediately before they affect the security situation adversely. Social Media can hugely be used in mitigating citizen concerns and providing

⁶ Times Of India: <https://timesofindia.indiatimes.com/viral-news/assam-police-tweak-baazigar-lines-to-promote-social-distancing/articleshow/77059014.cms>

them real-time assistance. A good example⁷ of this is when Assam Police was able to recover a hijacked vehicle within 57 Minutes.

Similarly, Social Media serves a key role in intelligence gathering and investigations. Law enforcement agencies can use publicly available information such as photos, videos, and other types of content to gather both information and evidence. Social Media can also aid in identifying suspects and/or victims of a crime. The Social Media Intelligence (SOCMINT) paradigm provides a new opportunity for law enforcement agencies to generate operational intelligence that could help⁸ in responding to public concerns and potential crimes.

Watching Social Media can make policing more proactive. It can help in identifying tell-tale signs of a potential situation before it escalates into a crime or a tragedy. While there are valid concerns about the privacy of citizens, we need to strike a fine balance between privacy and security. It's a thin line to walk - with usual disclaimers. Besides, most Social Media Mining is done using publicly available information. Information that can be found in publicly available Facebook feeds or Twitter timelines. This is no different than what Brands call „Social Listening“, wherein, they track online mentions and sentiments around keywords and phrases. Monitoring of problematic trends or potentially harmful sentiments on Social Media can help avert untoward situations.

Challenges And Way Ahead:

For all the potential of Social Media in Policing, it has its own sets of challenges. The ever-growing cyberspace and its associated risks mandate a well-thought-out, comprehensive, and integrated Social Media strategy. The two-way communication paradigm of Social Media, which helps Police departments to develop meaningful community relationships has rightfully led to greater accountability and transparency for the Police. Today there is intense public scrutiny of the Police on Social

⁷ *The Sentinel*: <https://www.sentinelassam.com/breaking-news/hollywood-style-chase-assam-police-recovered-hijacked-car-in-just-57-minutes/>

⁸ *Social Media Intelligence(SOCMINT)*:
https://www.researchgate.net/publication/262869934_Introducing_social_media_intelligence_SOCMINT

Media platforms. Thus, it is very important to ensure that the online persona of law enforcement agencies remain objective and open to suggestions while putting across a true and factual narrative that adds to its credibility.

As the Internet continues to reach the last man standing, the role⁹ of Information and Communication Technology is increasingly becoming important in all aspects of governance. With more than 560 million¹⁰ internet users, India is the second-largest online market in the world. Catering to such a humongous target audience has its own set of challenges. Social Media is a new medium through which people - police conversations are taking place like never before. In this new theatre of communication, Police departments need new doctrines and strategic manoeuvres that are in accordance with the principles at the heart of the Indian Constitution. The Information Age has bestowed powers that allow us to serve the citizens like never before. These powers also call for ensuring justice and a responsive model of policing.

To paraphrase Spiderman, with great power comes great responsibility.

Further Readings:

1. Michael Bazzell. Open Source Intelligence Techniques.
2. Laura DeNardis, Derrick Cogburn, Nanette S. Levinson and Francesca Musiani. Researching Internet Governance: Methods, Frameworks, Futures.
3. Nicholas Carr. The Shallows: How the Internet Is Changing the Way We Think, Read and Remember.

⁹Mark Graham (ed.), William H. Dutton (ed.). *Society and the Internet: How Networks of Information and Communication are Changing Our Lives:*

<https://academic.oup.com/book/35088>

¹⁰<https://www.statista.com/topics/2157/internet-usage-in-india/#:~:text=With%20over%20560%20million%20internet,million%20internet%20users%20the%20country>

4. Hamid Jahankhani, Stefan Kendzierskyj, Reza Montasari, Nishan Chelvachandran. Social Media Analytics, Strategies and Governance.
5. Carl Miller. The Death of the Gods.
6. An Xiao Mina. Memes to Movements.

Author's Profile

Shri Harmeet Singh, IPS Commissioner of Police, Guwahati & Spl. DGP Assam in Charge, Assam Police Smart Social Media Centre - „Nagrik Mitra“.

Salik Khan, Creative Consultant, Assam Police Smart Social Media Centre - „Nagrik Mitra“.



Sardar Vallabhbhai Patel
National Police Academy
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The Theory of Positive Policing

Dr. Hanif Qureshi, IPS*

Abstract:

The role of the police as a provider of safety and security services has expanded and they are called upon to solve various problems of local communities involving multiple stakeholders. To effectively function in this role, they need to reach out to people, be professional in their approach and perform multifarious tasks. Drawing from positive psychology, a model of positive policing is proposed which can enable the police to function effectively. This arm of hope comprises accomplishment, relationships, meaning, health, optimism, positive emotions and engagement. Instead of a study of the problems, positive policing seeks to enhance the good which is already present in the police officers.

Keywords:

Positive policing, well-being, Positive psychology, optimism, police, performance, happiness

Introduction:

The police have functioned in the past as an instrument of the government of the day and was used to control the masses, quell any

* IGP IRB, Haryana Police Complex, Bhondsi Gurgaon 122102, Haryana.

disturbances and strictly implement the will of the government without caring much for citizens' rights. With democracy citizen rights gaining ground, the police must ensure due process and while implementing laws fairly. It needs to reach out to the community at large and be a partner in solving crime and disorder issues.

Serving citizens is not new for police but requires an understanding of citizen expectations and how far the mandate which police has can go towards fulfilling it. Interaction with citizens has unequivocally increased due to the service mandate and this brings in new challenges. The nature of this work provides for the exercise of significant amounts of discretion. In their daily work police officers often deal with unstructured and mostly unsupervised citizen interactions. They could let off an offender, impose a fine or even arrest him. Being street level bureaucrats, they have much discretion and only limited supervision (Lipsky, 1980). Concerns have been raised that discretion leads to its abuse. In his book, *'Policing a Free Society'*, Goldstein (1977) makes a case for structuring discretion as far as possible to reduce the potential for misuse.

Further studies on policing revealed a more complete picture of discretion. This was a picture where discretion is used to achieve better policing through positively engaging with the community. The theory of positive policing studies these proactive behaviours in police which lead to better performance of police officers and police organizations.

Discretion:

In his book *'Professional discretion in welfare services'*, Evans (2010) refers to discretion as the extent of freedom a worker can exercise in a specific context. Thus, workers have a choice to decide between various courses of action which they may take up in a particular situation. This may be because there are no specific rules or norms applicable to that situation or because it is a grey area which necessitates decision making on the part of the worker.

Michael Lipsky (1980) focused specifically on the front-line staff in policy delivery agencies to whom he referred to as street level bureaucrats. These employees typically interact directly with citizens and

have substantial discretion at their command. Some of the examples of street-level bureaucrats could be judges, teachers, and police officers. Police officers typically face so many different types of situations that there are no specific rules for each such situation. Officers frequently work alone, without direct supervision, and must make quick decisions. Further, the nature of criminal law, due to the vagueness of some substantive laws and restrictions on officer behaviour due to the procedural law, makes it impossible to fully enforce all laws equally (Goldstein 1988; Walker and Katz, 2008). There is also a difference in the amount of emphasis put on enforcement of laws in different jurisdictions. For instance, some communities may enforce public intoxication vigorously, while others may not. Police officers being street-level bureaucrats therefore have wide-ranging discretion, most of the time (Maynard-Moody, Musheno and Palumbo, 1990).

At times, discretion is misused by police officers and this may lead to unethical or corrupt practices and may also lead to violation of human rights. Concerns have been raised that the mere existence of discretion leads to its abuse. The American Bar Foundation (ABF) sponsored a series of studies spanning the US criminal justice system in the late 1950's. Many of these studies discovered incompetence and corruption in the criminal justice system (Remington, 1990). One of the alleged causes of this phenomenon was explained as a result of improper exercise of discretion inherent in the enterprise. The study findings hinted that the practices which deviated from the law on the books were many times legitimate and involved a more effective way to deal with situations (Bernard and Engel, 2001). However, such deviations were not systematically studied and were thus poorly understood. Instead, what were more likely to be the subject of research studies were the abuse of discretion and not the positive aspects of discretion. Obviously, uncontrolled police discretion can (and has) become a serious problem in our society (Walker and Katz, 2008).

There is no doubt that the study of the misuse of police discretion is important. These studies have led to important changes in the way police departments function. However, at the same time it must be realized that

only a small percentage of officers indulge in such undesirable behaviour. A perusal of studies across both the US and India indicate that less than 1 % of police officers fall into this category. For instance, only 3,104 out of 600,000 (0.52 %) officers were disciplined for unethical behaviour according to a US study (Trautman, 1997). Similarly, in India, about 9,665 out of 1,223,319 (0.79 %) officers were the subject of complaints lodged against them for improper police behaviour (Crime in India, 2016). Thus, most police officers indulge in voluntary pro-social behaviours and use discretion in ways that help achieve positive outcomes for the police agency (Bernard and Engel, 2001). This is the same idea as Organizational Citizenship Behaviour, which involves the decision by employees to act in ways that benefit the organization and are not formally required or mandated by their job duties.

What is OCB?

There can be no doubt that the officers who use discretion to enhance achievement of organizational objectives, even though these acts may not be role prescribed, are an asset to the organization. Specifically, these voluntary, pro-social behaviours help achieve legitimate work objectives and promote the effective functioning of the organization. For instance, helping a co-worker, helping a citizen in distress even when off duty, learning new knowledge on own initiative, or being creative in improving interactions with citizens would be examples of pro-social and voluntary behaviours. Such behaviours have been studied for a substantial period across several organizations (Barnard, 1938; Katz, 1964). Dennis Organ and his colleagues first used the term „organizational citizenship behaviour“ (OCB) to refer to the behaviours that might improve organizational effectiveness, even though they may not be a part of the job description (Bateman & Organ, 1983; Smith, Organ, & Near, 1983). Since then, studies of OCB have proliferated in various kinds of organizations. However, the concept of OCB has received only limited attention in criminal justice agencies, and even less regarding the police. It is important to study OCB as it enhances organizational effectiveness

and success (Organ, 1988). This could be due to increased productivity of employees, better coordination within and between workgroups, or better adaptability to environmental challenges.

There is considerable debate over what exactly are the specific behaviours which may be referred to as OCB. Two constructs of Altruism and Compliance were identified as OCB by Smith et al. (1983). Podsakoff, Mackenzie, Payne, and Bachrach (2000) identified 30 behaviours in their review of relevant literature and divided them into seven categories. These are (1) Helping Behaviour, (2) Sportsmanship, (3) Organizational Loyalty, (4) Organizational Compliance, (5) Individual Initiative, (6) Civic Virtue, and (7) Self Development.

The positive revolution in psychology:

A parallel can be drawn from the growth of psychology with the study of discretion and OCB in police agencies. During the years following World War II, there was a need for psychologists who could treat mental illnesses. Thus, psychology studied weaknesses and damage, much like the treatment of a disease. This focus yielded rich dividends, such as the treatment or prevention of at least 14 disorders, which were previously thought to be intractable (Seligman, 1994).

However, there was a lack of research on what is good in an individual that drives him or her to be satisfied and living a deeper and fulfilled life. Mihaly Csikszentmihalyi (1988) realized the need for this positive psychology. He noted that even though some people were lost in despair after the destruction in World War II, there were others who nurtured hope and acted as a beacon for others in troubled times. He wondered what inspired them to hold on to their strengths. The emphasis on the individual as an active participant in his or her life continued with the work of Albert Bandura on self-efficacy. Bandura (1996) did not view individuals as passive entities merely responding to stimuli, but as active decision makers who exercise choices. In his social cognitive theory of self-regulation, Bandura also recognized that social factors affect the operation of the self-regulatory system.

There has been a revolution of sorts in psychology starting in the 1990's. Instead of studying what ails people, many psychologists have focused on what makes people happy and fulfilled. In a special issue of the *American Psychologist* in 2000, Seligman and Csikszentmihalyi (2000) promote a science of positive subjective experience, which promises to improve quality of life and prevent the pathologies of a meaningless life. They describe „positive psychology“ as seeking to achieve a scientific understanding and develop effective interventions to build thriving individuals, families, and communities (Seligman, Steen, Park, and Peterson, 2005). Seligman carried forward the work of humanist thinkers like Carl Rogers, Erich Fromm, and Abraham Maslow, who focused on happiness and positive aspects of human nature, instead of the treatment of mental illnesses. Positive psychology thus indicates a shift from treating abnormal behaviour and mental illness to focusing on happiness and positive aspects of human nature. This trend initiated largely by Seligman and Csikszentmihalyi has evolved into a flourishing study of positive psychology.

Police and positive psychology:

The above examples from both psychology and policing indicate that research attention first focused on the disease model. As far as psychology is concerned, efforts were made to determine what is wrong with the psychological condition of a person to set it right. There were notable achievements in the process. For instance, psychologists were able to find prevention and cures for several disease conditions. Similarly, studies conducted on police agencies sought to locate the source of abuse of discretion. Police studies resulted in a more complete understanding of the exercise of discretion and ways to improve the working of police agencies.

Only a handful of studies have examined positive aspects of discretion. For instance, Gottfredson and Gottfredson (1988) have examined discretion in the criminal justice system and how it can be used to improve system decision making. They emphasize that the proper use of discretion is critical to an effective and humane criminal justice

system, which is required for the control and reduction of crime. Nalla and Madan (2012) explored the extent of polite behaviour in a police agency. However, studies of positive behaviour among police officers have been few, and most have not been theoretically grounded.

Positive Policing:

The ideal police will not only be free from corruption, bias, and vice, but also must possess certain positive characteristics. The road to a good police officer passes through the goalpost of a good human being. Answers must be sought as to not only how to prevent abuse and misuse of law and systems, but also to develop and enhance the positive aspects of personality. Most police officers are driven by altruism to do their duty which ultimately helps individuals and communities. What are the personality strengths which are responsible for this behaviour? Are there any interventions which can help to enhance such behaviours? Can effective actions be taken at the individual officer level and at the organizational level to help the police better perform its functions? These are some of the core questions which the theory of positive policing seeks to answer.

The need for Positive Policing:

The concept of positive policing can be helpful in many ways for police departments. Though not limited to the following, some of the potential areas where a positive difference can be made are listed here.

1. *Improved performance:* Police officers often work in the field with little supervision, where the need for individual performance is enhanced. Employees with higher well-being learn more effectively and perform better (Chida and Steptoe, 2008).
2. *Better engagement:* The citizens are the customers of the security services which the police provide. Engagement with the community is of paramount importance for most police functions. Well-being helps employees have overall positive experiences at

work and increases engagement (New Economic Foundation, 2014).

3. *Enhanced productivity*: The duty hours of police are often long and unpredictable. Well-being increases resilience and leads to effectiveness at work for long hours (Medibank Private, 2005)
4. *Lower depression and anxiety*: Working alone and often in high pressure situations, police officers face tough bosses, inquisitive media, close monitoring by courts and dealing with political authorities. This can lead to feelings of depression when adequate outlets of emotions are not available. Positive psychology can help alleviate these symptoms (Sin and Lyubomirsky, 2009).
5. *Positive emotions and creativity*: The need for balanced emotions and creative solutions for unique issues faced by police officers is an everyday affair. People can be more creative with positive psychology tools. Einstein described the time of his creation of the general theory of relativity as the happiest moments of his life. (Kaufman, 2015).
6. *Integrity and Courage*: It takes courage to have high levels of integrity especially when situations are adverse. Cultivating positive emotions such as courage, empathy and honesty were predictive of integrity in a study conducted by Stats (2008).

Character traits of a good police officer:

The number of qualities which a police officer must possess is a highly variable number, depending on who you ask. Considering the variety in a police officer's jobs he or she may be called upon to do counselling, data analysis, investigation, hostage negotiation, managing a terrorist situation, controlling traffic, and so on. We might first consider the qualities which make for a good human being and an effective employee. Police officers need these qualities and skills and then some more.

Peterson & Seligman (2006) have identified certain character strengths and virtues by brainstorming with a group of noted positive psychology scholars. They also examined ancient cultures to know how people in the past construed human virtue. They found six core virtues

that were valued across cultures and time. They found people always respected the individuals who had these timeless virtues. They are courage, justice, humanity, temperance, transcendence and wisdom; these are further divided into 24-character strengths.

Wisdom and knowledge consist of creativity, curiosity, judgment, love of learning, and perspective. Courage comprises bravery, perseverance, honesty, and zest. Humanity has love, kindness, and social intelligence in its ambit. Justice has teamwork, fairness and leadership. Temperance deals with forgiveness, humility, prudence and self-regulation. Finally, transcendence is made up of appreciation of beauty and excellence, gratitude, hope, humour and spirituality.

These strengths help us to navigate the world and do better for us and everyone else. The strengths can be used to improve performance on a given task, relationship, or just improving well-being. Too much use of a strength may have some downsides to it. Let us consider bravery, for instance.

Bravery denotes willingness to face a difficult or dangerous situation. With bravery a person can face a physical threat or confront psychological and moral challenge. Even admitting one's mistake needs bravery. So being brave is good. Now consider this. A brave person likes to face challenges and may therefore struggle in situations where he perceives no freedom to stand up and act in a courageous way. Too much bravery can lead to recklessness. This means taking unnecessary risks in circumstances where a safer option exists. This suggests that the strength of bravery must be used judiciously, considering the situation which is at hand. An individual needs not only to be aware of his or her strengths but also be cognizant of how, when, and where to use them.

A police officer who can successfully face the challenges of a rapidly changing world needs to be equipped with the right kinds of positive psychology tools. She should have enough emotional intelligence to understand her own as well as others emotions and how to make the best use of them. The amount of interaction which police have with people every day is too much to ignore this important aspect. In this wonderful journey of helping self and others, a police officer paves the way for a

safe, happy and thriving society. Positive psychology can help on towards this goal. Martin Seligman (2018), one of the founders of positive psychology, believes that five elements can help people work towards a life of fulfilment, happiness, and meaning. Proposing the „PERMA“ model, he mentioned these elements as Positive emotions, Engagement, Relationships, Meaning, and Accomplishments. These constructs can be modified and used to develop programs and tools for individual officers as well as police departments. Optimism and health are the other elements that can be utilized effectively for building a professional, effective, and humane police.

Accomplishments are the pursuit of success and mastery. Police has become a specialized work and involves expert knowledge of several domains. Accomplishment has twin benefits of achieving professionalism and developing feelings of pride and joy. Accomplishments can be at the individual officer level or at the community level. They could also be personal or work related.

Relationships are vital in living a healthy social life. Humans have an innate desire to connect with others and share experiences and emotions. In the words of Christopher Peterson (1999), “Other people matter. Humans receive, share, and spread positivity to others through relationships”. The concept of community policing requires police departments to have strong ties with the communities they serve. Relationships are strengthened by reacting positively to other people. Having deep and lasting relationships can help police officers personally as well as the department and the society at large.

Meaning, or purpose, seeks to find the reasons for the things we do. Discovering and figuring out a clear "why" puts everything into context from work to home. Finding meaning is learning that there is something greater than one's self. Despite potential challenges, working with meaning drives people to continue striving for a desirable goal. Police work not only provides safety for citizens but is a key driver of economic growth. Establishing the rule of law is a sine qua non for any civilization. Police officers need to realize this.

Health in positive psychology is looked at as an asset. A “health asset” produces better health, over and above risk factors for disease. Positive Health seeks to discover which specific health assets produce longer, healthy life, and which health assets lower disease risk and health care costs. Apart from physical health, psychological health assets (e.g., positive emotions, life satisfaction, optimism, life purpose, social support) are prospectively associated with good health. Research is now showing connections between life satisfaction and heart disease, optimism and DNA sequence length, psychological strengths and immunity, and many others. The increasing variety and complexity of police work requires officers to be in good physical and mental health in order to thrive and not only survive.

Optimism is a state of mind where there is an anticipation of positive results for self or others. Charles R. Snyder (1994) said hope implies a plan to reach a goal. Police investigations often involve seeking answers which lead to solving of crimes. Optimism would not only keep up the drive for consistent police work but also will help to alleviate any symptoms of depression or feeling low. Optimism has also been linked to mental willpower, as well as the need for realistic perception of goals.

Positive Emotions include a wide range of feelings, not just happiness and joy. Though any feeling with no negativity, or discomfort is felt can be a positive emotion, there are some positive emotions which have been identified. The ten most frequent ones are joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe and love (Frederickson, 2000). There are others like excitement and satisfaction amongst others. These emotions are frequently seen as connected to positive outcomes, such as job satisfaction, healthier life and better social relationships.

Engagement refers to involvement in activities that a person enjoys. Mihaly Csikszentmihalyi explains true engagement as flow, a state of deep effortless involvement, feeling of intensity that leads to a sense of ecstasy and clarity. It involves a difficult but possible task which needs skills. Engagement involves passion for and concentration on the task at hand and when an individual is completely absorbed in it, almost

losing self-consciousness. Time seems to stop when a person is truly engaged, and it is almost like a spiritual experience. When employees in a workplace are engaged that leads to higher performance and job satisfaction. Police work is learnt skill, difficult, yet possible and the more engaged the officers are the higher the levels of performance will be achieved.

This ARM of HOPE (Accomplishment, Relationships, Meaning, Health, Optimism, Positive Emotions and Engagement) can be used to develop strategies and interventions for effective police functioning. The good news is that there are proven methodologies to effectively implement and enhance these elements. Several positive psychology interventions have been designed and implemented to test their effectiveness.

Positive Psychology Interventions:

Positive psychology interventions, or PPIs, refer to tools which are used to increase happiness, well-being, and positive cognitions and emotions (Keyes, 2002). PPIs are designed to boost positive feelings, positive thoughts, and positive behaviour. According to Sin and Lyubomirsky (2009), all positive psychology interventions have two essential components. The first is to focus on increasing joy or wellbeing through various methods. The second is to maintain the effects for a long time,

Studies suggest that happiness and well-being can be improved through social communication, gratitude practices, optimism exercise and scores of other ways. PPIs are not an external impetus, but they focus on the strengths and emotions which are already present inside us.

Conclusion:

Science has progressed by cross fertilization of ideas and by the method of experiment. For a long time, the society and the police itself has focussed on the abuse and misuse of discretion. While that was important, it is the right time to consider the ways and means to focus on the benefits of discretion and on the myriad ways in which police makes the world a better place. The rapid strides in positive psychology in the

last few decades show a promising area from which criminal justice agencies can learn. Human resources are the most valuable resource for the police and other criminal justice agencies. Paying adequate attention towards this resource can help make the best use of the technology and tools which the police officers are increasingly being asked to use. There is a human behind every machine and each step we take towards making him an effective person makes the man machine combination closer to the level of synergy that is expected. With this arm of hope we can envision tomorrow's police to be closer to the twin objectives of happy employees and an effective, yet humane police organization.

References:

- Bateman, T. S., & Organ, D. W. (1983). *Job satisfaction and the good soldier: The relationship between affect and employee "citizenship"*. *Academy of Management Journal*, 26(4), 587.
- Bandura, A. (1996). *A socio-cognitive view on shaping the future. In Proceedings of the Korean Psychological Association 50th anniversary conference (p. 106).*
- Barnard, C. I. (1938). *The functions of the executive*. Cambridge, MA: Harvard University Press.
- Bernard, T. J., & Engel, R. S. (2001). *Conceptualizing criminal justice theory. Justice Quarterly*, 18(1), 1-30. doi: 10.1080/07418820100094801
- Chida, Y., & Steptoe, A. (2008). *Positive psychological well-being and mortality: a quantitative review of prospective observational studies. Psychosomatic medicine*, 70(7), 741-756.
- Csikszentmihalyi, M. (1988). *The flow experience and its significance for human psychology*
- Evans, T. (2010). *Professionals, managers and discretion: Critiquing street-level bureaucracy. The British Journal of Social Work*, 41(2), 368-386.

- Frederickson, B. (2000). *Cultivating Positive Emotions to Optimize Happiness and Wellbeing. Prevention and Treatment (Journal of the American Psychological Association) March.*
- Goldstein, H. (1977). *Policing a free society. Cambridge, Mass: Ballinger Pub. Co.*
- Goldstein, J. (1988) "Police Discretion Not to Invoke the Criminal Process: Low Visibility Decisions in the Administration of Justice." In George C. Cole (ed.), *Criminal Justice Law and Politics, 5th Edition, pp. 83-102, (Pacific Grove, CA: Brooks/Cole Publishing Co.)*
- Gottfredson, S. D., & Gottfredson, D. M. (1988). *Violence prediction methods: Statistical and clinical strategies. Violence and victims, 3(4), 303-324.*
- Katz, D. (1964). *The motivational basis of organizational behavior. Behavioral Science, 9(2), 131-146. doi:10.1002/bs.3830090206*
- Kaufman, S. B. (2015). *The emotions that make us more creative. Harvard Business Review.*
- Keyes, C. L. M. (2002). Lopez. (2005). *Toward a science of mental health: Positive directions in diagnosis and interventions. Handbook of positive psychology, 45-62.*
- Lipsky, M. (1980). *Street-level bureaucracy: Dilemmas of the individual in public services. New York: Russell Sage Foundation.*
- Maynard-Moody, S., Musheno, M., & Palumbo, D. (1990). *Street-wise social policy: Resolving the dilemma of street-level influence and successful implementation. The Western Political Quarterly, 43(4), 833-848.*
- Medibank Private (2005). *The health of Australia's workforce, Medibank Private, Australia*
- Nalla, M. K., & Madan, M. (2012). *Determinants of citizens' perceptions of Police-Community cooperation in India: Implications for community policing. Asian Journal of Criminology, 7(4), 277-294.*
- NCRB, N. (2016). *Crime in India: 2015 Statistics.*
- New Economic Forum (2014). *Wellbeing at Work: A review of the literature. New Economics Foundation, UK.*

- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, Mass: Lexington Books.
- Peterson, C. (1999). 15 Personal Controls and Well-being. *Well-being: Foundations of hedonic psychology*, 288.
- Peterson, C., & Seligman, M. E. (2006). *The values in action (VIA) classification of strengths. A life worth living: Contributions to positive psychology*, 29-48.
- Remington, R. D. (1990). From preventive policy to preventive practice. *Preventive Medicine*, 19(1), 105-113. doi:10.1016/0091-7435(90)90013-A
- Seligman, M. (1994). *What you can change & what you can't*. New York: Knopf.
- Seligman, M., & Csikszentmihalyi, M. (2000). An introduction to positive psychology. *University of Pennsylvania, MAPP*, 600, 8-12.
- Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American psychologist*, 60(5), 410.
- Seligman, M. (2018). PERMA and the building blocks of well-being. *The Journal of Positive Psychology*, 13(4), 333-335.
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of clinical psychology*, 65(5), 467-487.
- Sin, N. L., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of clinical psychology*, 65(5), 467-487.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, 68(4), 653-663. doi:10.1037/0021-9010.68.4.653
- Snyder, C. R. (1994). *The psychology of hope: You can get there from here*. Simon and Schuster.

Staats, S., Hupp, J. M., & Hagley, A. M. (2008). Honesty and heroes: A positive psychology view of heroism and academic honesty. The Journal of psychology, 142(4), 357-372.

Trautman, N. (1997). Special report: The national law enforcement officer disciplinary research project. Wilmette: Hendon Publishing Company.

Walker, S., & Katz, C. M. (2008). The police in America: An introduction. Boston, Mass: McGraw Hill.

Author's Profile:

Dr. Hanif Qureshi, IPS

IGP IRB, Haryana Police Complex, Bhondsi

Gurgaon 122102, Haryana

Tele no. +91 7011931313

Email: hanif.qureshi@gov.in



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Inside Corrections: Time to Reinvent Parole in India?

Naazneen Bhasin, IPS*

Abstract:

Parole is an accepted feature of the Indian prison system. Whether it actually functions as a stepping stone to eventual reintegration of the prisoner into normal society or has become a means for prisoners to escape and thus pose a bigger threat at large is the matter for investigation and research. A review of the available research literature indicates that granting of parole is a human rights imperative, and as such, as a tool for prisoner reintegration, it is here to stay. The analysis of the parole absconder datasets in India reveals that in 2020 about 4.2 percent of prisoners who were granted parole jumped it and disappeared; of which about 29 percent were apprehended (this latter rate went as high as 83 percent in 2016). Moreover, the rate of recidivism in India in 2020 (under head Indian Penal Code, IPC) was 4.8 percent, the same as in 2019, marginally down from 5.0 percent in 2018. Notwithstanding, the paper emphasizes the need for reform in the way parole is administered in India and subsequent supervision or surveillance of the prisoner, without exception.

*DIG, Recruit Training Centre with additional charge of DIG, Women's Safety, Haryana.

1. Introduction:

Public safety is of utmost importance for a convict's release on parole. Therefore, a balance between keeping repeat or high-risk offenders in prison and not detaining those who show tendencies to reintegrate into society (lower-risk or lower-level offenders/more-ready for release prisoners) is key to the parole decision-making process. But reform and rehabilitation goals are not the only criteria. Economic motivations to reduce the imprisonment cost, which is higher than supervision or surveillance of the parolees, are just as important (Abadinsky 1978; Serin & Wardrop 2017). Moreover, there is consensus among experts and practitioners that parole has the potential for successful reintegration and rehabilitation of prisoners as well as for ensuring public safety, but a change in current practices is imperative (Solomon 2006).

This paper first gives an overview of the essential provisions of two important international standards that aim to assist countries in preventing crime and implementing criminal justice reforms, thus strengthening the rule of law, as well as ensuring both public safety and the rights of prisoners. It then looks at the legal provisions guiding the parole process in the Indian states; provides official statistics on parole offenders and absconders, as well as habitual offenders and the rate of recidivism in the period 2011-2020, so as to get a (limited) sense of how parole is presently working in the Indian context.

Next, a brief review of research literature (primarily based on the US correctional administration) on connections between imprisonment, parole, and recidivism tries to explore such questions as: Is parole an opportunity for prisoners to be reintegrated into society? Or do they commit new crimes or violate the parole terms and get re-arrested? Can there be some form of (stringent/intermediate) community supervision, keeping into account a persistent lack of police personnel and budget constraints? Does denying parole based on past record ensure future safety? Does imprisonment reduce or strengthen recidivism? Which of the two, stringent punitive action or alternative non-custodial measures are more beneficial? What programs are needed to improve both awareness and caution among the public?

Lastly, based on the above literature review, recent relevant court judgments in India, and Government of India's latest guidelines/advisories on prison reform, the paper lists some recommendations that aim to assist in reinventing the parole system in India.

2. International Minimum Standards for Reformatory Criminal Justice: An Overview:

Rule 3 Imprisonment and other measures that result in cutting off persons from the outside world are afflictive by the very fact of taking from these persons the right of self-determination by depriving them of their liberty. Therefore, the prison system shall not, except as incidental to justifiable separation or the maintenance of discipline, aggravate the suffering inherent in such a situation.

Rule 4.1 The purposes of a sentence of imprisonment or similar measures deprivative of a person's liberty are primarily to protect society against crime and to reduce recidivism. Those purposes can be achieved only if the period of imprisonment is used to ensure, so far as possible, the reintegration of such persons into society upon release so that they can lead a law-abiding and self-supporting life.

*-United Nations Standard Minimum Rules
for the Treatment of Prisoners (the Nelson
Mandela Rules), 2015*

The Nelson Mandela Rules (2015) acknowledge the importance of a rehabilitative approach to prison management. The rules explicitly highlight that the primary purposes of a sentence of imprisonment is the protection of society from crime and reduction of recidivism. The rules are "soft law," that is, they are not legally binding: National law takes precedence (Nelson Mandela Rules 2015). But the international community has adopted them as universally agreed minimum standards. In addition, the United Nations Standard Minimum Rules for Non-custodial Measures (the Tokyo Rules, 1990) provide a set of basic principles to promote the use of non-custodial measures, a wide range of alternatives to imprisonment from pre-trial to post-sentencing

dispositions, which include parole. The Tokyo Rules also encourage efforts to raise awareness and constructive attitudes among the general public about the value of non-custodial measures, as well as of the importance of the social reintegration of offenders, and call for public participation in the implementation of alternatives to imprisonment (Tokyo Rules 1990).

India, like many other UN member states, has incorporated several of the provisions of these rules in spirit, even if they have not been yet written into the domestic laws. Furthermore, the judiciary (both the Supreme Court and several High Courts judgments) and official prison-related guidelines in India have used the rules as “a secondary source when adjudicating the constitutionality of national prison practices” (Nelson Mandela Rules 2015). The rules take into consideration the plight and rights of prisoners as well as the multiple complex accountability responsibilities of the criminal justice authorities (e.g., police officers, prosecutors, judges, and court and prison staff).¹

3. Life on Parole: A Synopsis of India’s Legal Provisions:

On July 27, 2021, the Rajasthan High Court, dealing the writ petition of a convict under life imprisonment who was considered for parole for the first time in 14 years, called such state of affairs “pathetic” and stressed upon the need for a reformatory theory of punishment that ensures convicts’ reintegration into the society. The court highlighted that as per Rule 10 of the Rajasthan Prisoners Release on Parole Rules, 2021, every prisoner, who has served a particular part of his sentence (the maximum being 5 years for life convicts) earns the *right to be considered for release on parole*:

We have come across numerous cases wherein, the convicts languishing in jails for prolonged periods [are] unable to avail the facility

¹*This approach was strengthened with the adoption of the Doha Declaration on Integrating Crime Prevention and Criminal Justice into the Wider United Nations Agenda to Address Social and Economic Challenges and to Promote the Rule of Law at the National and International Levels, and Public Participation (Assembly resolution 70/174) at the end of the Thirteenth United Nations Congress on Crime Prevention and Criminal Justice, held in Doha in April 2015.*

of parole because of poverty/ illiteracy ... frustrating the spirit of the welfare legislation i.e. the Rules of 2021 (*Rakesh v. State* 2021).

Prison is a state subject under the Seventh Schedule of the Constitution of India. The management and administration of prisons is governed by the Prisons Act, 1894, and the prison manuals (rules/acts) of the respective state governments. Recognizing the need for uniformity and a consolidated national law on prisons, the Government of India brought out the *Model Prison Manual* in 2003 following the recommendations of the All India Committee on Jail Reforms (popularly, the Justice Mulla Committee, 1980-83) and the Supreme Court (*Ramamurthy v. State of Karnataka*, 1996). It was revised and updated in 2016. This updated manual not only reflects the essence of the constitutional provisions-importantly, Articles 14, 19, 20, 21, and 22 (Constitution of India 1950)² - and major Supreme Court judgments upholding the rights of prisoners, but also the international rules and treaties such as the Mandela and Tokyo Rules, as well as the International Covenant on Civil and Political Rights (adopted by the UN in 1966 and came into effect in 1966), which India ratified in 1979. At the same time, however, it includes antiquated provisions like denying parole to persons suffering from mental illness. The states are expected to adopt the provisions of the model manual into their own respective prison manuals.

3.1 Exploring Parole and Furlough through Prison Manuals and Court Rulings:

In India, there are no statutory provisions dealing with the question of grant of parole or furlough. The Code of Criminal Procedure (1973) does not contain any such provision: Section 432 covers only suspension or remission of sentences. In addition, as per the Prisons Act, 1984, only states can make rules regarding the release of prisoners on furlough and

²Article 14. Equality before law. 19. Protection of certain rights regarding freedom of speech, to assemble peaceably, to form associations, etc. 20. Protection in respect of conviction for offences. 21. Protection of life and personal liberty (except as per procedure by law).

parole (remission, too, which is not considered in this paper), as part of the correctional prison reforms. Thus, the grant of parole or furlough is “generally speaking an administrative action” (*Sunil Fulchand Shah v. Union of India* 2000). Parole and furlough are discussed at length in Chapter 19 of the *Prison Manual* 2016, as well as in all state prison manuals. Several Supreme Court and High Court judgments have from time to time looked into the ambiguities and made particular observations defining the terms or distinguishing them; at times, even castigating the authorities for not following the letter and spirit of the law. The Government of India, too, regularly issues guidelines and advisories updating or reviewing the temporary release process; it can also put out non-binding guidelines.

In general, parole and furlough are both defined as “progressive measures of correctional services” and are recognized as privileges, which are allowed to prisoners subject to “well-defined norms of eligibility and propriety” (*Prison Manual* 2016).

3.1.1 Defining Parole:

Parole is a conditional temporary release for a short period aimed at reform and rehabilitation, but is not an absolute right: According to the Ministry of Home Affairs, Government of India, advisory on parole and furlough circulated in September 2020, release on parole is not an absolute right (the sentiment is echoed in several court judgments), but a concession (MHA Advisory 2020). The concerned (competent) authority reserves the right to cancel this privilege. It is, however, a “legal right of every eligible prisoner as per the conditions laid out” (*Prison Manual* 2016, sec. 19.06.4). Moreover, the period spent outside the jail on parole is not considered part of the sentence; thus, the prisoner needs to spend extra hours in prison to make up for the time spent outside. However, the Maharashtra Prisons (Bombay Furlough and Parole) (Amendment) Rules (2015) state that the “period spent on sanctioned parole shall be counted as remission of sentence.” Further, a Supreme Court ruling held that the grant of parole does not suspend the sentence or the period of detention, but since “parole does not interrupt the period

of detention and, thus, that period needs to be counted towards the total period of detention unless the terms for grant of parole, rules or instructions, prescribe otherwise” (*Sunil Fulchand Shah v. Union of India* 2000).

There are two types of parole:

1. **Emergency parole:** It is granted under police protection so that the prisoner can attend to familial and social emergencies (death, serious illness, or marriage). It may be granted for a period extending up to 48 hours.
2. **Regular parole:** It is granted so that the prisoner can fulfil familial and social obligations or duties under normal circumstances, or cater to their own psychological, physiological, or other needs (e.g., being in touch with the outside world, admission of children, sowing of crops). Duration of regular parole extends to one month maximum and not more than two times in a calendar year, barring exceptional circumstances where a convict can avail up to 45 days release, but only once in three years (see Table 1).

Table 1. Guidelines for Regulation and Duration of Regular Parole

Sentence	Due for			Duration of leave per calendar year
	First release	Second release	Subsequent releases	
Not exceeding 5 years	On completing 1 year of imprisonment after entry to prison as convict	On completing 6 months of imprisonment after return from first release	On completing 6 months of imprisonment after return from second release	21 days
5-14 years	On completing 2 years of imprisonment after entry	On completing 1 year of imprisonment after return from first release	On completing 6 months of imprisonment after return	<ul style="list-style-type: none"> • 21 days (first 5 years) • 28 days

	to prison as convict		from second release	(remaining term)
Exceeding 14 years or life sentence	On completing 3 years of imprisonment after entry to prison as convict	On completing 1 year of imprisonment after return from first release	On completing 6 months of imprisonment after return from second release	<ul style="list-style-type: none"> • 21 days (first 5 years) • 28 days (remaining term)

Source: *Model Prison Manual*, 2016

3.1.2 Furlough:

Furlough is release of prisoner for a short period of time after a certain number of years of incarceration. It is an incentive for maintaining good conduct and discipline in prison. Therefore, the period of release is counted toward the prisoner's sentence. Under the Bombay Furlough and Parole Rules (1959) release on furlough is not an absolute right or a legal right, and a prisoner is entitled for furlough leave "every year" (namely calendar year) after completing seven years of imprisonment.³ Thus, the grant of release on furlough is a "discretionary remedy" once the prisoner has served the minimum years of sentence as stipulated in state rules (*State of Gujarat v. Narayan* 2021). The duration for furlough is as follows:

- In the first year (on completing 3 years of imprisonment): A maximum of 21 days
- Subsequent years in prison: A maximum of 14 days each calendar year

³According to a Supreme Court ruling (*State of Gujarat v. Narayan* 2021), "The Bombay Furlough and Parole Rules do not confer a legal right on a prisoner to be released on furlough ... the grant of release on furlough is a discretionary remedy." Bombay Furlough and Parole Rules (2015) state, "Nothing in these rules shall be construed as conferring a legal right on a prisoner to claim release on furlough."

3.1.3 Distinguishing Parole and Furlough:

Table 2 lists the distinguishing features of parole and furlough based on relevant court rulings and the *Model Prison Manual* (2016).

Table 2. Comparing Parole and Furlough

Parole	Furlough
Conditional release granted for situational relief on good behavior and regular reporting to the authorities for a set period of time.	Brief conditional release from prison after the prisoner has undergone a specified period of sentence; granted as a good conduct remission.
Primarily, to be treated as mere suspension of the sentence, keeping the quantum of sentence intact.	The period of sentence spent on furlough is counted toward the total sentence.
Reasons must be indicated if parole is revoked/refused.	It is not necessary to state the reasons.
Parole is to be granted only on sufficient cause being shown i.e. specific reason is required.	Since furlough is granted for no particular reason, i.e., meant for breaking the monotony of imprisonment, it can be denied in the interest of society
Duration extends to one month.	Duration extends to 14 days maximum.
Generally, granted by Divisional Commissioner.	Granted by the Deputy Inspector General of Prisons.
Release for short-term imprisonment.	For long-term imprisonment.
Can be granted a number of times.	Can be granted only a limited no. of times.

Sources: *Model Prison Manual* (2016); *Asfaq v. State of Rajasthan* (2017); *Haryana v. Mohinder Singh* (2000); Haryana Good Conduct Prisoners Act (1988); *Maharashtra v. Suresh Darvakar* (2006)

3.1.4 Which prisoners are not eligible for parole or furlough?

The following categories of prisoners are not eligible for release on parole or furlough (*Model Prison Manual* 2016):

- i) High-risk prisoners⁴
- ii) Prisoners convicted for heinous offences, such as terrorist crimes⁵
- iii) Under-trial prisoners, who are eligible for only emergency parole by order of the trial court
- iv) Convicted foreigners
- v) Prisoners suffering from mental illness

3.1.5 Measures to avoid misuse or abuse of the concessions granted by parole or furlough:

While granting parole or furlough, a balance needs to be maintained between the public purpose, “ingrained in the reformation theory of sentencing,” and the interests of society or “public interest” (*Asfaq v. State of Rajasthan* 2017; MHA Guidelines 2020, 2021). This aspect is important to fulfil one of the major “objectives of sentencing, namely deterrence and prevention ... Not all people in prison are appropriate for grant of furlough or parole ... a great number of crimes are committed by the offenders who have been put back in the street after conviction” (*Asfaq v. State of Rajasthan* 2017). Thus, the need to isolate repeat offenders, “who show patterns of preying upon victims. Yet administrators ought to encourage those offenders who demonstrate a commitment to reconcile with society ... Thus, the parole program could

⁴The opinion of the District Magistrate and Superintendent of Police is taken into consideration; and it includes those “whose immediate presence in the society may be considered dangerous or otherwise prejudicial to public peace and order,” or who have been involved in prison escape, or who have instigated serious violation of prison discipline. For definition of high-risk prisoners, see also, *Handbook on the Management of High-Risk Prisoners* (2016).

⁵The opinion of the District Magistrate and Superintendent of Police is taken into consideration.

be used as a tool to shape such adjustments” (*Asfaq v. State of Rajasthan* 2017).⁶

Some measures provided by the union government and courts to prevent the misuse of temporary release concessions to prisoners are as follows:

- (i) Systems must be put in place for monitoring and follow-up of each such case (e.g., updating photos of absconders or escapees in real time on e-prisons).
- (ii) Any person who either attempts to escape from prison or absconds from custody should not be considered for grant of bail, parole, or furlough.
- (iii) Grant of parole and furlough to offenders whose release may have an adverse impact on the security of the state or public safety, should be strictly restricted.
- (iv) Parole and furlough should not be granted as a matter of routine, especially to habitual offenders or inmates sentenced for serious crimes such as sexual offences, murder, and child abduction.

3.1.6 Competent Authority to sanction parole or furlough:

The *Model Prison Manual* (2016) provides the following guidelines; each state defines its own sanctioning authority:

1. Regular parole/furlough: Head of Prisons Department
2. Emergency parole:
 - Superintendent of Prisons for convicted prisoners
 - Respective trial courts for under-trial prisoners

Sanctioning authority in some states is listed as follows:

1. Maharashtra and Gujarat⁷
 - a. State government for specific cases
 - b. Divisional commissioner (if unavailable, Additional Divisional Commissioner) for all other cases

⁶ Also quoted in *State of Gujarat v. Narayan* (2021).

⁷ The *Prisons (Bombay Furlough and Parole) Rules, 1959*, are applicable in both Maharashtra and Gujarat. However, due to the amended rules in 2015, for Maharashtra, there a change in sanctioning authority details for furlough (*Maharashtra Prisons Rules* 2015).

2. Haryana⁸

- a. Divisional Commissioner for offences of murder, dacoity, rape with murder, dowry death, and Narcotic Drugs and Psychotropic Substances Act, 1985.
- b. District magistrate, except where Divisional Commissioner or Superintendent of Jails is authorized.

3. Kerala

- a. Ordinary leave: On the recommendation of the Superintendent of Police and Probation Officer. The first ordinary leave by Director General and subsequent leave by the Superintendent.
- b. Emergency leave: Superintendent of Jail up to a period of 10 days; Director General/Home Department up to 15 days. Any Extension of Emergency Leave subject to a maximum of 45 days only by the Government.

3.2 Parole Procedure:

The parole process is outlined as follows (also see Figure 1):

1. **Step 1:** The prisoner seeking parole submits application to the Superintendent of Prison, who after incorporating remarks/recommendations forwards it to the Competent (Sanctioning) Authority within a certain number of days (e.g., 3 days as per the 2016 Model Manual).
2. **Step 2:** The application with remarks is then forwarded via the District Magistrate to the District Superintendent of Police within a stipulated time period (again about 3 days).
3. **Step 3:** The report of the Superintendent of Police is then sent back to the Competent Authority within about 14 days via the District magistrate (who is also allowed about 3 days). The police must provide reasons if they disagree with the proposed release.
4. **Step 4:** The Competent Authority is expected to reach a decision on the application within about 7 days after receiving the police

⁸ The same for furlough (Haryana Good Conduct Prisoners Act 2015).

report/recommendations. The prisoner must be informed of the decision on the application and the grounds for rejection, if so.

5. **Step 5:** The parole is granted on certain conditions such as executing the necessary bond or surety (decided by the Competent Authority); informing Probation Officer of the place of stay; exhibiting good behavior throughout the release; and surrendering to the Prison Superintendent on expiry of release period or if recalled for violation of parole terms.
6. **Step 6:** The prisoner is released on parole after signing the conditions of release and furnishing a personal bond/surety. This information about the prisoner's release on parole is then circulated to concerned District Magistrates and Superintendents of Police (both home and place of stay districts), as well as Probation Officer (place of stay). The Probation Officer and concerned prison authorities keep a record of the prisoner's behavior while on parole.⁹

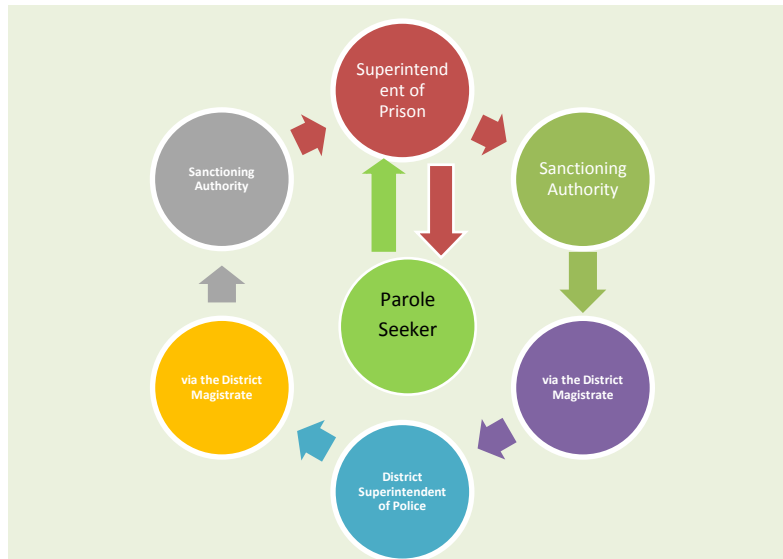


Figure 1. Parole application in motion

⁹ All expenses on parole are borne by the prisoners themselves.

4. Recidivism and Parole: A Look at the Prison Statistics in India

The number of prisoners varies significantly from country to country. The United States has the highest imprisonment rate in the world: more than 2 million prisoners (about 25 percent of the world's total prison population) with an incarceration rate of 629 people per 100,000 (World Prison Brief 2021). In comparison, at the end of 2020, the number of people incarcerated in India was 478,600 with an incarceration rate of 35 people per 100,000 (World Population Review 2022; *Prison Statistics of India* 2020). However, despite this low rate, overcrowding and overuse of prisons, as well as harsh, life-threatening prison conditions are a grim reality (US Department of State 2021; Jacobson et al. 2017; *India Justice Report* 2020). The levels of imprisonment in India have always been relatively low: a shortage of trained police officers and an overburdened and under-resourced court system contribute to low conviction rates (*India Justice Report* 2020).¹⁰

Similarly, recidivism rates between countries are not comparable. Moreover, it would be not be prudent to derive inferences based only on these statistics because of “inconsistencies in policing, charging, and supervision,” as well as differing methodologies (Prison Policy Initiative 2022). Therefore, although no meaningful conclusions can be drawn about the relation between criminal justice practices and recidivism (Yukhnenko et al. 2020), yet it is important to note such differences, as well as the prison reform processes in motion across the world, including the challenges therein, in order to effect a consolidated change.

With this caveat in mind, let us look at certain relevant parole and recidivism statistics in India for the period 2011-2020 (and in one case 2017-2020).¹¹

¹⁰The *India Justice Report* (2020) revealed that there are “more than 40 million cases pending in courts across the country ... the national average stands at one probation/welfare officer per 1,617 prisoners and one psychologist/psychiatrist for every 16,503 prisoners. At the state/UT-level, this goes up to 50,649.”

¹¹All data provided are from official government sources; the tables and figures presented here were prepared by the author.

4.1 Highlights:

- About 49 percent of parole absconders across India were arrested in 2011, as opposed to 29 percent in 2020.
- About 2.4 percent parolees across India absconded in 2011, as opposed to 4.2 percent in 2020. The average rate during 2011-2020 was about 1.7 percent.
- The rate of high-risk (“most-wanted” in official records) parole absconders for five states from 2014 to 2020 is in the range 0.4 percent-4.8 percent (only in 2018, leaping to 27.4 percent)
- The national rate of recidivism in 2020 (under Indian Penal Code, IPC) was 4.8 percent, the same as in 2019, marginally down from 5.0 percent in 2018.
- Share of habitual offenders to convicts admitted across India is in the range 2.8 percent-5.5 percent in the period 2011-2020.

4.2 Tables and Figures:

Figures 2-7 and Tables 3-6 provide a detailed view as follows.

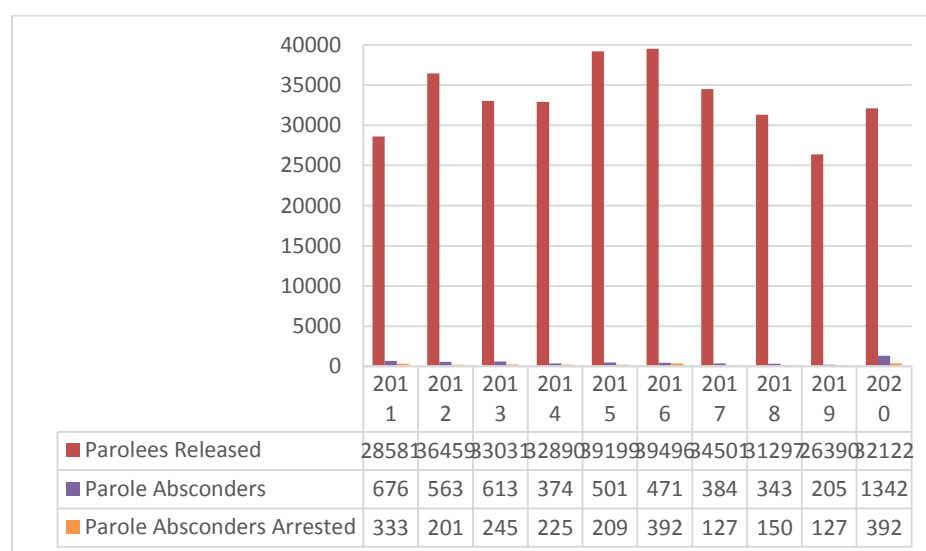


Figure 2. No. of Parolees Released, Absconded, and Arrested

Source: Prison Statistics India, National Crime Records Bureau (NCRB)

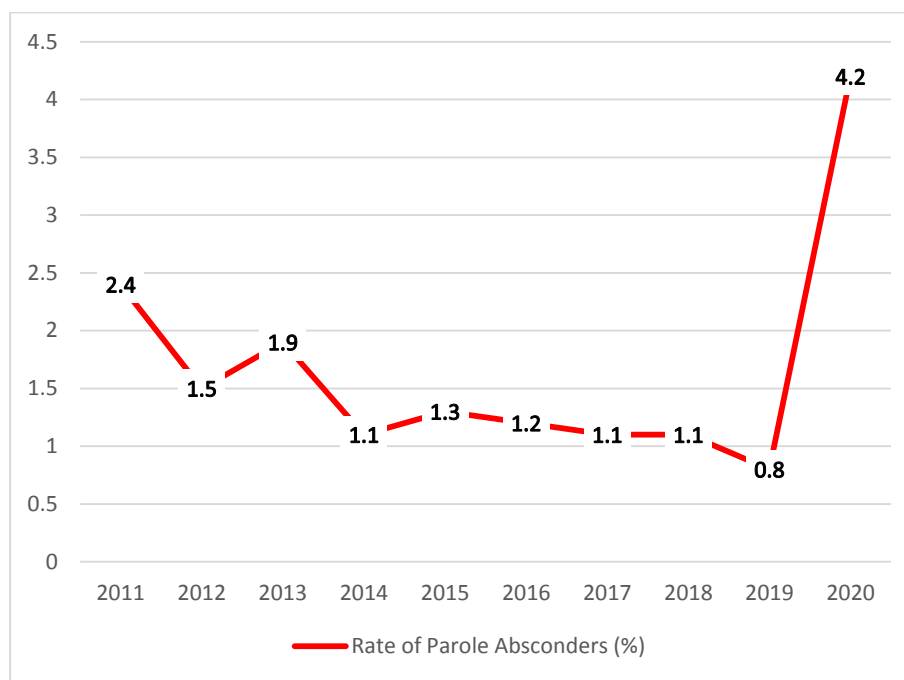


Figure 3. Percentage of Parole Absconders (2011-2020)

Source: *Prison Statistics India*, NCRB

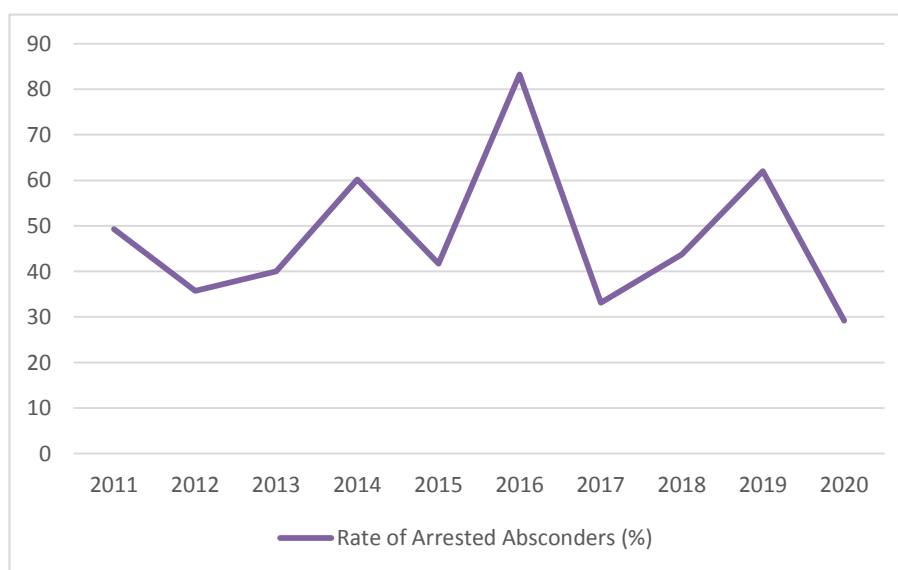


Figure 4. Percentage of Arrested Parole Absconders

Source: *Prison Statistics India*, NCRB

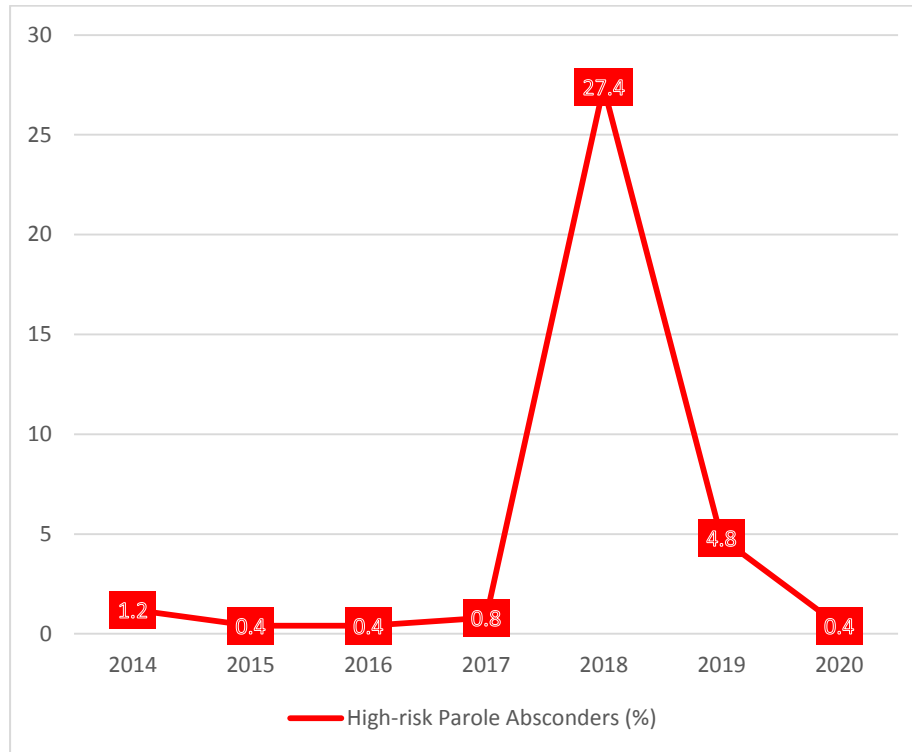


Figure 5. Rate of High-risk Parole Absconders in Five States

Note: Data for high-risk absconders from only five states (Gujarat, Karnataka, Telangana, Madhya Pradesh, and Maharashtra). Telangana became a state in 2014; hence 2011-2013 not considered.

Sources: Interoperable Criminal Justice System (ICJS); *Prison Statistics India*, NCRB

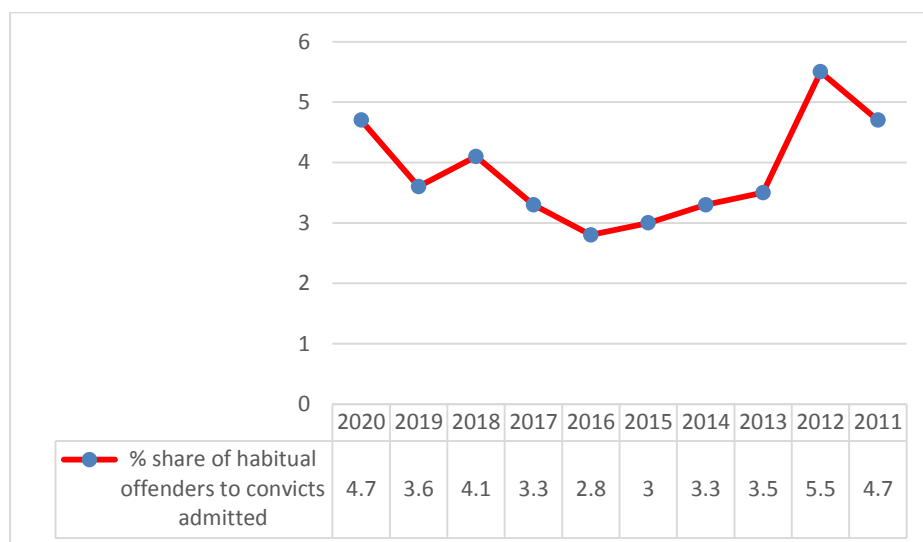


Figure 6. Recidivism Rate (Habitual Offenders to Convicts Admitted), 2011-2020

Source: *Prison Statistics of India*, NCRB

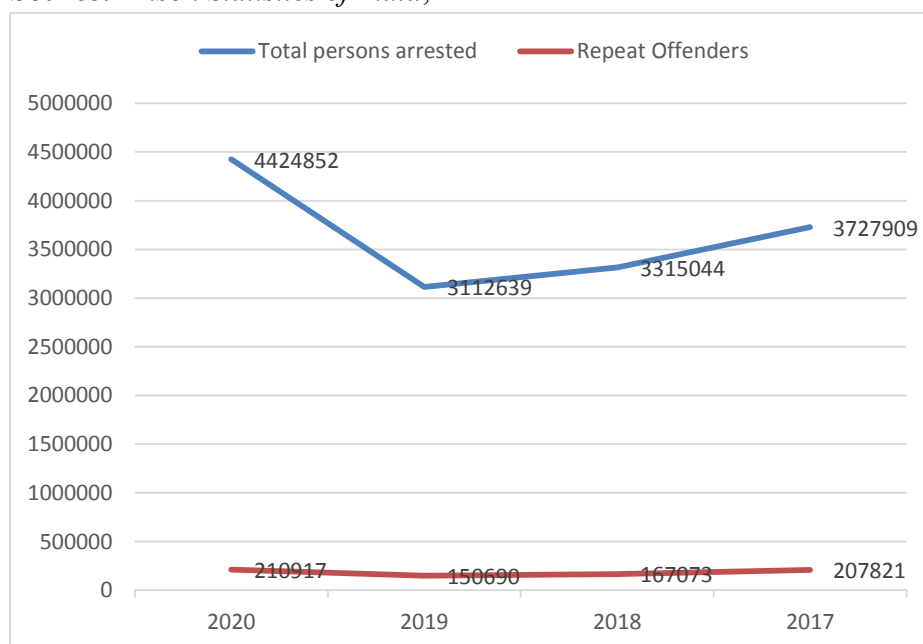


Figure 7. Recidivism among Persons Arrested across India under IPC (2017-2020)

Source: *Crime in India*, NCRB

Table 3. Parole Absconders (2011-2020)

Year	Total parole absconders	Parole absconders arrested	Arrested parole absconders (%)	Total parolees released	Rate of parole absconders (%)
2011	676	333	49.3	28581	2.4
2012	563	201	35.7	36459	1.5
2013	613	245	40.0	33031	1.9
2014	374	225	60.2	32890	1.1
2015	501	209	41.7	39199	1.3
2016	471	392	83.2	39496	1.2
2017	384	127	33.1	34501	1.1
2018	343	150	43.7	31297	1.1
2019	205	127	62.0	26390	0.8
2020	1342	392	29.2	32122	4.2

Source: *Prison Statistics India* (NCRB2011-2020)

Table 4. High-risk Absconders in Five States (2014-2020)

Year	Total parole absconders in five states	High-risk parole absconders	High-risk absconders (%)
2014	161	2	1.2
2015	246	1	0.4
2016	253	1	0.4
2017	248	2	0.8
2018	84	23	27.4
2019	62	3	4.8
2020	253	1	0.4

Note: Data for high-risk absconders available for only five states, namely Gujarat, Karnataka, Telangana, Madhya Pradesh, and Maharashtra. Telangana became a state in 2014; hence 2011-2013 not considered.

Sources: ICJS; *Prison Statistics India*, NCRB

Table 5. Incidence of Recidivism among Convicted Reoffenders

Year	Convicts admitted	Habitual offenders	% share
2020	83353	3908	4.7
2019	188765	6756	3.6
2018	192452	7865	4.1
2017	197952	6582	3.3
2016	200102	5589	2.8
2015	186566	5576	3.0
2014	187418	6274	3.3
2013	191144	6636	3.5
2012	219329	12135	5.5
2011	222391	10542	4.7

Note: For 2016-2020, the above calculation (habitual offenders) is based on convictions only. Repeat offenders among under-trials have not been taken into account.

Source: NCRB

Table 6. Recidivism among Persons Arrested across India (IPC, 2017-2020)

Year	Total persons arrested (including new offenders)	Persons arrested (convicted in past + not convicted in past)	Rate of recidivism (%)
2020	4424852	210917	4.8
2019	3112639	150690	4.8
2018	3315044	167073	5.0
2017	3727909	207821	5.6

Note: Persons include both adults and juveniles. Recidivism data for years 2011-2016 varied slightly, namely only included persons convicted in the past; hence not considered here.

Source: *Crime in India*, NCRB

5. Imprisonment, Parole, and Recidivism: Exploring the US Corrections System

Research suggests that punishment is only effective if it is swift and immediate and shows clear consequences for violations; imprisonment per se has negligible impact on reoffending, and may induce not just psychological distress on prisoners but also have criminogenic effects (Rhodes et al. 2017). A special report by the US Bureau of Justice Statistics way back in 1987, too, attested that time served in prison had no consistent impact on recidivism rates (Beck & Shipley 1987).

At the same time, studies also highlight that the effects of non-custodial measures such as parole are marginally better (Petricich et al. 2021). Serin & Wardrop (2017) cite national studies in the United States indicating that rehabilitation and community supervision reduce rates of reoffending. Even as the “issue of the effectiveness of parole remains relatively untested,” adequately supervised parole seems to have a small but significant impact in terms of recidivism outcomes (Serin & Wardrop 2017). However, the question of whether parole supervision increases public safety needs to be more widely examined (Solomon 2006).

In the United States, research also highlights lower rates of recidivism among parolees than offenders not released on parole (Pew 2013). In 2021, a special report by the US Department of Justice stated that the “percentage of state prisoners released in 2008 who were arrested at least once within 10 years would be 80.5 percent if arrests for probation and parole violations were excluded and 81.9 percent if they were included”—a small but statistically significant difference (Antenangeli & Durose 2021).

Research findings also show that calling back parolees (revoking their parole) for technical violations that are unrelated to new crimes decreases the cost effectiveness of parole (Pew 2013; Grattet 2009). Besides the financial aspect, there is the cost of giving prison space to parole violators who do not pose as much risk to public safety as high-risk (re)offenders. Doleac (2018) emphasized that “reducing the intensity of community supervision for those on probation or parole is a highly cost-effective strategy.” A Human Rights Watch Report (2020) asserted

that parole (and probation) supervision violations are funneling mass imprisonment in the United States, leading many jurisdictions in recent years to limit prison term for these violations.

A consensus study report by the National Research Council (2008) found that there exists no “average parolee”—the tendency to reoffend varies widely (rate of recidivism among parolees depends upon a number of factors)—and that rates of committing a new crime or violating parole terms peak soon after release. It also highlighted that not all approaches work for all offenders; however, cognitive-behavioral treatment¹² programs “significantly reduce recidivism” (Feucht & Holt 2016; NRC 2008).

Other studies have suggested that incentives and rewards for good/accepted/desired behavior (i.e., following prison norms) seem to work better, motivating parolees to stay out of trouble (Pew 2020). It is important to emphasize that no single provision or measure will alone achieve the goals of rehabilitation and reintegration.

Thus, as renowned criminologist and correctional expert Joan Petersilia (2009) suggests, the reinvented model for parole should include community-centered supervision, create a risk-based classification system with a focus on high-risk offenders, utilize technology to monitor high-risk offenders, and have intermediate, not stringent sanctions (e.g., revocation) for technical violations.

6. Conclusion and Recommendations:

Imprisonment is a tool of the penal policy with public safety as its ultimate motive, but its overuse causes immense harm: It disproportionately targets poor and marginalized groups; limits the capacity of prison systems to deal effectively with high-risk prisoners; and is a drain on the public purse (Jacobson et al. 2017). A stricter

¹²*Cognitive-behavioral treatment is a widely recognized “class of therapeutic interventions based on a common theory about the connection between our thoughts, attitudes and beliefs—cognitions—and our behavior” (Feucht & Holt 2016). It helps offenders identify their maladaptive patterns of behavior and provides them with the techniques to change them.*

punitive policy is not necessarily an effective one (e.g., harsh parole recalls/revocations increase the number of offenders returning to prison). In contrast, non-custodial alternatives, used in a balanced manner, are more effective, particularly for rehabilitation or reform.

Against this backdrop, it is imperative that the correctional framework in India must be reinvented¹³, keeping into consideration that the deep divide between intent and on-ground realities is a formidable challenge. Some recommendations are as follows:

First, the use of non-custodial alternatives (including temporary release options) must be codified at the central government (national) level and enforced in states.

Second, the prison manual provision denying parole to convicts suffering from mental illness is discriminatory, contravening both Article 14 (Equality before Law) of the Indian Constitution and Principle 1 of the Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care: “There shall be no discrimination on the grounds of mental illness” (UNODC 2009). Therefore, it needs to be examined and revised at the earliest.

Third, denying prisoners parole based on the nature of past crimes, which is often confused as being equivalent to the likelihood of committing a new crime, is widely prevalent among the authorities. Whereas studies suggest that violent offenders are statistically less likely to reoffend than, say, white-collar criminals (Fredericks et al. 2016). It is therefore important to examine the distinction between past crimes and future harm while making decisions on parole release.

Fourth, keeping in mind the derelict prison conditions and overcrowding, prisoner numbers need to be lowered further by encouraging authorities to push for pragmatic measures such as home

¹³The discussion on correctional reforms has been ongoing since the first decade of India's independence; and the first notable contribution was from a United Nations expert, Dr. W. C. Reckless, in 1951-52 (invited by India). The latest was the 2007 Committee under the Bureau of Police Research and Development (BPR&D), which drafted a policy paper, and in 2008 the Government of India released “a 40-billion package” toward reforms (Mehra 2017). Not much change has though happened at the national policy level.

leave, pardons, parole, remissions, and open prisons instead of stringent action.

Fifth, the guidelines by Government of India have advised states to review their temporary release rules from time to time, including the criteria, duration, and frequency of release basing their assessment on experience about the benefits and detriments of such parole. They have also directed them to include in the decision-making process a committee of officers and behavioral experts (psychologist/ criminologist/ correctional administration expert) as members of the Sentence Review Board, who may meet as per requirement, in order to decide the grant of parole and furlough to inmates and obtain their opinion before such temporary release. But in most states there is an absence of this type of board and the responsibility is upon the Superintendent of Police or the District Commissioner. The present system needs an overhaul; the Government of India guidelines in this case need to be made mandatory.

Sixth, the state and central governments need to establish community awareness programs that educate the public about rights of prisoners without lowering their cautious gaze. The communities could be involved in parole supervision for low-risk offenders, for instance. The successful models from across the world should be studied proactively and adapted to suit the Indian system.

References:

- Antenangeli, Leonardo, & Durose, Matthew R. (2021). Recidivism of prisoners released in 24 states in 2008: A 10-year follow-up period (2008–2018). Special report, US Department of Justice. https://bjs.ojp.gov/BJS_PUB/rpr24s0810yfup0818/Web%20content/508%20compliant%20PDFs*
- Asfaq v. State of Rajasthan, (2017) 15 SCC 55*
- Beck, Allen J., & Shipley, Bernard E. (1987). Recidivism of Young Parolees. US department of Justice, Bureau of Justice Statistics, <https://www.ojp.gov/pdffiles1/Digitization/104916NCJRS.pdf>*
- Bombay Furlough and Parole Rules, 1959.*

- Bureau of Police Research & Development (BPR&D). (2016). Model Prison Manual*
- BPR&D. (2017). Training manual of basic course for prison officers. Ministry of Home Affairs. Government of India.*
<https://bprd.nic.in/WriteReadData/CMS/Training%20Manual%20Prison%20Officers.pdf>
- BPR&D. (2007). National policy on prison reforms and correctional administration. Government of India. Ministry of Home Affairs.*
<https://bprd.nic.in/WriteReadData/userfiles/file/5261991522-Part%20I.pdf>
- Citizens Alliance on Prisons & Public Funding. (2009). Denying parole at first eligibility: How much public safety does it actually buy?*
https://www.prisonpolicy.org/scans/cappsmi/denying_parole_at_first_eligibility_2009.pdf
- Doleac, Jennifer L. (2018, July 2). Study after study shows ex-prisoners would be better off without intense supervision. Brookings.*
<https://www.brookings.edu/blog/up-front/2018/07/02/study-after-study-shows-ex-prisoners-would-be-better-off-without-intense-supervision/>
- Fair, Helen, & Walmsley, Roy. (2021, October). World prison population list. 13th Edition. World Prison Brief.*
- Feucht, Thomas, & Holt, Tammy. (2016, May 25). Does cognitive behavioral therapy work in criminal justice? Crime Solutions.*
<https://nij.ojp.gov/topics/articles/does-cognitive-behavioral-therapy-work-criminal-justice-new-analysis-crimesolutions;>
- Fredericks, K. A, McComas, R. E, & Weather by, G.A. (2016). White collar crime: recidivism, deterrence, and social impact. Forensic Research Criminology International Journal. 2(1), 5-14.*
<https://doi.org/10.15406/frcij.2016.02.00039>
- Grattet, Ryken, Petersilia, Joan, Lin, Jeffery, & Beckman, Marlene. (2009). Parole violations and revocations in California: Analysis and suggestions for action. Federal Probation. 73. 2-11.*
- Haryana Good Conduct Prisoners (Temporary Release) Act. (1988)*
- Haryana Good Conduct Prisoners (Temporary Release) Amendment Act, 2015,*

- <https://bprd.nic.in/WriteReadData/userfiles/file/201708091212424857398Haryana30.05.2017.pdf>
- Howard Abadinsky. (1978). *Parole history. Offender Rehabilitation*. 2(3), 275-278. https://doi.org/10.1300/J418v02n03_10
- Human Rights Watch & American Civil Liberties Union. (2020, July 21). *Revoked: How probation and parole feed mass incarceration in the United States*. <https://www.hrw.org/report/2020/07/31/revoked/how-probation-and-parole-feed-mass-incarceration-united-states>
- Interoperable Criminal Justice System (ICJS). (1998-2020). *Data of most wanted criminals who are parole jumpers*. ICJS report.
- J. Petersilia. (2009). *When prisoners come home: Parole and prisoner reentry*. Oxford University Press.
- Jacobson, Jessica, Heard, Catherine, & Fair, Helen. (2017). *Prison: Evidence of its use and over-use from around the world*. Institute for Criminal Policy Research. [global_imprisonment_web2c.pdf](https://www.prisonstudies.org/global_imprisonment_web2c.pdf) (prisonstudies.org)
- Kerala Prisons and Correctional Services. <https://keralaprisonsgov.in/index.html>
- Kohli, Tushar. (2021, August 4). *Parole, furlough, remission: All give relief to convicts, but this is how they're different*. The Print. <https://theprint.in/judiciary/parole-furlough-remission-all-give-relief-to-convicts-but-this-is-how-theyre-different/708417/>
- Maharashtra Prisons (Bombay Furlough and Parole) (Amendment) Rules, 2015. <https://bprd.nic.in/WriteReadData/userfiles/file/201708091236539857484Maharashtraason21.05.2017.pdf>
- Mehra, A. K. (2017, October 31). *Aarushi Talwar-Hemraj case is a perfect example of why india's criminal justice system needs reform*. The Wire. <https://thewire.in/government/aarushi-talwar-criminal-justice-system-reform>
- MHA. (2020, September 3). *Grant of parole/furlough to inmates and their premature release from prison - review of guidelines*, Advisory No. 17013/23/2020-PR. Government of India. https://www.mha.gov.in/sites/default/files/ParoleFurloughadvisory04092020_0.pdf

- MHA. (2021, October). *Guidelines. V-17013/23/2021-PR. Government of India.* <https://www.mha.gov.in/sites/default/files/AdvisoryEprisonslev eragetechnology06102021.pdf>
- National Crime Records Bureau (NCRB). (2011-2020). *Crime in India. Reports. Government of India. Ministry of Home Affairs.* <https://ncrb.gov.in/en/crime-in-india>
- National Research Council. (2008). *Parole, desistance from crime, and community integration. Division of Behavioral and Social Sciences and Education, Committee on Law and Justice, and Committee on Community Supervision and Desistance from Crime. The National Academies Press.*
- NCRB. (2011-2020). *Prison Statistics India.* <https://ncrb.gov.in/en/prison-report>
- Petrich, D. M., Pratt, T. C., Cheryl, L. J., & Cullen, F. T. (2021). *Custodial sanctions and reoffending: A meta-analytic review.* <https://www.journals.uchicago.edu/doi/full/10.1086/715100>
- Pew, (2020, April 23). *Comprehensive policies can improve probation and parole. Factsheet,* <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2020/04/comprehensive-policies-can-improve-probation-and-parole>.
- Pew. (2013). *The impact of parole in New Jersey.* <http://www.pewtrusts.org/en/research-andanalysis/issue-briefs/2013/12/02/the-impact-of-parole-in-new-jersey>
- Prison Policy Initiative. (2022, March 4; last updated). *Recidivism and Reentry: What makes people more or less likely to succeed upon release?* https://www.prisonpolicy.org/research/recidivism_and_reentry/
- Rakesh v. State. (2021). *CRLW-295/2021.* <https://cjp.org.in/wp-content/uploads/2021/08/jodhpur-hc-order-july-28-parole.pdf>
- Rhodes, William, Gaes, Gerald, Kling, Ryan, & Cutler, Christopher. (2017). *The relationship between prison length of stay and recidivism: A study using regression discontinuity with multiple break points. Report 251410. Bureau of Justice Statistics.* <https://www.ojp.gov/pdffiles1/bjs/grants/251410.pdf>
- Serin, R. C., & Wardrop, K. (2017). *Myths & facts: parole in the criminal justice system. National Institute of Corrections.*

<https://carleton.ca/cjdml/wp-content/uploads/Myths-Facts-parole-Final.pdf>

Sharma, Vivek Narayan, *Prisoners' rights in India*. (2018, October 20). *The Times of India*.

<https://timesofindia.indiatimes.com/blogs/lawtics/prisoners-rights-in-india/>

Solomon, A. L., (2006). *Does parole supervision work? Research findings and policy opportunities*. March 15, 2006,

https://www.urban.org/research/publication/does-parole-supervision-work/view/full_report

State of Gujarat v. Narayan, 2021 SCC On Line SC 949

State of Haryana v. Mohinder Singh, (2000) 3 SCC 394

State of Maharashtra v. Suresh Pandurang Darvakar, (2006) 4 SCC 776

Sunil Fulchand Shah v. Union of India & Ors. (2000). (3) SCC 409.

Tata Trusts. (2020). *India justice report: Ranking states on police, judiciary, prisons and legal aid*. <https://www.tatatrusts.org/Upload/pdf/ijr-2020-overall-report-january-26.pdf>

The Code of Criminal Procedure, 1973

The Constitution of India. (1950). Arts. 14, 19, 20, 21. All amendments made by Parliament up to and including the Constitution (One Hundred and Fourth Amendment) Act, 2019, are incorporated in this edition, available at <https://legislative.gov.in/sites/default/files/COI.pdf>.

The Prisons (Bombay Furlough and Parole) Rules, 1959,

https://home.gujarat.gov.in/Upload/The_Prisons_Bombay_Furlough_and_Parole_Rules_1959_home_1_1_1.pdf

UN General Assembly. (1990). *United Nations Standard Minimum Rules for Non-custodial Measures (the Tokyo Rules)*. General Assembly resolution 45/110, annex, rules 1.5, 17.2, 18.3 and 18.4. General Assembly resolution 45/110.

https://www.unodc.org/pdf/criminal_justice/UN_Standard_Minimum_Rules_for_Non-custodial_Measures_Tokyo_Rules.pdf

UN General Assembly. (2015). *United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules)*. General Assembly resolution 70/175, annex, A/RES/70/175, available at <https://undocs.org/A/RES/70/175>

- United Nations Office on Drugs and Crime (UNODC). (2009). Handbook on Prisoners with special needs, Criminal Justice Handbook Series.*https://www.unodc.org/pdf/criminal_justice/Handbook_on_Prisoners_with_Special_Needs.pdf
- UNODC. (2016). Handbook on the Management of High-Risk Prisoners. Criminal Justice Handbook Series.*https://www.unodc.org/documents/justice-and-prison-reform/HB_on_High_Risk_Prisoners_Ebook_appr.pdf
- UNODC. (2018). Introductory Handbook on the Prevention of Recidivism and the Social Reintegration of Offenders. Criminal Justice Handbook Series. United Nations.*
- UNODC. The history of the rules. The Nelson Mandela Rules.*<https://www.unodc.org/unodc/en/justice-and-prison-reform/nelsonmandelaruleshistory.html>
- US Department of State. (2021, March 30). 2020 Country reports on human rights practices: India.*<https://www.state.gov/reports/2020-country-reports-on-human-rights-practices/india/>
- Yukhnenko, D., Sridhar, S., & Fazel, S. (2020). A systematic review of criminal recidivism rates worldwide: 3-year update. Wellcome open research, 4(28).* <https://doi.org/10.12688/wellcomeopenres.14970.3>

Author's Profile:

Ms. Naazneen Bhasin, IPS 60RR

DIG, Recruit Training Centre with additional charge of DIG,
Women's Safety, Haryana.



Sardar Vallabhbhai Patel
National Police Academy
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Role of Police in Criminal Trial in India: A Critical Review

Dr. Pranav Kumar, IPS*

Abstract:

Police have a vital stake in the outcome of a criminal trial as punishment to criminals is essential for maintaining peace and order in society. However, since the separation of police and prosecution through amendment in Criminal Procedure Code (CrPC) in 1973, police no longer have a legal mandate for any active involvement in criminal trial beyond process service and apprehension of absconders. The paper critically examines the legality and scope of "trial monitoring" undertaken by police organizations in light of provisions of CrPC and judicial pronouncements. Since the prosecutor represents police in the Court, the paper also critically examines the nature of the current relationship between police and prosecutors. The paper further discusses the scope and role of police in criminal trials and argues for clearly redefining the role of police and prosecutor in the Indian context in view of the poor conviction rates and structural problems of the criminal justice system.

Keywords:

Police, prosecution, trial monitoring, Criminal Procedure Code

*Inspector-General of Police, Criminal Investigation Department, West Bengal.

1. Introduction:

Successful prosecution of offenders is essential to maintain peace and stability in any law-abiding society and is a prerequisite for the rule of law. Police, as a key constitutive agent of the criminal justice system, have the responsibility of controlling crime and maintaining peace and order in society, and hence, have a vital stake in the outcome of criminal trials. Criminal cases are sent to trial before a competent Court of law after police file a charge-sheet (report in final form) enumerating offenders and evidence collected against them during an investigation. "Trial monitoring" (also known as Court Monitoring in some places) mechanisms exist in varied forms in district police units and specialized units in India to pursue prosecution of criminal cases. Some district police forces have dedicated "trial monitoring" cells at District/Sub-divisional Headquarters, while others have mechanisms at the police station level to monitor the trial of "important" cases. The importance of cases usually gets determined by the sensitive nature of the crime, media coverage, gravity etc. These units typically monitor the day-to-day progress of a trial, production of witnesses and experts, compliance to directions of Courts issued during the trial. Holding I.O.s/Pairvi officers are often appointed to pursue undertrial cases - a practice which is more prevalent in specialized investigative wings of police. However, there is no apparent legal mandate for such "trial monitoring" by Police in India. As per the provisions of CrPC¹, police have minimal role to play in a criminal trial in India. CrPC provisions dealing with various aspects of criminal trial do not prescribe the role of police at any specific step of the trial process. Police Act, 1861 also does not lay out any role of police in trial or prosecution except for the general duty of the police to execute orders and warrants issued by a competent Court despite the overwhelming majority of criminal cases being started on police reports. The paper will critically examine various facets of the role of police in the trial of a criminal case from a legal and practical perspective.

¹*Code of Criminal Procedure, 1973*

2. Police and trial under CrPC:

The word trial has not been defined in CrPC. Section 2(g) of CrPC defines inquiry as every inquiry other than a trial conducted under the Code by a Magistrate or Court. Trial in a criminal case can be construed to mean as the process of arriving at a conclusion regarding guilt or innocence of the accused brought before the Court of law for adjudication. The police have not been assigned any specific role or responsibility in a trial in the provisions of CrPC pertaining to trial. This contrasts with the situation prior to the amendment in CrPC in 1973 when prosecutors were effectively functioning under the Superintendent of Police. It is pertinent to note that the annual conviction rate of IPC crimes which was 62.7% in 1972, fell forty years later to 38.5% in 2012 (Tiwary, 2021; Crime in India 1972, 2012) and presently stands at 59.2% (National Crime Records Bureau [NCRB], 2021). The conviction rate of grievous offences (e.g. rape, murder) is even lower. However, this is not to argue that CrPC amendment in 1973 has been the only factor for drop in conviction rates since several other structural issues are also responsible for poor conviction rates. Nevertheless, the diminished role of police in trials can be seen as a contributing reason behind prosecution failures.

2.2 Scheme of trial under CrPC:

Typically trial in a Sessions triable case based on police report undergoes the following phases under the scheme of CrPC:

- (1) Cognizance by Magistrate under section 190 following the filing of a report in the final form filed by police under Section 173 CrPC
- (2) Supply of copy of police report and other documents to accused (Sec. 207)
- (3) Commitment to Sessions Court (in case of Sessions triable cases)
- (4) Discharge, if no sufficient grounds (Sec. 227)
- (5) Framing of charges (Sec. 228)
- (6) Evidence by prosecution (Sec. 231)
- (7) Evidence of defence (Sec. 233)

- (8) Recall of witnesses/additional witnesses (Sec. 311)
- (9) Examination of accused under (Sec. 313)
- (10) Final arguments by prosecution and defence (Sec. 234)
- (11) Judgment (Sec. 235)

Trial before a Magistrate in other warrant cases² also follows a similar pattern (Sec. 238-250 CrPC) except that the stage of commitment is not required and no final arguments are held. None of these stages provide any specific role of police during trial proceedings. In fact, the only place where the clear role of the police is mentioned in CrPC in trial matters is under Section 265 C in the Chapter XXI-A of plea bargaining³ which prescribes for the issuance of notice to the police officer who investigated the case, along with other stakeholders, for mutually satisfactory disposition of the case. Otherwise, during regular trial, an Investigating Officer is examined by prosecution like any other witness. Despite this apparent lack of legal mandate, police are often expected to play a role in trial at different stages, such as supplying a copy of police report to the accused, even though under Section 207 of CrPC the responsibility has been given to the concerned Magistrate for providing copy. Considering the schema of CrPC, "trial monitoring" mechanisms devised by police departments operate mostly on an informal basis. Several states have also issued police orders/circulars for "trial monitoring" by police. However, these guidelines can at best be considered as "facilitatory" in nature. Police Regulations are framed under section 12 of Police Act⁴, 1861 which also does not prescribe any role of police in criminal trials.

3. Problems in criminal trial and role of police:

A trial is conducted by public prosecutors/assistant public prosecutors in the Court. Under the schema of the Criminal Procedure Code, 1973, the prosecution is now separated and independent from the police. However,

²Under section 2(x) a "warrant case" is a case relating to an offence punishable with death, life imprisonment or imprisonment for a term exceeding two years.

³Inserted by Criminal Law (Amendment) Act, 2005.

⁴Several states now have their own Police Acts with analogous provisions.

police still play a crucial, albeit indirect, role in conduction of criminal trial through the service of processes. Processes include both summons and warrants, but the execution of warrants is a critical function of police in criminal trials. A large number of cases are pending for trial due to non-execution of warrants and thereby delaying the trial. While some accused are never traced since the beginning of investigation, others jump bail at various trial stages and abscond. In small number of cases, trials are split after completion of the process of proclamation and attachment but in large majority of cases trial does not progress for want of the presence of the accused. As per data updated on National Judicial Data Grid (NJDG), as on 12.12.2021, in as many as **3067310** criminal cases trial is delayed as one or more accused are absconding (NJDG 2021).

Expeditious trial is one the prime objectives of "trial monitoring" done by police. Despite right to speedy trial being recognized as fundamental right under article 21 of the Constitution of India in a number of judicial pronouncements⁵, it remains elusive. Law Commission of India (2012) while discussing causes for delay in the progress of criminal cases in trial Courts made, *inter-alia*, following observations:

2.4 1) Absence of some or all the accused or non-production of undertrial prisoners at the stage of framing of charges and during trial. Earnest efforts are not being made by the police in apprehending and producing the absconding accused. Execution of warrants has become the least priority for the police who have their own reasons – genuine as well as artificial. Where there are large number of accused, the delays on this account have become a routine feature. If the accused are residing outside the District or the State, it compounds the problem further. (p. 9)

2) Police fail to ensure that prosecution witnesses turn up in time and quite often, even I.Os are defaulters. Trial cases are adjourned quite often for non-attendance of official witnesses. (p. 10)

⁵See *Hussainara Khatoon v. State of Bihar*, 1980 SCC (1) 81, *P. Ramachandra Rao v. State of Karnataka*. (2002) 4 SCC 578.

2.5 (iii) Lack of coordination between the Police and Public Prosecutor. The assistance of concerned Police Officers is seldom available to Public Prosecutors. Prosecutors often feel helpless. (p. 11)

Law Commission has held police responsible for failure to produce witnesses even though CrPC does not prescribe any clear duty of police to produce witnesses. Further, the law also does not provide any clear mechanism for coordination between police and prosecutors. In a study sponsored by Bureau of Police Research and Development (BPR&D), Govt. of India on the Hostility and Problems associated with Witness (Bajpai 2010), it was recommended that some guidelines indicating the obligations of police and prosecutors must be formulated. The study suggested that the witnesses should have the right to seek guidance from police and prosecution for properly making the statements.

Problem areas in criminal trials that are related to police in some or other manner can be summarised as follows : (a) Non-service of summons (b) Non-execution of bailable warrants (c) Pendency of non-bailable warrants against absconders (d) Mismatch between cited documents, and exhibits and seizure list (e) Missing of documents /alamat (f) Incomplete/wrong addresses of witnesses in police report (g) Delay in filing reply to bail petitions, discharge petitions and various other miscellaneous petitions by accused at different stages of trial (h) Non-availability of sanction/authorization for prosecution under IPC and various Special Acts and (i) Non-production of undertrial prisoners (UTPs). Production of UTPs before Court is primarily the duty of prison authorities but is often dependent upon escort provided by police.

Some of the aforementioned problems are amenable to correction at the investigation stage itself through better supervision and due care in filing charge-sheet and evidence chart. Still, several potentially remediable problems also appear at the trial stage, e.g. issues related to sanction for prosecution. Communication gap and lack of structured mechanism between prosecution and police may block solutions to those problems.

3.2 Components of "Trial monitoring":

The first and foremost objective of "trial monitoring" is to achieve conviction after trial. Cases of heinous crimes (e.g. murder, rape, dacoity) or sensational crimes where accused are in custody (so called "custodial trial") are usually monitored through "trial monitoring". While there are different methods and modalities of monitoring of trial by police in India, following are the usual components of "trial monitoring":

- (1) A holding I.O. is appointed for the case of a dedicated team of officers monitors all the case.
- (2) Recording day to day progress in physical form (e.g. Court Diary) or in electronic form through some software.
- (3) Preparation of case brief for the prosecutors including a memorandum of evidence/evidence chart.
- (4) Pursuing /expediting /framing of charges by the Courts.
- (5) Ensuring service of summons to witnesses and ensuring their presence in the Courts.
- (6) Briefing of witnesses prior to deposition through prosecutor and also direct briefing on occasions.
- (7) Apprehending absconders against whom warrants of arrest have been issued.
- (8) Liaison with prison officials for production of witnesses.
- (9) Ensuring timely production of reports of experts from forensic science laboratories and other experts (as such reports are often not available at the time of filing of charge-sheets) and ensuring attendance of experts in the Courts.
- (10) Maintaining record of depositions in the Court and keeping track of progress of trial.
- (11) Ensuring appearance of expert/Govt. witnesses by following up with concerned laboratory/Govt. department.
- (12) If any major lacunae/defect is pointed out by prosecutor in the case steps to address the same e.g. sanction for prosecution for specified offences.
- (13) Assisting prosecutor in recall of witnesses under Section 311 CrPC and preparing final arguments.

- (14) Execution of convict warrants in case accused absconds just before/after the pronouncement of judgment.
- (15) Following up cases in Superior Courts.

Police organizations are innovating in various ways to tackle the problems in trial and thereby enhance conviction rates. In the absence of structural solutions, such initiatives are unlikely to often have lasting and replicable impact.

3.3 Briefing of witnesses:

Briefing of witnesses deserves to be dealt with in detail as witnesses' hostility during trial is often cited as a major reason behind acquittals (Dash, 2020). Witness briefing has been suggested as a measure to reduce the problem of hostility. However, briefing of witnesses by police is not permissible in law and is often interpreted as "tutoring" and testimony of a "tutored" witness is considered to be tainted. During cross-examination, defence lawyer tries to elicit from the witnesses that they were "tutored" by police before the deposition and seek drawing of adverse inference by the Court on such briefing.⁶

Model Police Manual by BPR&D (BPR&D, n.d. -b) recommends that in sessions' cases:

“The Investigating Officer should assist the Public Prosecutor at least two days in advance of the commencement of the Sessions trial in ascertaining from the witnesses what they would be stating in Court, and what exhibits have to be marked through them.” Manual further recommends that in other cases “the Investigating Officer should assist the APP in ascertaining from the witnesses what they would be stating in court, instructing him which documents are to be marked as prosecution exhibits and what items of property should be exhibited and ensure that the prosecution is presented in the best possible manner.”

However, there is no legal mandate whatsoever for the involvement of police in the briefing of witnesses under CrPC and as interpreted in

⁶See 2016 SCC OnLine Del 3907.

various judicial pronouncements. Section 171 of CrPC is under the chapter on investigation. However, its phraseology are relevant to understand the spirit of law vis-à-vis the role of police for Court matters. The section reads as under:

Section 171: Complainant and witnesses not to be required to accompany police officer and not to be subjected to restraint: No complainant or witness on his way to any court shall be required to accompany a police officer, or shall be subjected to unnecessary restraint or inconvenience, or required to give any security for his appearance other than his own bond: Provided that, if, any complainant or witness refuses to attend or to execute a bond as directed in Section 170, the officer in charge of the police station may forward him in custody to the Magistrate, who may detain him in custody until he executes such bond, or until the hearing of the case is completed.

4. Court police set-up :

Police officers are also permanently deputed to courts for liaison work between Police, Court, Prosecutor, and Prison Administration. The arrangement varies from state to state. In some states, police officers in the rank of constable/head constable are deputed as Court naibs in all Courts dealing with criminal cases while in other states officers in the rank of SI/ASI/Inspector are deputed to the Court for liaison work. In West Bengal officers in the rank of inspector called as Court Inspector continue to be deputed to Sadar (District Headquarters)/sub-divisional Courts even though their role has greatly diminished following the introduction of amended CrPC in 1973. Officers of other ranks assist them. One sub-inspector rank officer called G.R.O. (General Record Officer) is deputed in each ACJM/CJM Court. Police officers, whenever deputed, handle the work related to issue of processes, putting up police files, maintaining warrant files and Court Police malkhana register and miscellaneous liaison work with various wings of criminal justice system.

H.P. Prosecution Manual (Directorate of Prosecution, 2008) prescribes following duties of Court Naib:

- i) Keep close liaison between the Prosecutor and Investigation agency and the Court Registry.
- ii) Be the custodian of case files of criminal cases under trial.
- iii) Be responsible for maintenance of the criminal cases register, police files and custody of the other record.
- iv) Receive the summons/warrants and dispatch/forward them to the Police Station promptly for service.
- v) Maintain a case diary and enter details of day-to-day proceedings and the decision of the case and intimate the same to the Police Station and Challan In-charge/SHO concerned and dealing Clerk of the office of District Attorney/Assistant District Attorney. He shall get case diary signed from the Public Prosecutor in-charge of the case and the SHO. On his transfer he shall deposit the case diaries with the Public Prosecutor of the Court who shall check that details of ongoing cases have been properly entered before giving the case diary to the new Naib Court.
- vi) Ensure that in every decided case, the certified copy is applied for promptly and on receipt of complete certified copies of judgment and other documents, he shall arrange for supplying the photocopy of judgment etc. to the Superintendent of Police as per the instructions of the Department.

Similar duties are also performed by Court Naibs in other States where either officers or constables are permanently deputed in the Court to assist the Magistrates in processing of police files and related aspects. However, it would not be exaggeration to say that Court police set-up has no legal sanction under the scheme of CrPC and can be seen as an ad-hoc measure to address certain deficiencies of the system.

5. Relationship between police and prosecution:

CrPC amendment in 1973 has fundamentally altered the relationship between police and prosecution. Prior to amendment, public prosecutors effectively worked under the control of Superintendent of Police who,

along with District Magistrate, could supervise their functioning. Police officers were also directly acting as prosecutors in the Court under Section 492 of CrPC 1898.⁷

Section 25 (3) of CrPC still provides for deputing police officers not below the rank of the inspector as assistant public prosecutor in-charge of the case by District Magistrate if no Assistant Public Prosecutor is available (an amendment to the Section in West Bengal in 1985⁸ allows only the appointment of "a local officer" other than police officer as Assistant Public Prosecutor). Further, Section 302 of CrPC also allows prosecution to be conducted by anyone other than a public prosecutor including a police officer not below the rank of inspector of Police in a Magistrate's Court. However, these provisions do not appear to be in use in so far as appointment of police officers as prosecutors is concerned. On the other hand, appointment of law graduate employee of Municipal Corporation as Assistant Public Prosecutor has been held to be valid (*K. Tirupathi v Government of A.P.*, 1983).

Under CrPC prosecutors enjoy wide powers including power to withdraw prosecution under Section 321 CrPC, however, no accountability mechanisms for prosecutors which is further compounded by issues related to appointment of prosecutors (Varghese, 2021).

Successive judicial pronouncements have also contributed to severance of relationship between police and prosecution (*R. Sarala v. T.S. Velu & Others*, 2000). The independence of prosecution has been supported in a catena of judgments by the Supreme Court of India. In *Deepak Aggarwal vs Keshav Kaushik & Ors* on 21 January(2013), Apex Court held that:

⁷492 (1) The 3* * * * 4[Provincial Government may appomt, generally, or many case, or for any specified class of cases, in any local area, one or more officers to be called Public Prosecutors.

(2) The District Magistrate, or subject to the control of the The District Magistrate , the Sub-divisional Magistrate may, in the absence of the Public Prosecutor, or where no Public Prosecutor has been appointed, appoint any other person, not being an officer of police below (such rank as the (Provincial Government] may prescribe in this behalf] to be Public Prosecutor for the purpose of [any case]. (Criminal Procedure Code,1898).

⁸W.B. Act 17 of 1985.

In India, role of Public Prosecutor is no different. He has at all times to ensure that an accused is tried fairly. He should consider the views, legitimate interests and possible concerns of witnesses and victims. He is supposed to refuse to use evidence reasonably believed to have been obtained through recourse to unlawful methods. His acts should always serve and protect the public interest. The State being a Prosecutor, the Public Prosecutor carries a primary position. He is not a mouthpiece of the investigating agency.

Similarly, in *Jitendra Kumar@ Aiju vs. State (NCT of Delh)*, 2000, Delhi High Court, observed that:

A Public Prosecutor is an officer of the Court and is required and expected to assist the Court to unravel the truth in a given case. In performance of his duty, he can prosecute the accused but he cannot assume the role of a persecutor. It is no part of his duty to secure conviction at all costs. In discharge of his duty the Public Prosecutor is expected to act fairly and impartially and must be conscious of the rights of the accused.

In *Babu v. State of Kerala*, 1984 Kerala High Court went to the extent of observing that "Public Prosecutors are really Ministers of Justice whose job is none other than assisting the State in the administration of justice."

It is evident that Constitutional Courts have fiercely protected the independence of prosecution from executive. Thus, while a defence lawyer exclusively presents the case of the accused before the Court, the prosecutor does not act for victim in the same spirit but is expected to remain neutral presenter of the prosecution case. Lacunae in prosecution often lead to acquittal and prosecution has even been mentioned as the weakest link in criminal justice system (Prosecution weakest link in justice delivery: academic, 2021). Also, procedural safeguards in criminal justice system are skewed towards accused and the system is not sensitive to the rights of victim (Malimath, 2003).

On a few occasion Courts have recognized this anomaly. Kerala High Court in *Aziz v. State of Kerala* (1984) had observed "while defending the public interest, which he [a public prosecutor] represents on behalf of the State will act truthfully and fairly, and at the same time, advocate the cause for which he is engaged to the very best of his ability."

Recently Supreme Court in *Varinder Kumar v. State of Himachal Pradesh* (2019) remarked:

The criminal justice delivery system, cannot be allowed to veer exclusively to the benefit of the offender making it uni-directional exercise. A proper administration of the criminal justice delivery system, therefore requires balancing the rights of the accused and the prosecution, so that the law laid down in *Mohan Lal* (supra) is not allowed to become a spring board for acquittal in prosecutions prior to the same, irrespective of all other considerations.

In Central Bureau of Investigation (Delhi Special Police Establishment), prosecution wing is part of the agency. Prosecution wing is functionally independent; however, as prosecutors are attached to the CBI branches, branch heads exercise administrative supervision on the functioning of prosecutors to certain extent. Daily Court Diaries are submitted by prosecutors through which the concerned CBI unit monitors progress of trial. Such mechanisms of getting Court Diaries from prosecutors are challenging to implement in State Police for the obvious reason of lack of any kind of supervisory control on prosecutors.

Section 25A of CrPC⁹ provides for establishing a Directorate of Prosecution headed by the Director of Prosecution under the administrative control of Home Department in the State. Every Public Prosecutor, Additional Public Prosecutor and the Special Public prosecutor is supposed to work under the supervision and control of the Directorate. Further, Director of Prosecution is required to be appointed with the concurrence of Chief Justice of respective High Court. The institution creates certain scope of executive supervision over the

⁹Inserted by the CrPC (Amendment) Act, 2005.

conduction of trial. However, the Directorate's establishment and functioning are widely varying from State to State. Some states like Himachal Pradesh has formulated manuals (Directorate of Prosecution, 2008) delineating clear roles of legal advisors during investigation and prosecutors in the trial process. Nevertheless, the effectiveness of the institution is a matter of critical evaluation. Further, in view of judicial pronouncements regarding status of prosecution and its relationship with investigative agencies, rules and regulations formed for this institution also remain to be judicially tested.

Admittedly, Prosecution in India does not enjoy discretion and powers available in some jurisdictions with inquisitorial system (e.g. France, Netherland) where investigative agency functions under the control of prosecution. Even in the adversarial systems of the United States of America (US) and England and Wales, prosecutors have wide discretionary powers, including power to decide whether to charge a person following police investigation (Pakes, 2010, pp 63-84; Terrill, 2009, pp 41-42). However, with such powers, the prosecutors in those countries also have to take responsibility for prosecution failures. In India, while following the conventions of adversarial systems, police and prosecution have been separated. Neither the prosecution holds any accountability nor it is adequately equipped to deal with entire process of criminal prosecution on its own. Accountability here should not be interpreted as one of achieving conviction or getting the accused proven guilty at any cost. It should be seen as the duty to present the prosecution case in the best possible professional manner while being conscious of the impact of the outcome of the prosecution vis-à-vis victim(s) of the crime and society at large. Police mostly participate in prosecution through informal mechanisms such as "trial monitoring". It can also be said that in India Police-Prosecution relationship itself is now more informal in nature and "trial monitoring", in the absence of formal structured mechanisms, is more dependent upon personal attributes and relationships of police officers and prosecutors.

5.2 Special Public Prosecutors:

Section 24 (8) of CrPC allows the appointment of a Special Public Prosecutor for conducting trial. Experienced lawyers are usually appointed as Special Public Prosecutors for conducting trial of a few complex and sensational cases. Special Public Prosecutors are appointed for minuscule number of cases. Furthermore, such appointments are not beneficial in the long run for the criminal justice system as they help conceal the dismal state of prosecution machinery and appointments themselves are sometimes mired in controversy (Jain & Ranjan, 2020).

6. Normative issues:

It is instructive to note what Sir Alexander Cockburn, Attorney General of England, had remarked way back in 1845:

I think it is of the first importance that policeman should be kept strictly to their functions as policemen, as persons to apprehend and have the custody of prisoners, and not as persons who are to mix themselves up in the conduct of prosecution, whereby they acquire a bias infinitely stronger than that which under any circumstances, naturally attach itself to their evidence.
(as quoted in Stenning & Jansson, 2018)

It is not difficult to envisage the problems of direct police involvement in prosecution, and the doctrine of separation of police and prosecution in common law jurisdiction has justified historical and empirical basis. Police cannot expect the prosecution to do its bidding in all cases and police functioning itself is sometimes plagued by inefficiency, undue influence and corruption. It would indeed be a travesty of justice to make prosecution handmaiden of police. However, in India, which has borrowed its criminal justice system from England, the separation of police and prosecution in 1973 has created a unique problem. While prosecution has been declared independent, it has neither been adequately empowered and equipped to deal with the prosecution independently nor has been made accountable for its task. Society expects police to ensure justice to victims and punishment for criminals.

These are the twin objectives which compel police to play an active role during the trial process even without any legal mandate.

7. Repositioning the role of police in criminal trials:

Poor conviction rates, current developments in criminal jurisprudence, technological advancements and societal expectations necessitate the need for a change in the role of police in criminal trials. At this point, we can refer to observations of Supreme Court in *State of Gujarat Vs. Kishanbhai and Ors.* (2014) wherein the Court lamented on the state of affairs in criminal justice system:

Every time there is an acquittal, the consequences are just the same, as have been noticed hereinabove. The purpose of justice has not been achieved. There is also another side to be taken into consideration. We have declared the accused-respondent innocent, by upholding the order of the High Court, giving him the benefit of doubt. He may be truly innocent, or he may have succeeded because of the lapses committed by the investigating/prosecuting teams. If he has escaped, despite being guilty, the investigating and the prosecution agencies must be deemed to have seriously messed it all up. And if the accused was wrongfully prosecuted, his suffering is unfathomable. Here also, the investigating and prosecuting agencies are blameworthy.

The Court then went on to direct that:

On the culmination of a criminal case in acquittal, the concerned investigating/prosecuting official(s) responsible for such acquittal must necessarily be identified. A finding needs to be recorded in each case, whether the lapse was innocent or blameworthy. Each erring officer must suffer the consequences of his lapse, by appropriate departmental action, whenever called for ... Accordingly we direct, the Home Department of every State Government, to formulate a procedure for taking action against all erring investigating/prosecuting officials /officers ... The above mechanism formulated would infuse

seriousness in the performance of investigating and prosecuting duties, and would ensure that investigation and prosecution are purposeful and decisive. The instant direction shall also be given effect to within 6 months. (*State of Gujarat Vs. Kishanbhai and Ors.*, 2014)

The status of compliance to Court's directions is beyond the scope of this paper. Unfortunately, the Court's observations can apply to a majority of criminal trials. However, a mere diktat to fix responsibility is unlikely to lead to meaningful change unless structural issues are addressed.

7.2 Apprehension of absconders:

Apprehension of absconders against whom the competent Courts have issued non-bailable warrant is singularly important legally mandated role of police in criminal trial. As per Crime in India Report, 2020 (NCRB, 2021) **482281** were pending for execution at the end of year 2020 (as per the data provided by States/UTs). The discrepancy in figures cited by Court and Police is also a common occurrence. Often, warrants are returned to the Court unexecuted for fresh issuance, which artificially changes the pendency figures since formal re-issuance is often delayed. It is well-known that police officers usually do not engage with apprehension of absconders with as much alacrity in under trial cases as is seen in under investigation cases. Liberal grant of bail and ineffective bond and security measures are also responsible for large number of absconders as accused jump bail and abscond. Under such circumstances, dedicated police units must be formed at the District/State level to apprehend such absconders and bring them to justice. Effective execution of proclamation and attachment (Sec. 82 & 83 CrPC) can also facilitate in compelling the absconders to appear before the Court of law.

7.3 Assistance to victim's advocate:

Under section 24 (8) CrPC, the Court may permit the victim to engage an advocate of his choice to assist the prosecution¹⁰. Therefore, if a victim or

¹⁰ Amended by the CrPC (Amendment) Act, 2008.

complainant wishes to engage an advocate duly allowed by the Court, it is expected from police to render him all necessary assistance as is given to a public prosecutor, including providing case brief.

7.4 Witness protection:

Witness protection is another emerging area where role of police comes into play. Threat to witnesses and fear and apprehension regarding safety and security among witnesses have been identified as significant factors behind witnesses turning hostile (Kundu, 2021). Police can play a major role in witness protection. Ministry of Home Affairs (MHA), Govt. of India, has formulated a Witness Protection Scheme, which has been endorsed by the Supreme Court in Writ Petition (Criminal) No. 156 of 2016. The scheme provides for the categorization of witnesses and recommends their protection. The scheme is yet to take off in most states while it is under implementation in certain states at different stages. Odisha Witness Protection Scheme 2019 has given significant responsibility to police for witness protection. The Maharashtra Witness Protection and Security Act, 2017 also prescribed key role to police in witness protection. Section 195A in the Indian Penal Code introduced in 2006 is a cognizable offence where police can register FIR and investigate (the word "complaint" used in corresponding Section 195A of CrPC is yet to be conclusively determined by the judiciary). Special Acts e.g. Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) 1989, National Investigation Agency Act, 2008, Whistle Blowers Protection Act, 2011, Juvenile Justice (Care and Protection of Children) Act, 2015, Protection of Children from Sexual Offences Act, 2012 also contain provisions for protection of witnesses.

7.5 Vigilance during trial:

Accused side also attempts to subvert criminal trial by using unfair means. Instances of criminal cases being recorded for subversion of trial process are sometimes reported (Ex judge claims, 2019). Compromising various stakeholders in a trial to subvert the process is criminal activity and vigilant police can play a role in preventing such subversion to

maintain sanctity of process of prosecution through prompt registration of cases and proper investigation.

7.6 Complex crimes:

With the rise in cybercrimes, complex economic offences, and growing use of forensics in the investigation, close cooperation between police and prosecution is imperative in the present situation. Special training programmes should be organized to brief and update prosecutors about latest advances in forensics and information technology (IT) being used by police during investigation.

7.7 ICJS and IT tools:

Interoperable Criminal Justice System (ICJS), an initiative by e-committee of the Supreme Court, has tremendous potential to transform the relationships among different pillars of the criminal justice system regarding data/information exchange. Police as well as the prosecution must fully utilize the potential of ICJS and CCTNS (Crime and Criminal Tracking Network & Systems) in streamlining trial of criminal cases (e-committee, Supreme Court of India, n.d.). Several police organizations have also developed their own system of centralized monitoring. "Court Cases Monitoring System" (CCMS) in Vijayawada (A.P.) in January 2005 involves e-monitoring of Court work. The initiative led to an improvement in conviction percentage (BPR&D, n.d. -a). Several state police forces have also developed their own "trial monitoring" software programmes either as standalone or as add-on on CCTNS Core Application Software.

7.8 Redefining the roles:

Adaptation is key feature of a dynamic criminal justice system. After the separation of police and prosecution in the United Kingdom, when the need arose, Serious Fraud Office was promptly created in 1987 as an exception that gave wide powers of investigation to prosecutors (Searl, 2004). Certain less serious offences have also been assigned back to

police for prosecution in England and Wales (Stenning & Jansson, 2018). Current challenges require India also to realign the role of police and prosecution. There is an urgent need to clearly define the role of police in criminal trials and formalize the "trial monitoring" mechanisms. This would also increase accountability of police for professional investigation as faulty investigations are undoubtedly a major problem behind acquittals (Santhy, 2012). Police also cannot be allowed to merely shift the blame on prosecutors in case of prosecution failures. Once role of police in trial has been defined and the prosecutors flag deficiencies of investigation, responsibility can be fixed on the erring police officer. Or alternatively, prosecution can be further strengthened, resourced and given full responsibility for trial along with accountability as seen in countries referred above. Ministry of Home Affairs has formed a National Level Committee for Reforms in Criminal Laws to undertake a review of criminal laws in India (MHA, 2020). Expectedly, the Committee may come up with suggestions to improve the police-prosecution interface which is legally sanctioned so that prosecution is not treated merely as a neutral presenter of facts but an active participant in the quest for justice for victims of crimes. Police should also have a defined role in the disposal of cases without trial through the compounding of offences (Sec. 320 CrPC) and withdrawal from prosecution (Sec. 321).

8. Conclusion:

Criminal trials in India suffer from the problem of "ownership" of trial. Unlike countries like the US or UK where prosecutors are exclusively in-charge of prosecution and are accountable for the trial, prosecutors in India enjoy a unique position of independence and are neither responsible for the trial nor accountable for the trial outcome. As the most visible and accountable organ of the criminal justice system, police have a high stake in the outcome of the criminal trial; mechanisms like "trial monitoring" have evolved to pursue trial of criminal cases. Nevertheless, we can no longer depend on "*jugad*" (French *bricolage*) of "trial monitoring" to address the growing challenges of very high acquittal rates, complex

crimes, sophisticated and resourceful criminals and, technological challenges. The criminal justice system in India has adequate safeguards for accused persons. Victims also deserve their case to be presented through effective prosecution. The paper has attempted to examine the contours of the problem to emphasize the need to redefine the roles of prosecution and police in criminal trials, which is essential to developing a robust criminal justice system in 21st century India. A legal realignment and redefinition of roles of police and prosecution in trial, while maintaining fairness and objectivity, is long overdue. Neither of them can afford to remain oblivious to the outcome of criminal trials.

References:

- Aziz v. State of Kerala* (1984) Cri. LJ 1060 (Ker)
- Babu v. State of Kerala* 1984 Cr LJ 499
- Bajpai, G. S. (2010). *On Witness in the Criminal Justice Process: Problems & Perspectives*. *Indian Law Review*, Vol. 1. Available at SSRN:<https://ssrn.com/abstract=1802876>
- Bureau of Police Research and Development (n.d.-a). *Model Police Manual: Volume 2*, <https://bprd.nic.in/WriteReadData/userfiles/file/6798203243-Volume%202.pdf>
- Bureau of Police Research and Development (n.d.-b). *Court Cases Monitoring System*. [https://bprd.nic.in/WriteReadData/userfiles/file/201809050547169347845CourtCaseMonitoringSystem\(MM05\).pdf](https://bprd.nic.in/WriteReadData/userfiles/file/201809050547169347845CourtCaseMonitoringSystem(MM05).pdf)
- Dash, P. P. (2020). *Rape adjudication in India in the aftermath of Criminal Law Amendment Act, 2013: Findings from trial courts of Delhi*. *Indian Law Review*, 4(2), 244–266. <https://doi.org/10.1080/24730580.2020.1768774>
- Deepak Aggarwal v. Keshav Kaushik & Ors. (2013) 5 SCC 277
- Directorate of Prosecution, Department of Home, Government of Himachal Pradesh (2008). *Prosecution Manual*. https://himachal.nic.in/WriteReadData/l892s/l73_l892s/3-11934501.pdf
- e-committee, Supreme Court of India (n.d.). ICJS.<https://ecommitteesci.gov.in/project/icjs-interoperable-criminal-justice-system/>
- Ex-Judge Claims 40 Crore Bribe Offered For Janardhan Reddy's Bail In 2012. (2019, August 27) NDTV.com.<https://www.ndtv.com/india-news/ex-judge-claims-rs-40-crore-bribe-offered-for-gali-janardhan-reddys-bail-in-2012-2091341>
- Jain, C. & Ranjan, A (2020, Sep. 9). *Examining The Special Prosecution Needs Of Criminal Justice*. Outlook. <https://www.outlookindia.com/website/story/opinion-examining-the-special-prosecution-needs-of-criminal-justice/360054>
- Jitendra Kumar@ Aju vs. State (NCT of Delhi) 2000 (53) DRJ 707

- K. Tirupathi v Government of A.P.* 1983 CrLJ 1243 (AP)
- Kundu, B. (2021). *Witness Protection in India*. Livelaw.in.
<https://www.livelaw.in/columns/criminal-justice-system-witness-protection-scheme-law-commission-report-hostile-witnesses-184706>
- Law Commission of India Report (2012), 239th Report on *Expeditious Investigation and Trial of Criminal Cases Against Influential Public Personalities*. Submitted to the Supreme Court of India in W.P. (C) NO. 341/2004, *Virender Kumar Ohri Vs. Union of India & Others*. March 2012.
- Malimath, V. S. (2003). *Report of the committee on reforms of the criminal justice systems*. Government of India. Ministry of Home Affairs.
- Ministry of Home Affairs. Government of India. 2018. *Witness Protection Scheme*.
https://www.mha.gov.in/sites/default/files/Documents_PolNGuide_finalWPS_08072019.pdf
- Ministry of Home Affairs. Government of India. 2020. *Committee For Reforms In Criminal Laws, Centre For Criminology And Victimology*.
<https://nludelhi.ac.in/UploadedImages/8956ade5-a725-4a36-bcee-086353ea5a30.pdf>
- National Crime Records Bureau (2012). *Crime in India*.
<https://ncrb.gov.in/en/crime-india-year-2012>
- National Crime Records Bureau (2021). *Crime in India*.
<https://ncrb.gov.in/en/Crime-in-India-2020>
- National Judicial Data Grid (2021, Dec.12). *Pending Dashboard[Data Set]*.
https://njdg.ecourts.gov.in/njdgnew/?p=main/pend_dashboard
- Pakes, F. (2010). *Comparative Criminal Justice* (2nd Ed., pp 63-84). Routledge.
- Prosecution weakest link in justice delivery: academic. *The Hindu*. (2021).
<https://www.thehindu.com/news/cities/Kochi/prosecution-weakest-link-in-justice-delivery-academic/article6777016.ece>
- Santhy, K.V.K. (2012). *Problem in the Criminal Investigation with reference to Increasing Acquittals: A study of Criminal Law and Practice in Andhra Pradesh*. Bureau of Police Research & Development. Govt. of India.
<https://bprd.nic.in/WriteReadData/userfiles/file/201608020459199930125Report.pdf>
- Sarala v. T.S. Velu & Others (2000) 4 SCC 459
- Searl, T. A. F. (2004). *The investigation and prosecution of serious fraud in England and Wales* (Doctoral dissertation, University of Sheffield).
- State of Gujarat Vs. Kishanbhai and Ors.* (2014) 5 SCC 108
- Stenning, P., & Jansson, J. (2018). *Framing Prosecutor–Police Relations in Europe–A Concept Paper in The Evolving Role of the Public Prosecutor* (pp. 92-104). Routledge.
- Terrill, R. J. (2009). *World criminal justice systems* (7th ed. Pp 41-42). Anderson Publishing, Limited.

- Tiwary, D. (2021). Conviction rate dips to almost half in 40 years. The Times Of India.*
<https://timesofindia.indiatimes.com/india/conviction-rate-dips-to-almost-half-in-40-years/articleshow/28767806.cms>
- Varghese, H. (2021). Abject Incompetence Of Prosecution: Kerala High Court Initiates Suo Motu Case To Probe Appointment Of Prosecutors. Livelaw.in.*
<https://www.livelaw.in/news-updates/kerala-high-suo-motu-cognizance-on-incompetence-of-prosecutors-182322>.
- Varinder Kumar v. State of Himachal Pradesh (2019) S.C.C. OnLine SC 170*
<https://thc.nic.in/user%20manual/ICJS-manual.pdf>

Author's Profile:

Dr. Pranav Kumar, IPS

Inspector-General of Police, Criminal Investigation Department, West Bengal.



Sardar Vallabhbhai Patel
National Police Academy
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Crime Prevention Through Targeted Patrols

How technology can be used for effective supervision

Seju P. Kuruvilla, IPS*

Introduction:

The primary role of the police in India is prevention and detection of crime and maintenance of Law and Order. Prevention of street crimes is one of the most challenging aspects of metropolitan policing across the globe and the same is true for all Indian cities be it Delhi, Mumbai, Kolkata, Chennai, Bengaluru, or Hyderabad. Routine police patrols have been traditionally the most common practice across the globe to achieve this goal of prevention of street crimes.

Police patrol strategies across the world have always been based on two unproven but widely accepted hypotheses: first, that visible police presence prevents crime by deterring potential offenders; second, that the public's fear of crime is diminished by such police presence. Thus, a routine preventive police patrol was believed to be effective in crime prevention and to reassure the public (George L. Kelling et al, 1974). The police, the elected representatives and the public in general believe that the presence of police officers on patrol deter criminals and hence patrolling is considered to be one of the essential elements of policing. This is the reason why police forces across the globe deploy foot patrols, motorcycle patrols and vehicle patrols. But what are the findings of the research which have studied the actual impact of police patrols with

*Deputy Director, Sardar Vallabhbhai Patel National Police Academy, Hyderabad.

regard to its stated objective of deterring potential criminals and/or of reducing the fear of crime amongst the public? The experiment conducted by Kansas City Police tried to question the above hypotheses.

The Kansas City Preventive Patrol Experiment:

The Kansas City Preventive Police Experiment was a yearlong experiment to test the effectiveness of the traditional police practice of routine preventive patrol (George L. Kelling et al, 1974). The aim was to understand how to use the resources of Kansas City, Missouri Police departments resources better. The experiment ran successfully for one year from October 1972 to September 1973 across 15 beats which were divided into 5 groups of 3 beats each with each group having a Reactive Beat, a Proactive Beat and a Control Beat.

The experiment questioned the premises of routine patrols, that is, that patrols deter potential offenders from committing crime and that police visibility reduce the fear of crime amongst public. The findings from the experiment concluded that traditional model of routine preventive patrols had no significant impact on either of the above two stated premises. Random or reactive patrols, which involve officers patrolling places regardless of the crime rate or passing an area on route to attending a call from the public, have been shown to have no crime reduction effect (Sherman and Eck, 2002; Weisburd and Eck, 2004).

There have been many follow-up experiments like the Minneapolis hot spots experiment in 1991, which inferred amongst other things that extra patrol can make a difference in the amount of crime occurring in a specific crime hot spot (Sherman and Weisburd, 1995). Visible police patrol can reduce crime, however, but only if it is targeted in the small geographic locations - or hot spots – where crime is concentrated (Sherman and Eck, 2002; Weisburd and Eck, 2004).

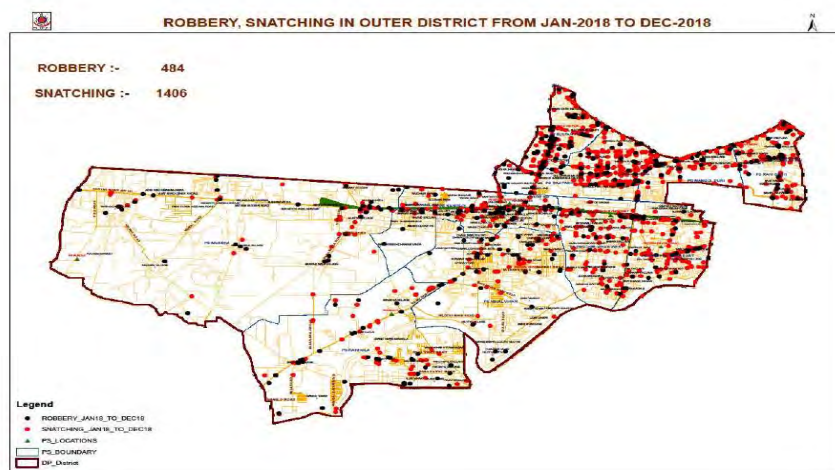
If prevention of crime is one of the most important functions of police and the traditional routine police patrols being less impactful as shown by the Kansas City Preventive Patrol Experiment and other studies, then what is the alternative? Targeted Patrol – a dynamic, efficient and result oriented approach.

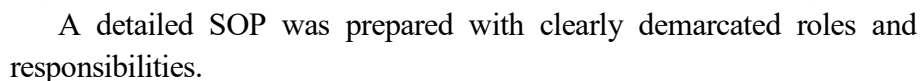
Delhi Police Outer District Targeted Preventive Patrol Model:

Outer District in Delhi is one of the most crime prone districts not only in Delhi but in the whole of India with a registration of around 20,000 criminal cases in a year. During the Fortnightly Crime Review Meeting of the Commissioner of Police, Delhi and the weekly meetings held by the Joint Commissioner of Range, the analysis of street crimes accounts for 50% of all discussions. I am sure that this would be the general trend across the metropolitan cities and other major cities across the country. The analysis at the Police Head Quarters is mainly done by comparing the cases registered under the various sections of the Law (for example robbery, snatching etc.) with that of the previous year. This may not give the correct picture, as there are variations in the FIR registration figures because of which the actual street crime figures are hidden and can be better analyzed from the PCR (Dial 100) Call Data which is the most critical data for Crime Pattern Analysis.

Delhi police have been using CMAPS for hot spot analysis, wherein the Police Control Room Calls (PCR Calls) for robbery, snatching, motor vehicle theft and other crimes are plotted, based on the location and time of the incident. I am sure that by now each State Police Force would be having their own tools for the crime hot spot analysis.

The Spatio-Temporal Analysis of the street crimes (robbery and snatching) of Outer District showed that the Highways are the hotspots. (Image below).





- To have 24x7 patrolling on highly crime prone stretches.
- To improve police visibility and presence.
- To instil confidence in the general public.

- To create fear of apprehension in the minds of criminals.
- To respond quickly in case of any incident being reported.
- To fix accountability and responsibility.

In order to achieve the desired results, the following **roles and responsibilities** were fixed by creating Standard Operating Procedures:

Sl No.	Roles	Responsibilities
1.	Patrolling Staff	<ul style="list-style-type: none"> • They shall always move in a group, i.e. 02 M/cycles and 04 police personnel. • One person shall carry long range weapon and remaining shall carry small arms. • All police personnel shall wear fluorescent jackets. • They shall use blinkers and sirens on time-to-time basis to ensure police visibility and instil confidence in the public. • They shall keep patrolling at normal speed and try to cover the stretch within 30 to 40 minutes. • They shall remain vigilant and look out for vehicle borne criminals moving in the area and intercept and check them. • They shall immediately respond to PCR calls related to snatching / robbery in their respective stretches.
2.	Inspector ATO	<ul style="list-style-type: none"> • The ATO shall constantly monitor the position of the patrolling party and shall designate halting points for the Highway Patrols. • He should physically check the staff and perform patrolling duty along with them to boost the morale of the staff. • He should brief and debrief the patrolling staff and give specific targets to the staff so that the

		patrolling can be more effective and outcome oriented.
3.	Night Duty Officer	<ul style="list-style-type: none"> • The District Night GO/ Inspectors on Sub Division Night Duty shall check the movement of the Highway Patrols. • They should invariably conduct physical check of all the patrolling staff. • The District Night GO should take two hourly output of the checking done by patrolling staff through the District Control Room.
4.	District Control Room	<ul style="list-style-type: none"> • The District Control Room shall immediately communicate the PCR calls related to robbery/snatching incidents on the particular route to the concerned Highway Patrol so that they can respond to the incident.
5.	SHO/ SDPO	<ul style="list-style-type: none"> • SDPOs/SHOs shall regularly monitor & supervise the Highway Patrol to keep track of the effectiveness and outcome of the patrolling.

Implementing any such projects requires close supervision and the effectiveness of any police patrol depends on the effectiveness of supervision and the overall motivation of the staff. This was made possible with the use of technology.

How Technology was used for effective supervision:

The latest available technology of **Global Positioning System** and **Live Video Streaming** was used to make the police patrolling more effective and thereby ensuring a safer neighborhood for the citizens of the area.

All patrol motorcycles of Outer District were fitted with **GPS Device** and all 4 wheel patrol vehicles of Outer District, i.e. Emergency Response Vehicles (ERVs), Quick Reaction Teams (QRTs) and Linear Patrolling Vehicles (LPVs) were equipped with **4G based CCTV**

Cameras with inbuilt GPS that provides 24x7 GPS Location, live video streaming and recording facility.

The **District e-Control Room** was set up to ensure continuous monitoring of these vehicles and proactively interacting with the patrolling staff and to give necessary directions and vital information thereby ensuring dynamic patrolling in the area.

The main **objectives of the e-monitoring system** were:

- To enable effective monitoring of patrolling staff by regular checking of GPS Location and live footage by the Control Room Staff/Supervisory Officers.
- To enable geo-fencing of the patrolling vehicles in order to ensure patrolling on designated routes and timings.
- To enable **dynamic interface** between Control Room, Supervisory Officers and Field Staff whereby they can interact with each other.
- To enable patrolling staff to record any live incident that can help in investigation and actively enable evidence building.
- To act as a “force multiplier” and “Eyes & Ears” to Delhi Police.
- To have a sufficient database of patrol route and timing in order to analyse the trends and make corrective strategy.
- To act as a watchdog thereby optimizing the output of the patrolling staff.

Standard Operating Procedures were established with specific aims and objectives and clearly demarcated roles and responsibilities.

Sl No.	Roles	Responsibilities
1.	District e-Control Room	<ul style="list-style-type: none"> • The Incharge of the e-Control Room to be responsible for 24x7 monitoring of all the patrolling vehicles. • The e-Control Room to act as the

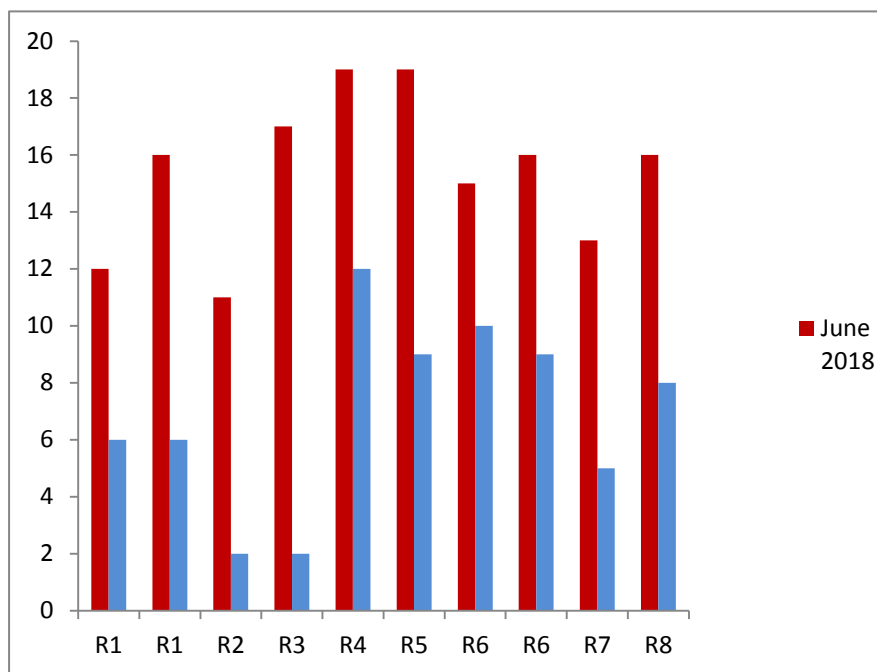
		<p>interface between the Supervisory Officer and the patrolling staff, instantly communicating vital instructions and ensuring timely mobilization and response to sensitive incidents on ground.</p> <ul style="list-style-type: none"> • The e-Control Room to maintain a register and keep the record of all instructions/information passed on to the concerned patrolling vehicle. • The e-Control Room to prepare fortnightly report regarding the output of the patrolling vehicles.
2.	Inspector ATO	<ul style="list-style-type: none"> • The ATO to constantly monitor the position of the patrolling vehicles through the GPS application and also view the live footage through the Live Video Stream application. • He should physically check the staff and perform patrolling duty along with them to boost the morale of the staff. • He should brief and debrief the patrolling staff and give specific targets to the staff so that the patrolling is effective and outcome oriented.
3.	District Night GO/ Inspectors on Sub Division Night Duty	<ul style="list-style-type: none"> • The District Night GO/ Inspectors on Sub Division Night Duty shall check the movement of the Patrolling Vehicles using the GPS application and the Live Video Streaming Application. • They should invariably conduct physical check of all the patrolling

		<p>staff.</p> <ul style="list-style-type: none"> • The District Night GO should take two hourly output of the checking done by patrolling staff through the District Control Room.
4.	M.T. Section	<ul style="list-style-type: none"> • It is the duty of Incharge M.T. Section to ensure that the GPS device and the cameras are functioning properly and meaningfully oriented to maximize coverage both inside and outside.
5.	SHO/ SDPO	<ul style="list-style-type: none"> • SDPOs/SHOs shall regularly monitor the “GPS Location” and “live feed” of the patrolling vehicles to keep track of the effectiveness and outcome of the patrolling. • They must mobilize these patrolling vehicles on the basis of the latest spacio-temporal analysis of crime. • The patrol routes of each patrolling vehicles should be earmarked and geo-fenced for effective crime prevention.

The Outcome:

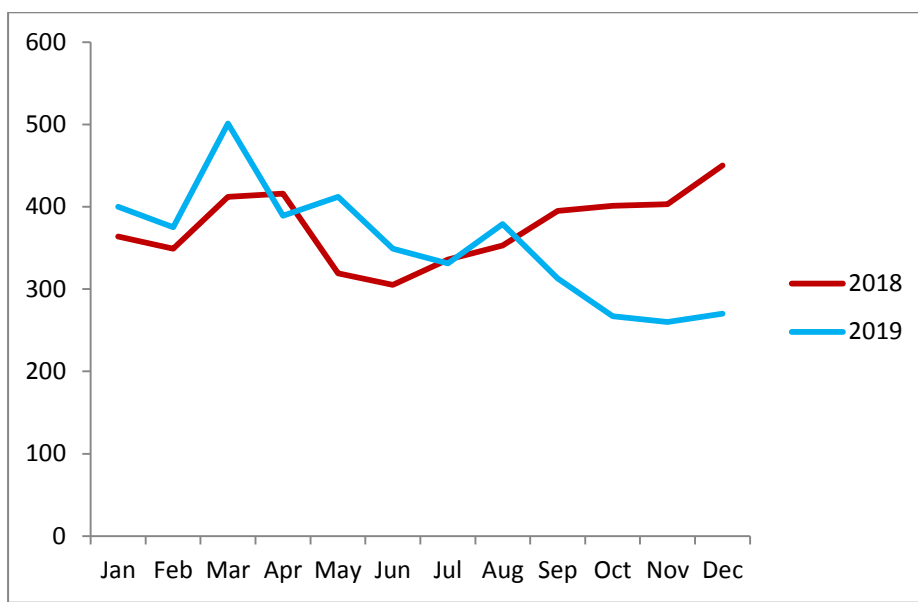
The comparative chart of PCR (Dial 100) calls of robbery and snatching on the motorcycle patrol routes for the month of June shows that there was a considerable reduction in the crime reported in June 2019 compared to June 2018.

**COMPARATIVE CHART OF PCR CALLS OF ROBBERY AND
SNATCHING ON THE TARGETED MOTORCYCLE PATROL
ROUTES FOR THE MONTH OF JUNE 2018 & 2019**



The month wise comparison of PCR (Dial 100) Calls of Robbery and Snatching for the entire Outer District for the whole of 2018 & 2019 shows that the monthly reported robbery and snatching PCR (Dial 100) calls were higher for the 1st six months of 2019 (i.e. January to June) compared to similar period of 2018. Whereas after introduction of 24x7 Mobile Cycle Patrols in the most crime prone stretches the monthly reported robbery and snatching PCR (Dial 100) calls gradually started reducing during the next six months of 2019 (i.e., July to December) compared to similar period of 2018.

COMPARATIVE CHART OF ROBBERY AND SNATCHING PCR CALLS OF ENTIRE OUTER DISTRICT



This shows that the impact of 24x7 motorcycle patrols was not limited to the designated Highway Patrol Stretches, rather the positive effects had spill-over to the whole district. There could be other factors also responsible for the decrease in calls, besides the effect of the targeted motorcycle patrols, but since there were no further detailed studies conducted, we can utilize the data to draw a conclusion that there was no evidence of displacement of crime to the neighboring areas. Importantly, systematic reviews have shown that crime displacement tends not to happen with focused police activity in high-crime places. The crime reduction benefits may even spread to the areas immediately surrounding the targeted locations (Braga and others, 2019; Santos, 2014; Ariel and others, 2016).

Learning / Reflection:

From the robbery and snatching PCR (Dial 100) calls comparative chart for June 2019, it is evidently clear that there has been an immediate effect of drastic reduction in the incidents of robbery and snatching on the

designated routes where the 24x7 Motorcycle Patrols were introduced in the month of June 2019. In addition, it is also evident from the statistics that the street crime incidents continued to decline over the next six months which can be directly attributed to the effectiveness of the 24x7 Motorcycle Patrols on the crime hot spots.

The following multi-pronged strategy proved to be very effective and produced outstanding results.

- Strategy 1: Spatio-Temporal Analysis of street crimes and identification of Hot Spots.
- Strategy 2: Introduction of Targeted Patrols on Crime Hot Spots.
- Strategy 3: Effective supervision through technology-oriented ways and means.
- Strategy 4: Motivation of staff through immediate rewards and appreciations.

Bibliography:

- Kelling G.L, Pate T. Dieckman D, Brown C.E. (1974) the Kansas City Preventive Patrol Experiment: Summary Report.*
<https://www.policinginstitute.org/wp-content/uploads/2015/07/Kelling-et-al.-1974-THE-KANSAS-CITY-PREVENTIVE-PATROL-EXPERIMENT.pdf>
- Sherman, L.W. and Wiesburd D., 1995, Does Patrol Prevent Crime? The Minneapolis Hot Spot Experiment, Crime Prevention in the Urban Community, 1995.*
- Ariel B, Weinborn C and Sherman LW. (2016). "Soft" policing at hotspots – do police community support officers work? A randomized controlled trial". Journal of Experimental Criminology, 12(3), pp 277-317.*
- Braga AA and others. (2019). „Hot spots policing of small geographic areas effects on crime". Campbell Systematic Reviews.*

- Santos RB. (2014). „The Effectiveness of Crime Analysis for Crime Reduction: Cure or Diagnosis?“. Journal of Contemporary Criminal Justice, 30(2), pp 147-168.*
- Sherman L and Eck J. (2002).. „Police for Crime Prevention“ In: Sherman L and others, eds. „Evidence-Based Crime Prevention“. London: Routledge.*
- Weisburd D and Eck J. (2004). „What Can Police do to Reduce Crime, Disorder and Fear? „The Annals of the American Academy of Political and Social Science, 539, 4265.*

Author's Profile:

Seju P. Kuruvilla, IPS

Deputy Director, Sardar Vallabhbhai Patel National Police Academy, Hyderabad.



Sardar Vallabhbhai Patel
National Police Academy
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Fighting Terror: Should Counter-Terrorism Mean More?

Kannan Perumal, IPS*

Abstract:

This qualitative study attempts to bring out the structural weaknesses that limit the efficacy of current counter-terrorism strategies by reviewing existing literature. Shortcomings identified in this work are the problem of lack of agreed definition of terrorism, double standards in countering terrorism practices, the risk of terrorism being viewed as wholly religious, deficit of gender perspective in counter-terrorism strategies, weak financial and legal instruments, challenges in international cooperation and terror funding. Recognizing terrorism as primarily a political problem, this study argues that the State must remain morally high and that counter-terrorism strategies need to be depoliticized for controlling the terror phenomenon.

Key words:

Counter-terrorism, apolitical, gender perspectives, feminization of terrorism, terror funding

*Deputy Inspector General of Police, Shahabad Range, Bihar.

1. Introduction

In spite of disagreement over defining the term terrorism, there is consensus among international actors about the nature of terror phenomenon and its wide range of manifestations. In common understanding, terrorism refers to acts or threats of violence that target civilians in the pursuit of political objectives. For Orehek & Vazeou (2014), terrorism constitutes an extreme form of aggression in which non-state actors target civilians to achieve their political aims. Terrorism has been found to have distinct ideological, strategic and tactical objectives, and such objectives have roughly been analogous to those sought by governments in wars, campaigns and battles (Waugh, 2018). Admittedly, terrorists are rational actors with ideology driven by specific political objectives, and terror acts are neither profit-motivated nor random nor sadistic unlike conventional crimes (Kydd & Walter, 2006). Religious, anarchic and nationalistic motivations have been the sources of terror acts. Rosand et al (2009) show that terror groups can be motivated by nationalist politics, religious fundamentalism and ethno-nationalist separatism. Socialism and exclusionism (Heyman, 2003) have also been found to be inspiring terrorists, and these motivations can complement and work parallel with each other. Still, there is very little evidence to show that terrorist movements succeed in achieving their mission. Wilcox (2017) argues that terrorism has failed historically as a strategic weapon for achieving political objectives. But, the impact terrorism causes in the society through violence is huge and there have been instances of prolonged political conflicts like Isreal-Palestein conflict and North Ireland conflict for decades due to terrorism.

Now, the terror threat has emerged as a global challenge impacting governance, human rights, trade, space and the environment and no country is immune from terrorism. Modern trends in terrorism are characterized by decrease in overall attacks, increase in the lethality per attack, escalation of terror networks, coordinated attacks and increase in the incidence of religion motivated attacks. But, the term terrorism was not used in anti-government sense before the early 20th century and the twentieth century saw involvement of State actors in promoting as well

as countering terrorism resulting in large scale violent oppression and political assassinations in many parts of the world. As early as in 1930s global initiatives like the convention on extradition and the Convention for Prevention and Punishment of Terrorism¹ were taken to address terrorism as there were many political assassinations, particularly in Europe.

2. Terrorism and global response:

During the second half of twentieth century, the international community started seriously acting on terrorism by adopting various treaties and such treaties initially covered crimes against civil aviation and shipping; criminalizing possessing, threatening or using bombs; and terror finance. International treaties on suppression of bombings, terrorism financing, and on unlawful acts against the safety of civil aviation are notable in this regard. Still, there were instances of cross border terror acts and counter terror operations by States in other jurisdictions in the twentieth century. In fact, State sponsorship of terrorism, besides expanding the resource base of terror organizations, increases the risk of War Between the States. But, until the emergence of Al-Qaeda and other non-state actors at the end of twentieth century terrorism was considered as domestic law and order challenge.

Post the 09/11 attacks² terrorism has been recognized as a global challenge and multinational cooperation has become an essential ingredient of the global anti- terror strategy. Subsequent to the USA's

¹Following the assassination by Croatian and Macedonian separatists of King Alexander I of Yugoslavia in Marseilles in 1934, the League of Nations adopted the Convention on Prevention and Punishment of Terrorism in 1937.

²On September 11, 2001, nineteen militants associated with the Islamic extremist group al Qaeda hijacked four airplanes and carried out suicide attacks against targets in the United States. Two of the planes were flown into the twin towers of the World Trade Center in New York City, a third plane hit the Pentagon in Virginia, and the fourth plane crashed in a field in Pennsylvania. About 3000 people were killed during the 9/11 terrorist attacks which triggered major US initiatives to counter terrorism.

declaration of ‘war on terror’³, many regional and global initiatives have been taken aiming at addressing specific aspects of terrorism like terror funding, nuclear terrorism and terrorism bombing. Global and regional bodies such as the United Nations, European Union, Inter-American Counter Terrorism Committee, Financial Action Task Force, etc., are at the forefront to converge global efforts in the fight against terrorism. Regional groups like the ASEAN, African Union, BRICS⁴ and NATO also have a shared understanding on countering terror activities though the primary objectives of these regional groups is economic cooperation. At global level, there are at least sixteen UN facilitated treaties in force aiming at promoting transnational cooperation for evolving counter-terrorism strategies. Nevertheless, the UN negotiated treaties are not binding on the State parties.

For Gallo (2018), terrorism we confront today is the outcome of political alienation, grievances, sub-cultures of misinformation and conspiracy; and terrorism will continue to exploit societal fragmentation (Bapat, 2012) and weak governance (Azam, 2012) to push through their ideologies. Similarly, regional and inter-state conflicts, democratic retrenchment, and demographic pressures can lead to socio-political and economic pressures which terrorism has long exploited for its existence (ODNI, 2021). Arguably, far-right-wing wave of terrorism characterized by racism, fascism, anti-semitism and extreme nationalism is underway (Auger, 2020). According to Koehler (2016) right-wing extremism covers a broad range of ideologies that essentially see violence as legitimate tool to combat the political or ethnic enemy. Thus, the threat posed by terrorism now is complex, globalized, and connected to a number of threats (Fink, 2012) challenging continuously the efficacy of State response.

It is believed that the counter-terrorism strategies are hurt partly by the fundamental assumptions of the strategies, including the lack of

³War on terror is the term used for describing the USA led counter terrorism campaign in response to the 9/11 attacks.

⁴It is a group of five emerging major economies: Brazil, Russia, India, China and South Africa.

enthusiasm shown by State actors in holding themselves committed to global anti-terror initiatives, and partly by the evolving nature of terror practices. These reasons explain the range of shortcomings the current counter-terrorism strategy faces in fighting terrorism while it is true that State response to terrorism also has evolved over the years from capacity building to creating strong legal instruments. Leadership and networks of terror groups like the Al-Qaeda have been disrupted and the challenges of terrorism have been understood with more precision by anti-terrorism policy makers. Similarly, the evolution of transnational alliance against terrorism has incorporated engagements with partner countries, adopting global norms, awareness creation, and evidence sharing as components of the counter-terrorism package. But, the strategy choices open for States in devising their counter-terrorism strategies are limited though the State has a monopoly, at least theoretically, over use of violence. Engaging military resources, using political and social institutions, blocking terrorists' access to resources and intensifying police actions are the lawful courses of action available with the State for fighting terrorism. Also, there are evidence of trial and error based counter terror measures taken by countries such as France and Israel (Suzan & Shapiro, 2007) with encouraging outcomes in their contexts. But, deriving strong policy conclusions from discrete examples like Israel is also problematic for different reasons. Besides, the decades old counter-terrorism campaign has failed to identify convincing case studies of States that have successfully controlled terrorism as the terror phenomenon keeps taking different forms in many parts of the world. Thus, the State response to control the terror challenge remains inadequate, and terror and counter terror campaigns continue to happen as cause and effects of each other.

3. Counter-terrorism and challenges:

The current counter-terrorism strategy broadly covers targeting terrorist leaders and groups, securing borders, tightening financial controls, strengthening the role of police, improving criminal justice systems, and

providing mutual legal assistance⁵ in addition to awareness creation and capacity building. Essentially, military action remains the most visible state response to terrorism so far. Destabilizing the terror groups and targeting terrorist leaders for causing arrest or death through security forces are at the core of current counter-terrorism strategy. Right from Israel's hostage rescue operation in 1976⁶ in Uganda to the recent anti-terror campaign in Afghanistan led by the United States of America were essentially military actions. Even domestic terrorism is responded by the States predominantly through military interventions. But, military campaigns to control terrorism have failed in Iraq, Somalia, Mali, Cameroon, Nigeria, Iraq, and recently in Afghanistan. Also, developments in Iraq and Afghanistan indicate that intervention by strong economic and military powers like the USA and European Union is not sufficient enough to control terrorism.

On theoretical aspect, the fundamental premises of the current counter-terrorism strategies are that there is a positive correlation between poverty and terrorism, and terrorism is predominantly anti-Western. Also, it is being believed by policy makers that terrorism can be defeated, and that de-radicalization and decapitation of terror groups really work. But, most of these assumptions are anecdotal, and evidence is that many of the poorest countries do not have terror problems while a good number of advanced countries struggle with terrorism. Groves (2008) argues that terrorism could be a high-skill and high-wealth profession attracting motivated and privileged individuals though poverty can facilitate terrorism. For London (2020), global powers often see terrorism through skewed political optics rather than the broader threat.

Similarly, the argument that terrorism is predominantly anti-Western also do not have credible evidence as many countries including the USA, Italy, Spain and the UK face the problem of domestic terrorism. Actually, Boston marathon bombings, San Bernardino shootings and Orlando

⁵Mutual Legal Assistance is the cooperation mechanism between two countries for exchange of information in criminal matters.

⁶It was a rescue mission by Israeli commandos at Entebbe airport in Uganda to release Jewish hostages after their plane was hijacked by Palestinian and German terrorists.

shootings in the West were committed by home-grown terror networks (Crenshaw, 2020) rather than by transnational anti-Western terror groups. De-radicalization efforts by the States have also produced very limited results as globalization and technological advancements have greatly impacted the practice of terrorism. Particularly, the Internet has added a new dimension to radicalization and evidence indicates that terrorism can be fueled through online propaganda leading to self-radicalization rather than being radicalized by specific terror groups. It has been found that the Internet accelerates self-radicalization, allows radicalization without physical contact, and acts as an echo chamber for furthering extremist beliefs (Behr et al, 2017).

It is evident that terrorism keeps evolving and there have been noticeable changes in the approach and targets of terror groups over the period of time. While theatrical targets like hostage takings and hijackings replaced the military targets in the left wing wave, defining features of the contemporary religious ideology driven terrorism are religious appeals, suicide bombings, wider recruiting tactics, massive radicalization, and more deadly attacks. Until recently, many of the tactical methods adopted by terror groups closely resembled those used by the States in armed conflicts, and the ‘principle of distinction’⁷, used to be respected by terror organizations. Now, terror attacks have become more indiscriminate and there is lack of target killings due to advanced weaponry and security systems though target killings still continue to occur. High level bombing capacities and weapons of mass destruction that create huge impacts in the society are the distinguishing features of contemporary terror practices (UNODC, 2021).

Organizational structures of the contemporary terror groups also show more decentralized command (Carley, 2019). Drastic changes in the structure and approach of terror organizations are driven by issues of sustainability and counter-terrorism strategies adopted by the State. It has been found that sustainability of terror groups is encouraged by

⁷The principle of distinction specifies that combatants must distinguish themselves from civilians. In other words, combatants must neither deliberately target nor indiscriminately or disproportionately harm civilians in the conflict.

distributed command, diversified attacks, multiple home bases and locating in a democratic country (Gaibullov, 2013). Similarly, religious fundamentalism influenced terror groups have been found to have better survival prospects than other groups. Fink (2012) argues that today's terrorists have diversified supply lines and sources of finance, exploit communication technologies, adopt decentralized structures, and outsource operations to franchises or individuals. Similarly, weapons, people, and materials move across borders, ideas move over the Internet and cash flows through mobile phones or alternative remittance systems. These apart, densely populated urban centers, interconnected economies and societies, and increased dependence on technology for financial, military, and transportation systems underline the vulnerabilities of the State response in the fight against terrorism (Tarapore, 2020). Thus, it is obvious that the current counter-terrorism strategies aiming at hierarchical, centralized, and geographically limited groups are producing sub-optimal results.

4. The definition problem:

The fundamental problem in addressing terrorism is the lack of an agreed definition as the term terrorism remains a contested concept. For Schmid (2004), distinction between the terms terrorist, freedom fighter and liberation movement activist has been as controversial to debate and define as the definition of terrorism. For these reasons differing views on terrorism still persist on whether 1. The State can commit acts of terrorism, and 2. The quest for self-determination can preclude an act otherwise falling under the definition of terrorism (Scheinin, n.d).

The major constraint in arriving at an agreed definition on terrorism is disagreement among the States over de-legitimizing and criminalizing certain behaviours and groups for the purpose of defining terrorism. Dugard (2001) argues that such differences are more political than legal. Evidently, governments often show an inclination to target individuals or groups that do not deserve to be labeled as terrorists. Particularly, in the aftermath of the 9/2011 attacks, the States have resorted to vague and broad definitions of terrorism in the name of fighting terrorism. There

have been instances of perversion of definition of terrorism for demonizing, oppressing and victimizing the opponents, political bodies and religions in many States. Thus, terrorism remains too elusive a term for an internationally agreed definition (Grozdanova, 2015) and thus, counter-terrorism efforts are not purely apolitical.

Lack of a common definition on terrorism has implications on counter-terrorism strategies as it creates constraints in harmonizing the anti-terrorism strategies across jurisdictions. Also, ambiguities in definition can offend the ‘principle of legality’ which is the corner stone of democratic politics. Lack of standard definition of terrorism often leads to the problem of double standards⁸ in the fight against terror and there are evidence of ideological bias, political self-interest and being selective in approaching terrorism by some States. Studies indicate that terrorism is being used for covert operations in other jurisdictions by some States as engaging in conventional war is a costly choice in the contemporary world. There are evidences of the State sponsored terror acts, and the State actors involving in cyber terrorism to steal information, spread disinformation and to engage in proxy and psychological wars in other countries (Thuraisingham & Kallberg, 2013). Thus, addressing the definition question is critical for bringing-in clarity to the counter-terrorism debate (Jessica, 2002), to de-politicize the issue (Neill, 2003), and to control double standards (Krueger, 2003) in the counter-terrorism campaign.

5. State sponsorship

State sponsorship to terrorism, despite continued condemnation for years, remains a reality. Since 1970, over fifty States have engaged in State sponsorship to terrorism in different ways (Berkowitz, 2018). State sponsorship to terrorism can be through controlling the terror groups (Byman, 2009), coordinating the activities of terror groups, and by ignoring the activities of terror groups (US Department of States, 2006). Obviously, modern terrorist organizations are better funded, well

⁸*Double standard* is a principle or policy that is applied in a different manner to similar things, without proper justification.

organized and well informed of the dynamics of their targets. McFayden (2009) attributes this to the State sponsorship of terrorism.

There are many causes for the State sponsorship to terrorism. It has been found that defects in political and administrative systems prompt the States to resort to sponsoring terror activities for maintaining political stability (Siegfried, 2017). In other words, terrorism can be the outcome of failure of politics. In some cases there has been similarity of goals between the State and terror groups like in the case of Libya which used terrorists to bomb aboard Pan Am 103 in 1988. But, double standards in acting against terrorism cause inconsistencies in the global counter-terrorism efforts by undermining the unity required for fighting terrorism. Neill (2003) argues that terrorism thrives on double standards and inconsistencies in the State's approach. The UN (2017) has also emphasized that there is need for the States to refrain from organizing, instigating, facilitating, participating in, financing, encouraging or tolerating terrorist activities, and to take appropriate practical measures to ensure that their territories are not used for terrorist bases or preparation or organization of terrorist acts intended to be committed against other States.

Besides undermining the global norms against terrorism, the State sponsorship of terrorism has implications on the functioning of enforcement agencies as there is high degree of deniability of evidence for identification of terrorists, tracing the motivations and support network, investigation, and subsequent trials in instances where the States promote terrorism covertly. Another serious issue associated with the State sponsorship of terrorism is the foreign fighter phenomenon. There have been evidences of foreign fighters involved in the Spanish civil war, Afghan war, and in political conflicts in Chechnya. The Mumbai attacks⁹ and Syrian conflict also indicate that people move to other jurisdictions to become members of terror organizations (Efrain,

⁹There were a series of terrorist attacks that took place in November 2008, when 10 members of Lashkar-e-Taiba, an Islamist terrorist organization from Pakistan, carried out 12 coordinated shooting and bombing attacks lasting four days across Mumbai. A total of 175 people died, including nine attackers, and more than 300 were wounded.

2018). When there is State sponsorship to terrorism, identifying and repatriating the foreign fighters and collecting evidence from other jurisdictions become serious concerns to the enforcement agencies. Thus, counter-terrorism strategies should address the questions of which the States do sponsor terrorists, why they choose to engage in sponsoring terrorism and what kind of global norms can constraint the States from sponsoring terrorism either covertly or overtly.

6. Right-wing extremism, religious fundamentalism and terrorism:

According to the European Commission (2016), radicalization is the phenomenon of people embracing opinions, views and ideas which could lead them to terrorism. Violent extremist belief systems or narratives can facilitate the process of radicalization and adopting a religious or ideological belief system that justifies violence is central to the process of becoming a violent extremist (Arlington, 2015). Thus, radicalization should be understood in the broader context where belief systems politicize and prompt the individual or group's behaviour to resort to even violent means for achieving their objectives. The current counter-terrorism research admits that fighting radicalization is an integral component of counter-terrorism strategy. Both far-right-wing and religious fundamentalist organizations, which consider engaging in terrorism as duty to protect their respective belief systems, have been found to be radicalizing individuals.

In the last few decades, religious fundamentalism has emerged as the most visible political manifestation of religions and is behind many powerful political mobilizations and sensational acts of violence across the world. Apart from perceived hostility and injustice, historical antagonism and political climates have a decisive role to play in religious fundamentalism induced radicalization. Like religious fundamentalism driven terror groups, right-wing extremist networks are also coordinating internationally today more than ever before (Musharbash, 2021) and it has been estimated that the far right-wing extremist movements were responsible for 73% extremism related murder in the USA between 2011 and 2020 (Mason, 2020). Though right-wing extremism is not a new

phenomenon, large scale immigration from conflict prone zones to other countries and racial supremacy has contributed to the rise of far right-wing extremism in the twenty first century. But, it is true that right-wing extremism is being seen through the pre-existing focus on radical Islam (Munira, 2021) and thus, there is the danger of approaching right-wing extremism as National Socialism or reciprocal radicalization to radical Islam since there is the likelihood of alignment of political objectives between the States and right-wing extremist networks. Miller (2021) argues that the war on terrorism has supercharged the racists, supremacists, anti-government militias and anti-globalizers to capitalize on the global socio-political upheavals to advance their intolerant political ideas and violence (Pantucci, 2021). It is thus, essential that the counter radicalization narrative is not skewed in factoring the actual forces at work.

Though radicalization is not age specific, young populations have been found to be susceptible to recruitment by terror networks through radicalization¹⁰ (Darden & Jessica, 2019). Similarly, poverty (Winter, 2019) and social media use (Holt et al, 2019) have been found to be playing an increasing role in radicalization. Holt et al (2019) further argue that self-radicalized individuals use social media to network with other terrorists. The scope of the challenges of radicalization is evident from the facts that the Europol removed 1906 URLs linking to terrorist contents on 180 platforms in one day and the Facebook removed over 4.7 million pieces of content connected to organized hate and terrorism (UNICRI, 2020). Despite radicalization being a context-bound (Bailey, 2018) phenomenon, religious fundamentalism, racial or ethnic superiority, politico-economic exclusions and wide spread injustice can make radicalization global (Rogelio, 2006). Here, counter-terrorism efforts must understand that terrorism is neither monolithic¹¹ nor wholly religious as there are multiple groups with transnational networks, but not necessarily with converging objectives, engage in acts of terrorism.

¹⁰*The process by which an individual or group comes to adopt increasingly radical views in opposition to a political, social, or religious status quo.*

¹¹*Monolithic is something which is united and difficult to change.*

7. Feminization of terrorism:

Anti-terrorism literature reveals that terror practices keep evolving to evade the State interventions, and that there are instances of women being recruited by terror networks in large scale exploiting the gender misconceptions and stereotypes (European Parliament, 2017) about women. Role of women as informers, collaborators, human shields, recruiters, and as perpetrators (Berko, 2007) has been found in many terror attacks. Still, there is a definite deficit of integrating the gender perspective in counter-terrorism strategies (Sjoberg, 2015) and gender stereotyping of attributing terror acts to male traits has historically been defied. It is equally true that terrorist groups target women through acts of gender based violence for recruiting them (UNODC, 2021).

During the late nineteenth century, female terrorists played a decisive role in terrorism in Russia (Hilbrenner, 2016). The Red Army faction (Baader-Mein-hof) in Germany, Italian Red Brigades, and Red Army in Japan had women leaders. Palestine Liberation front had Leila Khaled participating as the first female terrorist in a plane hijacking in 1969. The role of women as suicide bombers in terror acts is also evident in many parts of the world. During 2016, twenty six percent of the total terrorists arrested in Europe were women and during 2017, 181 women participated in 100 suicide attacks (Jamile, 2019). Kurdistan Workers Party, the Liberation Tigers of Tamil Elam, the Hamas, Revolutionaries of Colombia, the al-Aqsa Martyrs etc. have engaged women suicide bombers in their attacks. From early 2000s, the Islamic Supreme Council of Palestine and Al-Qaeda have engaged women in their terror activities (Bodziani, 2019). Recently, the ISIS¹² has recruited women in their networks.

Women are engaged by terror groups for recruitment and operational supports also. Some women networks in the USA, Palestine, Indonesia and in Pakistan have been found to have involved in funneling money to terror groups (Jamile, 2019) in a clandestine manner. Similarly, women

¹²Islamic State in Iran and Syria.

networks in Belgium and Spain have been found involved in recruitment activities for Al-Qaeda (Europol, 2016).

Bigio & Rachel (2019) argue that omission of women in countering radicalization put the States at disadvantage in fighting terrorism. They further argue that due to their distinctive advantages of access and influence, women can be crucial anti-terrorism messengers in educational, religious and local political institutions. Thus, it is necessary to ensure greater gender participation and leadership for effective counter- terrorism strategies. Integrating gender perspective in counter-terrorism needs to address the issues of women as victims of terrorism, women as agents of preventing terrorism and women as members of terror networks.

8. Terrorism, organized crimes and money laundering:

Growing nexus between terrorism and organized crime¹³ is another concern to countering terrorism as the relationships between these two crimes are opportunistic (UNODC, 2021) and mutually reinforcing. Terror groups have been found to be benefiting from organized crimes such as drug trafficking, kidnapping for ransom, exploiting natural resources and trafficking in persons. Another critical dimension of organized crimes and terrorism nexus is terror funding through money laundering across jurisdictions, and foreign terrorist funding has emerged as one of the main forms of material support to terror groups from other jurisdictions. Money laundering and terrorism funding can have serious consequences to the stability of financial systems and the jurisdictions with weaker financial controls have been attractive sources for money laundering and terrorism funding.

By definition, the wealth involved in money laundering is from illegal sources, and terror networks have been found to be involved in money laundering by obscuring the source and destination of the illicit

¹³*Organized crime is a continuing criminal enterprise that rationally works to profit from illicit activities that are often in great public demand. Its continuing existence is maintained through corruption of public officials and the use of intimidation, threats or forces to protect its operations.*

wealth and by manipulating the financial instruments. FATF¹⁴ (2016) admits that the international pricing systems are prone to wide range of risks and vulnerabilities that can be exploited by terror groups. False reporting of invoices, creating shell companies, under or over valuation of goods/ services, third party intermediaries facilitating invoice settlements etc, are the known vulnerabilities in international trade; and trade based money laundering¹⁵ is used for terror financing by manipulating the invoicing systems.

Similarly, online payments and commercial websites also facilitate terror financing through cross border transactions, non-face-to face registrations (Neil, 2001), possible anonymity of the users (FATF, 2007), and speedy transactions. The banking sector, the remittance sector, front business entities, bearer negotiable instruments, and electronic and online payment systems have been found to be used by terrorists as the key channels for fund-raising. Strengthening Financial Intelligence Units and complying with the recommendations of Financial Action Task Force (FATF) can be effective in controlling terror funding through money laundering. It is also necessary to bring-in suitable changes in the anti-money laundering legislations to make money laundering a standalone offence. In many jurisdictions the definition of money laundering is still linked with 'proceeds of crime' which warrants a registered predicate offence for investigating into money laundering aspects by the enforcement agencies. Many countries including Afghanistan, Iraq, Sri Lanka, Nigeria, Saudi Arabia and Panama have strategic deficiencies in their anti-money laundering and anti-terrorism framework as identified by the European Commission and such deficiencies can undermine the counter-terrorism strategies.

¹⁴Financial Action Task Force is an inter-governmental initiative of the G-7 countries, formed in 1989 to fight money laundering. In 2001, the FATF was authorized to formulate policies on terror funding also.

¹⁵Trade based money laundering is the process of disguising the proceeds of crime and moving value through misrepresentation of price, quantity or quality of imports or exports.

9. Enforcement challenges:

Similarly, investigation and trial of terror offences have been found to be inefficient in many countries (Bureau of counter terrorism, 2019). Since terrorism is a transnational phenomenon multinational cooperation is necessary for extradition, transferring criminal proceedings, confiscating and repatriating stolen assets, and for exchange of intelligence in terror cases. But, due to lack of harmonization of legal instruments across jurisdictions there are obstacles like ‘dual criminality’¹⁶, and ‘rule of specialty’¹⁷ in extradition, evidence collection and in trials. Such issues need to be addressed through harmonizing legislations and by pragmatic application of ‘dual criminality’ and ‘rule of specialty’ principles in offences related with terrorism.

It is well understood by policy-makers that conditions related to poor governance, structural inequalities, injustice, and violations to human rights and rule of law are the factors that promote and sustain terrorism. Similarly, conflict, sense of insecurity, limited access to justice and weak institutions also act as drivers of terrorism. Thus, the issues of political grievances, conflicts for power and religious fundamentalism need to be understood in right perspectives while employing the counter-terrorism instruments. The State and enforcement agencies need to understand that the terror phenomenon has an appalling narrative to expand its support base.

It is true that the counter-terrorism campaign itself has produced many undesirable outcomes, and in many countries the measures adopted by the States have compromised the principles of rule of law and personal freedom re-fueling terror motivations. Similarly, there have been instances of specific, targeted and extra-judicial killings by enforcement agencies while fighting terrorism. Resorting to torture, making secret evidence admissible etc., that violate the fundamental principles of law have also been reported in many anti-terror campaigns.

¹⁶According to this rule, the offence covered by the extradition request must constitute an offence under the law of both States concerned for the request to be granted.

¹⁷According to this rule, the individual may be prosecuted by the requesting State only for those acts that were the subject of the request for extradition.

Such measures cannot facilitate the State to build its capabilities to fight terrorism, rather, can prove counter-productive in the long run by sustaining the terrorism phenomenon.

10. Conclusion:

From evidence available, the limitations of current counter-terrorism strategies are obvious, and evidence also indicates that additional results achievable through counter-terrorism strategy are limited due to the impacts of multiple variables that operate at structural level in many countries. Even if we accept the argument that the current counter-terrorism strategies could result in significant improvements in controlling terrorism, this does not establish that the improvements will be sufficient enough for achieving effective control over terrorism in future given the growing complexities in the terror phenomenon. Similarly, paying exclusive emphasis on global approach rather than addressing the inconsistencies in implementation and context specific drivers will continue to undermine the efficacy of counter-terrorism initiatives. Also, we notice that not all countries make similar improvements in countering terrorism due to contextual reasons that range from gender discrimination to sponsoring terrorism and from political instability to weak institutions. For these reasons, at best, the current counter-terrorism campaign has given terrorism a global outlook while remaining inadequate in achieving the very objective of controlling terrorism.

It is necessary that counter-terrorism strategies are constantly reviewed and suitable adjustments made to face the emerging challenges as there is no blueprint of necessary capabilities that can be built by the States for countering terrorism. It must be kept in mind that terrorism is ideology driven and many associated variables that impact the motivations of terror groups need to be addressed for controlling terrorism. In spite of terrorism being a global challenge, the provisions of international conventions on terrorism are still not binding upon the State parties resulting in inconsistencies in anti-terror interventions. This hampers the process of stabilizing counter-terror practices across

jurisdictions. Making the provisions of international conventions binding upon the State parties can facilitate evolving a common global strategy besides helping to identify the deviant State actors in the fight against terror. Also, this will help to reach a common understanding about the terror behaviours that need to be criminalized where there is still disagreement among the governments.

Similarly, there is considerable debate and empirical evidence about the involvement of women in terror activities and integrating gender perspective in counter-terrorism strategies is an area that requires attention. Research on actively engaging women in educational, religious and political institutions for anti-terrorism work can answer the questions whether women can address the specific terror challenges like radicalization and preventing the women from getting trapped by terror networks. Also, strong financial systems, legal instruments with enhanced international cooperation in evidence sharing are essential for controlling terror funding. Similarly, working with global partners for exempting the application of dual criminality and rule of specialty principles in terror cases can to a large extent help the enforcement agencies to play a constructive role in fighting terrorism.

Ultimately, ensuring that the State remains morally high by respecting the principles of personal freedom in the counter-terrorism campaign will be the convincing response to terrorism as the challenge is political even by definition.

References:

- Arlington. (2015). *Radicalization and violent extremism: lessons learned from Canada, USA and the US*. National Institute of Justice. Washington: US Department of Justice.
- Auger. (2020). *Right-wing terror: a fifth global wave? Perspectives on terrorism*, XIV (3).
- Behr. (2017). *Radicalization in the digital era*. RAND Corporation.
- Berko. (2007). *Gender, Palestinian women, and terrorism: women's liberation or oppression? Studies in Conflict and Terrorism*, XXX (6), 493-519.

- Berkowitz. (2018). Dangerous delegation: explaining the rationale and outcomes of state sponsorship of terrorism through the principal-agent framework. Binghamton: Binghamton University.*
- Bigio, & Rachel. (2019). Women and terrorism: hidden threats and forgotten partners. Washington: Council on Foreign Relations.*
- Bodziani. (2019). Terrorist activity of women: an outline of the problem. Faculty of Security Studies. Wroclaw: The General Kosciuszko Military University of Land Forces in Wroclaw.*
- Byman. (2009). The changing nature of State response of terrorism. The Saban Center for Middle East Policy. The Brookings Institute.*
- Carley. (2019). Structural knowledge and success of anti-terrorist activity: the downside of structural equivalence. Washington: Department of Defense, the Office of Naval Research (ONR), United States of America.*
- Crenshaw. (2020). Rethinking transnational terrorism: an integrated approach. Washington: United State Institute of Peace.*
- Darden, & Jessica. (2019). Tackling terrorists- exploitation of youth. May.*
- Dugard. (2001). The problem of definition of terrorism in international law. In Eden, & O 'Donnel, A turning point in international and domestic law? (pp. 188-216). New York: Transnational Publishers.*
- European Parliament. (2017). Radicalization and violent extremism- focus on women: how women become radicalized, and how to empower them to prevent radicalization? Brussels: Directorate General for Internal Policies of the European Union.*
- Europol. (2016). European Union terrorism situation and trend report 2016.*
- FATF. (2007). New payment methods. Financial Action Task Force.*
- Fink. (2012). Meeting the challenge: a guide to United Nations counter terrorism activities. Washington: International Peace Institute.*
- Gaibullov, K. (2013). Determinants of the demise of terrorist organizations. Southern Economic Journal, 79 (IV), 774-792.*
- Gallo. (2018). Strategic counter terrorism failure: why we continue doing the same thing and expecting different results?. Modernwar.*
- Grozdanova, R. (2015). Terrorism- too elusive a term for an international definition? Netherlands International Law Review, 305-334.*
- Heyman. (2003). Covert action: the roots of terrorism. Power and the Semantics of Terrorism.*

- Hilbrenner, A. (2016). *The Perovskaia paradox or the scandal of female terrorism in nineteenth century Russia. The Journal of Power Institutions in Post Soviet Societies*, XX (16).
- Hoffman. (1998). *Inside terrorism*. London: Oxford University Press.
- Jamille. (2019). *Women and terrorism*. New York: Council on Foreign Relations.
- Koehler. (2016). *Right-wing extremism and terrorism in Europe. Current Development and Issues for the Future*, VI (2).
- Kydd, & Walter. (2006). *The strategies of terrorism. International Security*, XXXI (1), 49-79.
- London. (2020). *Rethinking US counter-terrorism strategy*. Middle East Institute.
- Mason. (2020). *Extremist ideology as a complex contagion: the spread of far right radicalization in the United States. Humanities and Social Sciences*, VII (49).
- McFayden. (2009). *Global implications of State sponsored terrorism*. Kentucky State University.
- Munira. (2021). *Right-wing extremism has deep roots in South East Asia. Global Network on Extremism and Technology*.
- Musharbash. (2021). *The globalization of far right-wing extremism: an investigative report*. Combating Terrorism Center.
- Neil. (2001). *Internet-based financial services: a new laundry? Journal of Financial Crimes*, IX (2), 134-152.
- Neill. (2003). *Human rights, the United Nations and the struggle against terrorism. International Peace Academy*.
- ODNI. (2021). *The future of terrorism: diverse actors, fraying international efforts*. Washington: National Intelligence Council.
- Orehek, & Vazeou. (2014). *Understanding the terrorist threat: policy implications of a motivational account of terrorism. Policy Insights from the Behavioral and Brain Sciences*, I (1), 248-285.
- Pantucci. (2021). *Persistence of right-wing extremism and terrorism in the West. Counter Terrorist Trends and Analysis*, 118-126.
- Rogelio. (2006). *Radicalisation processes leading to acts of terrorism*. European Commission. Official Journal of the European Union.

- Rosand, E., Chowdhury, N., Fink, & Ipe, J. (2009). *Countering terrorism in South Asia: Strengthening multilateral engagement*. New Delhi: Center for Global Counter Terrorism Cooperation.
- Scheinin. (n.d). *Unilateral exceptions to international law: systematic legal analysis and critique of doctrines that seek to deny or reduce the applicability of human rights norms in the fight against terrorism*. Florence: European University Institute.
- Schmid, A. (2004). *Terrorism- the definition problem*. *Case Western Reserve Journal of International Law*, 36 (3), 375-419.
- Siegfried. (2017). *Pakistan and state-sponsored terrorism in South Asia*. In *Terrorism revisited*. South Asia Democratic Forum.
- Suzan, B., & Shapiro, J. (2007). *The French experience of counter-terrorism*. *Global Politics and Strategy*, 45 (I), 67-98.
- Tarapore. (2020). *Rebalancing counter terrorism*. India.
- Thuraisingham, & Kallberg. (2013). *From cyber terrorism to State actors' covert cyber operations*. *Strategic Intelligence Management*, 229-233.
- UNICRI. (2020). *Algorithms and terrorism: the malicious use of artificial intelligence for terrorist purposes*. United Nations Office of Counter Terrorism.
- UNODC. (2021). *A brief history of terrorism*. Counter terrorism. Vienna, Austria: United Nations Office on Drugs and Organised Crimes.
- UNODC. (2021). *Counter terrorism teaching guide*. Vienna, Austria: United Nations Office on Drugs and Organised Crimes.
- US Department of State. (2006). *Building international will and capacity to fight terrorism*. Washington: US Department of State.
- Waugh. (2018). *The values in violence: organizational and political objectives of terrorist groups*. *Conflict Quarterly*, 5-19.

Author's Profile:

Kannan Perumal, IPS

Deputy Inspector General of Police, Shahabad Range, Bihar



Sardar Vallabhbhai Patel
National Police Academy
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Bail Provisions and the Role of Police

Dr. K.P.A. Ilyas, IPS* & Dr. Rajesh Kumar Mohan, IPS**

Abstract:

One of the basic roles of a police officer is to investigate a crime. The process of investigation starts right from receiving a complaint and goes through various stages like registration of FIR, reaching Scene of Crime, making Panchanama, taking witness statements, arrest of the accused, seizures, and many more steps ultimately culminate in the filing of a police report in the Court. One of the powers vested in the police officer is to deprive an individual of personal liberty by arresting him and keeping him in the custody. This power is conferred to ensure that the objective of a fair trial is achieved. In doing so many protections are given to the accused in the form of bail provisions.

Considering the pivotal role given to the police officers by our statutes in the investigation process it is essential for them to be abreast with all the details of the bail provisions. Having noted that, it is also true that these provisions are not only complex and overlapping but have undergone various changes during the course of the evolution of the law.

This write-up is an attempt to understand the nuances of the bail provisions. The onus is on the role of police officers in this particular process of the criminal justice system. Emphasis has been laid

*Assistant Director, Sardar Vallabhbhai Patel National Police Academy, Hyderabad

**IPS Probationer of 74 RR

specifically on explaining key terms such as statutory bail, transit bail, mandatory bail etcetera and also encouraging police officers to use the provisions of the law such as Section 437 of CrPC to the fullest possible limit in order to dispense justice to all the members of society.

Keywords:

Bail, offence, Criminal Justice System, Mandatory bail, Anticipatory bail, Transit bail, warrant, undertrials, incarceration, jail.

Introduction:

Police along with the judiciary are important pillars of the Criminal Justice System. The ultimate end of this system is to deliver justice to both the accused and the victim of a crime. In common law jurisdictions, there are multiple procedures implemented to create a system that dispenses justice by balancing various values. Take the example of the bail versus jail provisions. These are procedural mechanisms to ensure the appearance of an accused in a court of law. In achieving this objective a just balance is needed between the personal liberty of the accused on the one hand and the societal need for a fair trial on the other hand.

Chapter XXXIII (from Section 436 to 450) of the Criminal Procedure Code (CrPC) deals with bail provisions. The role of the judiciary is central in the just implementation of these sections and so is that of the police. The primary purpose of bail provision is to ensure attendance of the accused during the investigation of the case or during the trial stage at the same time to reduce needless incarceration of the accused. To understand it in more detail we should know that the CrPC divides all the offences into two categories i.e. 'bailable offences' and 'non-bailable offences'. This classification is mentioned in the first schedule of the CrPC. In the former category, bail is granted as a matter of right and must be granted by the police itself. In the latter, however, bail is granted using discretionary power and the accused can't claim it as a right. Broadly speaking we can divide the bail provisions into two categories. One as mandatory bail provisions where bail „shall“ be taken. The second is discretionary bail provisions where bail „may“ be taken.

Mandatory Bail Provisions:

Section 436 of CrPC (Section 436 in The Code Of Criminal Procedure, 1973, n.d.)¹ deals with bailable offenses. This section reads like this: “In what cases is bail to be taken. When any person other than a person accused of a non-bailable offence is arrested or detained without warrant by an officer in charge of a police station, or appears or is brought before a Court, and is prepared at any time while in the custody of such officer or at any stage of the proceeding before such Court to give bail, such person shall be released on bail”. The usage of the word „shall“ in it means that the bail is mandatorily taken after the arrest of the person accused of a bailable offense. The police must take the bail from the accused and he/she should be released from custody which can be either police or judicial.

There are two more ways where taking bail is mandatory. First, one is mentioned under Section 71 of CrPC (Section 71 in The Code Of Criminal Procedure, 1973, n.d.)². This relates to the situations when a Court may issue a warrant for arrest. Along with the warrant, the Court may issue an endorsement that if the person arrested executes a bond with sufficient sureties for his attendance in the Court then the officer to whom the warrant is directed „shall“ release that person from custody. Again the usage of the word „shall“ signifies the mandatory nature of the direction.

The second way is under Section 167(2) of the CrPC (Section 167(2) in The Code Of Criminal Procedure, 1973, n.d.)³. Suppose a person is arrested without a warrant (which is a more frequent method in practice and is covered under Section 41) and taken in custody, then under Section 57 he has to be produced in front of a magistrate within 24 hours. However, the investigation may not be complete within 24 hours so the magistrate may authorize his detention beyond this period. In such cases, if the investigation is not completed within 60 or 90 days, as the case may be, then the person „shall“ be released on the bail. In this, the role of the police is not there. This provision is called by various names such as default bail or compulsory bail or statutory bail. All these terms signify that there is limited or no discretion in granting bail. There is, however, a

catch here related to the counting of the days. In *Ravi Prakash Singh v State of Bihar* (2015) (*Ravi Prakash Singh @ Arvind Singh vs State Of Bihar* on 20 February 2015, n.d.)⁴ case, the Supreme Court has interpreted the law saying that the day on which the accused is remanded to judicial custody has to be excluded and the day charge-sheet is filed in the court has to be included in counting the days taken to investigate. Recently, the Bombay High Court took a contrary view. However, this order has been stayed by the apex court and matter is sub judice. Except for the counting of the days, there is no confusion about the usage of these mandatory provisions of bail.

Discretionary Bail Provisions:

Section 437 of CrPC (Section 437 in The Code Of Criminal Procedure, 1973, n.d.)⁵, however, is always a matter of great discussion and debate. This is so because on the first reading of this section it appears that police also have a discretionary role in giving bail in non-bailable offences. Among other things, it says that *'If it appears to such an officer or court at any stage of investigation ... be released on bail... An officer or a Court releasing any person on bail ...'* Despite such a clear-cut mention of the word „officer“ this provision is hardly exercised by the police officers in the field. This ground situation may make us think that these provisions have given a limited role to the police in delivering justice. However, this is far from the truth. If we dwell deeper into the law, we will find that our statute has given a far greater role to the police officers. Let's try to find out what the legal position is on this Section of CrPC.

As we have seen, there is a clear mention in Section 437 of the word „officer“. Along similar lines, the second schedule of CrPC which contains Form No. 45 attached to it also uses the words like 'Bond and Bail-Bond for attendance before Officer in Charge of Police Station or Court.'

The intention of the legislature to give discretionary bail powers to police officers in non-bailable offences is further strengthened by the opinions expressed in the 1922 Sapru Committee (Sohoni & Gopal, 20)⁶ on CrPC. It was a select committee headed by Tej Bahadur Sapru which

proposed amendments to the old CrPC. The select committee uses these words “*What we have done is to allow the Court or police officer to release on bail in a non-bailable case..*” The amendments proposed by the Sapru Committee were added to the CrPC in 1923.

Many experts like Durga Das Basu, Justice C K Thakker, Ratanlal, and Dhirajlal have dwelled on the scope of Section 437 in depth. They also believe that police officers have discretionary powers under discretionary bail provisions. D D Basu (Basu, 1997)⁷ is very categorical in saying that there is no doubt that police officers can take bail in non-bailable offences and this power flows through Section 437 of CrPC. Within the category of non-bailable offences, some are less serious and some are more serious because the first schedule of CrPC is not entirely rational while making the distinction between bailable and non-bailable offences as this classification is not based on the severity of the punishment but rather an artificial division by the original makers of the CrPC. According to D D Basu, the powers conferred on police officers under Section 437 of CrPC covers offences of both nature i.e. less serious offences and also more serious offences which also include the gravest of them with the punishment of life imprisonment and even the death penalty(rarest of the rare).

Then what explains the fact that on-field police officers don't exercise this discretion to take bail in non-bailable cases? Firstly, it may be due to a lack of awareness among them about this section. Many practicing advocates wrongly advise the police officers against the usage of this section. Secondly, it may also be due to the inertia factor. Very few people have used this section which prevents the newcomers to not using this section on account of lack of precedence in such matters. Thirdly, it may be on account of the fear factor in the minds of police officers that this may result in victims casting aspersions on their integrity. Finally, it may have roots in the mistaken belief that police have a limited role in the dispensation of justice; rather it is the work profile of courts. It is believed that the police work is not to exercise discretion but rather to implement whatever is being ordered by the courts. This limited role thesis of police functions is not only false but also violates the will of the

people. If we read our criminal laws then it is made clear on many counts that the police are a significant pillar of our criminal justice system. They enforce rule of law on the ground. Right from the point of registration of FIR to the investigation, charge sheet and even trial, police have huge discretionary roles. These have been given to the institution of police because there is faith of the legislature in the Indian Police and its impartiality towards the public. It is high time that this faith is reciprocated even for Section 437.

There are certainly many cases that are lingering in our courts for a long time. Close to 76 percent of the jail inmates (“76% prisoners are undertrials; ratio is highest in Delhi, J&K,” 2022)⁸ are in fact undertrials. These people mostly belong to the poorer section of society where they are unable to avail bail provisions in the courts due to the high cost of legal services in India. If there are genuine cases of such accused where bail can be given, no police officer should hold him/her back from using these sections to give respite to the undertrials and unprivileged citizens of our society. The courts also have the duty to help these undertrials. The Supreme Court has on multiple occasions said that „Bail is the Rule and Jail is an Exception“. In fact, this canon of criminal jurisprudence was first laid down by the Supreme Court of India in its landmark judgement of *State of Rajasthan V. Balchand alias Baliy*, (*State Of Rajasthan, Jaipur vs Balchand @ Baliy* on 20 September 1977, n.d.)⁹ way back in the year 1978. Despite these directions, the lower courts remain conservative in granting bail. Added to it is the huge burden of cases in front of the courts. If police officers work in tandem with the courts, then the problem of undertrials can be reduced to a great extent. Concerning the plight of undertrials, one more section comes out prominently. It is Section 436A of Cr PC. This section was not present in the initial CrPC but was inserted later by Act 63 of 1980 and came into effect w.e.f. 23-9-1980. Under this section, if an undertrial has undergone detention for a period extending up to one-half of the maximum period of imprisonment specified for that offence under the law, then he shall be released by the Court. Here again, emphasis should be on the word „shall“. Despite this section, many undertrials are incarcerated in our

prisons due to a lack of awareness of this section to the undertrial. This again opens up one more possible role that police officers can play. They can inform the accused about the availability of this section for their rescue. The third pillar of our society i.e. civil society can also contribute in this regard. Many NGOs have in fact tried to bring this issue to the mainstream but this effort at best can be termed as limited in scale with a bias towards some areas where the reach of such NGOs is there. Indian Police has a reach spread across the length and breadth of the country so they are best placed to address the awareness part of this issue.

Anticipatory Bail, Transit Bail, and Bail for Juveniles:

The second case in which the release on bail is discretionary is Section 438 of CrPC. This is often termed anticipatory bail. Here the bail is granted in anticipation of arrest. This special power has been conferred only on High Courts and Court of Sessions. While applying for this section, registration of FIR is not needed, rather it's the reasonable apprehension of the arrest that is necessary for such protection. Clearly, this section is made for non-bailable cases as in bailable cases accused will get bail mandatorily. Here, one more catch is there. The protection of anticipatory bail is disallowed in some special statutes. Section 43D (4) of UAPA, Section 18A (2) of SC/ST Prevention of Atrocities Act; and Section 21(3) of MCOCA prohibit the grant of anticipatory bail. It should be noted that anticipatory bail is an immunity not from arrest but from custody. There are also cases where the Court may issue a warrant of arrest against a person outside the jurisdiction of the Court. In that case, the procedure mentioned in Section 78 of CrPC is followed by the Court. In such cases, the accused can go for transit bail. Section 81 of CrPC (Section 81 in The Code Of Criminal Procedure, 1973, n.d.)¹⁰ deals with the transit bail. In case of bailable offences of this nature, then the Executive Magistrate or District Superintendent of Police or Commissioner of Police who is directed by the Court, as the case may be, shall take bail and forward the bond to the Court that issued the warrant. While in non-bailable offences, it is the Chief Judicial Magistrate or the

Sessions Judge of the district in which the arrest is made who is empowered to grant this bail which again is a discretionary power.

In those cases where juveniles are involved, the Juvenile Justice (Care and Protection of Children) Act, 2000 kicks into action. Section 12 of the JJ Act deals with the bail of juveniles. The Section reads in this way: “When any person accused of a bailable or non-bailable offence, and apparently a juvenile, is arrested or detained or appears or is brought before a board, such person shall, notwithstanding anything contained in the Code of Criminal Procedure, 1973 or in any other law for the time being in force, be released on bail with or without surety or placed under the supervision of a Probation Officer or under the care of any fit institution or fit person but he shall not be so released if there appear reasonable grounds for believing that the release is likely to bring him into association with any known criminal or expose him to moral, physical or psychological danger or that this release would defeat the ends of justice.” This basically means that all offences become bailable in the case of juveniles by default except in the cases mentioned in the Section quoted above. In case of non-granting of the bail, the juvenile has to be kept in an observation home and has to be brought before a juvenile justice board.

Conclusion:

When we read and understand the various facets of the bail provisions in our laws, one thing that stands out clearly is that they are some sort of balancing exercises. In ensuring the right amount of balancing of individual liberty and societal interest of fair investigation, many stakeholders come into the picture. These include primary stakeholders like the courts, the police, the prosecution, and the defence side. The ultimate objective is to dispense justice i.e. fair treatment to everyone and what is due to them. For all this to happen we need that all the pillars of the criminal justice system should understand their roles completely. They should collaborate and keep the citizens' interest in focus. The ultimate end of the criminal justice system is fair treatment for everyone involved and society at large.

References:

- Section 436 in The Code Of Criminal Procedure, 1973. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/770661/>*
- Section 71 in The Code Of Criminal Procedure, 1973. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/1191195/>*
- Section 167(2) in The Code Of Criminal Procedure, 1973. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/839149/>*
- Ravi Prakash Singh @ Arvind Singh vs State Of Bihar on 20 February 2015. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/58810628/>*
- Section 437 in The Code Of Criminal Procedure, 1973. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/848468/>*
- Sohoni, R. C., & Gopal, R. (Eds.). (20). Sohoni's Code of Criminal Procedure 1973. Butterworths.*
- Basu, D. D. (1997). Criminal Procedure Code, 1973: Vol. II (Third). PHI Learning Pvt. Ltd. Delhi.*
- 76% prisoners are undertrials; ratio is highest in Delhi, J&K. (2022, May 4). The Indian Express.<https://indianexpress.com/article/india/76-per-cent-prisoners-areundertrials-ratio-is-highest-in-delhi-jk-7900089/>*
- State Of Rajasthan, Jaipur vs Balchand @ Baliay on 20 September 1977. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/8258/> 13*
- Section 81 in the Code of Criminal Procedure, 1973. (n.d.). Retrieved June 25, 2022, from <https://indiankanoon.org/doc/1914940/>*

Author's Profile:

Dr. K.P.A. Ilyas, IPS

Assistant Director, Sardar Vallabhbhai Patel National Police Academy, Hyderabad.

Dr. Rajesh Kumar Mohan, IPS Probationer of 74 RR.



Sardar Vallabhbhai Patel
National Police Academy
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A Review on the Changing Dimensions of Digital Forensics in Criminal Investigations

Dr. K.V.K. Santhy* & Abhishek Sharma Padmanabhan**

Abstract:

There is a great quantity of information available and the possibility afforded by electronic data to investigate and demonstrate a criminal offence. Digital forensics is becoming increasingly significant in virtually all aspects of criminal investigation. Even if they may be permissible in certain instances, in criminal justice procedures, these electronic pieces of evidence are sometimes treated with the greatest amount of skepticism and distrust, though their use is significant. The employment of scientifically untested forensic techniques in legal proceedings is widely criticized by the scientific community. Employing electronic data has many advantages due to its distinct and dynamic nature, but at the same time as the present laws and privacy constraints continue to be significant barriers.

This article provides a thorough investigation into the concerns that are considered vital to debate and address for evidence based on scientific grounds to be admissible in courts. The article does an in depth analysis of the current state of forensics in emerging sub-fields of digital technology such as cloud computing, social media, and the Internet of

*Associate Professor of Criminal Law, NALSAR University of Law;
Email : santhy@nalsar.ac.in

**Assistant Professor of Law, CHRIST (Deemed to be University);
Email : sharmapabhishek@gmail.com

Things (IoT). The difficulties that may arise in the process of systematic validation of electronic evidence are examined using contemporary evaluation methodologies. Techniques for developing best practices, dependable tools, and formal testing methods for electronic evidence are also discussed, all of which might be immensely valuable in increasing the credibility and reliability of electronic evidence in court processes.

Key Words:

Criminal Investigation, Data, Digital Forensics, Electronic Evidence, Reliability, Validation, Verification

1. Introduction:

Equal access to and use of information, data storage, and Internet usage analysis are among the goals of the "Digital India Information Technology Campaign" (DTIC). The reliance on e-communications, e-commerce, and the use of data storage devices has increased as a result of the E-revolution. In both Civil and Criminal proceedings, it highlighted the need for an overhaul of existing IT legislation and standards of evidence. The proliferation of digital information and the associated cybercrime pushed Indian laws to include a legal mechanism for the use of digital evidence. The collection of digital and electronic forms of evidence has become an integral component of Cyber investigations, the scope of which has been expanded beyond that of computer-related offenses. The so-called 'digital exhaust,' which is generated as a result of constant use of digital devices in all aspects of life, can reveal important details about the relationships, location, and intended audience of both victims and suspects. A computer or cell phone recovered at the scene may not be the source of digital evidence. Other networked devices, such as video game consoles and vehicle navigation systems, are also able to store data that is of the highest importance¹. In a similar vein, user accounts on the Internet that have no direct physical connection to a

¹Fredric Lederer, *the New Courtroom: the Intersection of Evidence and Technology; Some Thoughts on the Evidentiary Aspects of Technologically Produced or Presented Evidence*, 28 SWUL. 1, 5 (1999).

crime scene but can nonetheless offer useful information regarding offline activities. The process of finding and keeping digital evidence is just one part of how a criminal investigation works. Infrastructure and technical expertise must be planned in advance. Bringing a case to trial successfully necessitates close cooperation with other members of the criminal justice system like prosecutors, defense attorneys, and judges².

The model legislation on Electronic commerce developed by the United Nations Commission on International Trade Law (UNCITRAL) served as the basis for both the original Information Technology Act of 2000 as well as its subsequent amendments. The IT Act of 2000 was revised to make digital evidence admissible. The advent of digital technology and communications has loosened many of the old media barriers. However, the Internet, social networking sites, mobile technology, and other innovations have drastically changed our way of life and business globally. Despite this, it has enabled criminal activity to flourish³. Email, text messages, photographs, and video are increasingly the preferred methods of connecting and communicating in the modern world. It has become inevitable and ubiquitous in our daily lives, allowing us to access previously unattainable alternatives⁴. Sadly, the same opportunities have been afforded to criminals who wish to exploit the intended applications of technology and digital evolution⁵. Using this technology, people have created new and inventive ways to conduct traditional crimes⁶. They have also fostered new crimes including identity theft, cyber stalking, and ransomware, which are collectively called as cybercrimes and are closely tied to digital technology. The extensive availability of today's modern technologies has made many

²*State of Maharashtra v. Dr. Praful B Desai*, AIR 2003 SC 2053 (India)

³Philip Leith, *The problem with law in books and law in computers: The oral nature of law*, 6 *ARTIFICIAL INTELLIGENCE REVIEW* 227–235 (1992)

⁴Apar Gupta, *How to rely upon an email in court*, December 14, 2011, available at <http://www.iltb.net/2011/12/how-to-rely-upon-an-email-in-court/> (Last visited on June 20, 2022)

⁵*Palvinder Kaur v. State of Punjab*, AIR 1954 SC 354 (India).

⁶Ajit Narayanan, *Law, computers and AI*, 6 *ARTIFICIAL INTELLIGENCE REVIEW* 127–128 (1992)

unsafe and even useful tools for criminals⁷. Forensic science is more than just DNA reports, blood samples, or Forensic Science Lab reports, and if we want to keep up with the times, we need to be well-equipped with technologies. In a world where robotics, AI, and drones are on the doorstep, policymakers and stakeholders can no longer rely on antiquated techniques of inquiry and prosecution to maintain rule of law or adjudication. There must be a scientific basis for police investigations and court prosecutions, and prosecutors, police personnel, and judges should be well-versed in forensic science.

In legal proceedings, it is vital to evaluate evidence objectively in order to avoid erroneous conclusions and the correctness of forensic sciences has long been a matter of debate, and it still is⁸. It is also recommended that courts should use forensic methodologies that have been scientifically proven to be legitimate and reliable. All criminalistics processes demand substantial statistical proof for reasoning and consequences. Modern legal practice disapproves of approaches that lack objectivity, impartiality, and independence. Despite the fact that electronic evidence is scrutinised in criminal cases, courts often accept it with hesitation and caution⁹. To be accepted in a court of law, the evidence must be legitimate and reliable. While digital evidence can be manipulated, it still requires a scientific study that is both disciplined and admissible in the Court.¹⁰

The admissibility of Electronic Evidence is always questioned for in the Courts as Electronic evidence fails to meet scientific standards in courtrooms. The lack of faith in digital forensics and the lack of clear rules for evaluation allows defense attorneys to easily question the

⁷Cameron S D Brown, Investigating and Prosecuting Cyber Crime: Forensic Dependencies and Barriers to Justice, 9 International Journal of Cyber Criminology 55–119 (2014)

⁸Mahamadou Tembely et al., Digital Forensics, 7 International Journal of Advanced Research in Computer Science and Software Engineering 2277 (2017), <https://www.researchgate.net/publication/318665422> (last visited Feb 25, 2022)

⁹Ashley Brinson et al., A cyber forensics ontology: Creating a new approach to studying cyber forensics, 3 Digital Investigation 37–43 (2006)

¹⁰Hans Henseler & Sophie van Loenhout, Educating judges, prosecutors and lawyers in the use of digital forensic experts, DFRWS 2018 EU - Proceedings of the 5th Annual DFRWS Europe S76–S82 (2016)

evidence in the Court. They find weaknesses in the collecting and comparison of evidence, which they utilise to cast doubt on the evidence's accuracy and reliability¹¹. Some detractors have questioned the veracity of digital forensic techniques and methodologies. For this reason, it's vital to show that the domain is a rigorous, practical, and reproducible science. Digital forensic processes must be reviewed and confirmed using thoroughly evaluated methodologies. To achieve this purpose, the discipline must be founded on sound scientific principles, avoiding judicial misunderstandings¹². However, proving digital forensics as a precise and repeatable discipline is not an easy task.

This article examines the issues surrounding scientific validation. The broad requirements for empirical evaluation of forensic evidence were discussed first, followed by the problems peculiar to each subject. These difficulties appear to make it hard to analyse digital evidence using existing scientific standards. Second, the article delves into analysing the evidentiary standards governing the admissibility of emerging forms of Digital Forensics. They seem to exacerbate the problem of experimental evaluation. In the third phase, the article raises few pertinent questions such as whether or not existing solutions to these problems might be empirically tested. It also discussed the domain's future research goals.¹³.

2. Background:

In forensic science, evidence is identified, collected, analysed, and explained using scientific or technical procedures¹⁴. Digital forensic science is an essential area of forensic science since it is used to evaluate scientific evidence. The evidence must also be empirical, supporting the acceptance or rejection of a theory, as well as the conclusion of guilt or

¹¹Trevor Bench-Capon & Frans Coenen, *The maintenance of legal knowledge based systems*, 6 *ARTIFICIAL INTELLIGENCE REVIEW* 129–143 (1992)

¹²Stein Schjølberg & Solange Ghernaoui-Hélie, *A Global Protocol on Cybersecurity and Cybercrime*, 9 *JOURNAL OF CONTEMPORARY CRIMINAL JUSTICE* 152–169 (2015), www.cybercrimelaw.net. (last visited Mar 06, 2022)

¹³Yinghua Guo et al., *Validation and verification of computer forensic software tools-Searching Function*, 6 *DIGITAL INVESTIGATION* (2009)

¹⁴Marcello Di Bello & Bart Verheij, *Evidential Reasoning*, 9 *CRIMINAL JUSTICE REVIEW* 42 (2021), https://doi.org/10.1007/978-90-481-9452-0_16 (last visited Feb 13, 2022)

innocence. Evidence must be able to be explained and defended using systematic and experimental methods¹⁵. The strength of any empirical technique is determined by the statistical results and the suitability of the experiment and controls in the area. As a result, the standards used to assess the validity of scientific evidence vary in each forensic investigation¹⁶. To be credible and trustworthy in the criminal justice system, scientific evidence must be founded on exact science. Electronic evidence is accepted and validated using the same principles as other evidence¹⁷. The Daubert standards are the gold standard for scientific evidence and also time tested. The four Daubert criteria are commonly employed in court procedures to establish the admissibility of scientific facts and testimony, including digital evidence¹⁸.

The requirements are generalized as:

- (i) Is the scientific hypothesis already tested or can it be empirically proven?
- (ii) The availability of information on the known or probable rate of errors connected with the procedure;
- (iii) Whether or not the procedure has been peer-reviewed and
- (iv) Whether the procedure is broadly accepted by the relevant scientific community¹⁹

¹⁵Daniel J Ryan & Gal Shpantzer, *Legal Aspects of Digital Forensics*, 9 *FORENSIC SCIENCE INTERNATIONAL* 312–315 (2018)

¹⁶Éadaoin O'Brien et al., *Science in the court: Pitfalls, challenges and solutions*, 370 *PHILOSOPHICAL TRANSACTIONS OF THE ROYAL SOCIETY BIOLOGICAL SCIENCES BIOLOGICAL SCIENCES* (2015)

¹⁷Roberta Julian & Sally Kelty, *Forensic Science and Justice: From Crime Scene to Court and Beyond*, 24 *CURRENT ISSUES IN CRIMINAL JUSTICE* 1–6 (2012)

¹⁸D. Michael Risinger et al., *The Daubert/Kumho implications of observer effects in forensic science: Hidden problems of expectation and suggestion*, 90 *CALIFORNIA LAW REVIEW* 1–56 (2002), <https://asu.pure.elsevier.com/en/publications/the-daubert-kumho-implications-of-observer-effects-in-forensic-sci> (last visited Feb 25, 2022)

¹⁹JANE GOODMAN-DELAHUNTY, *INTERPRETING EVIDENCE: EVALUATING FORENSIC SCIENCE IN THE COURTROOM* (wiley) (2016)

3. The Problems with Accepting Digital Evidence as Scientific Evidence:

This research considers factors that may hinder the formal adoption of digital forensics as a genuine scientific field. The lack of formal testing and verification of forensic procedures is one of the most likely causes, which has been attributed to many circumstances²⁰. Finally, the lack of empirical verification will impede the public acceptance of digital evidence as both legally and scientifically reliable. The primary laws governing digital forensics are the Indian Evidence Act of 1872 and the Information Technology Act of 2000. Originally, "Evidence" didn't include digital data; it was only until Section 3 of the Indian Evidence Act, 1872 was amended that "Evidence" included digital evidence. Information technology (Amendment) act, 2008, section 4, allows electronic evidence to replace paper-based records. However, the Indian courts have reaffirmed that evidence from digital sources cannot be rejected, but must be proven to be accurate

In India, the validity of scientific evidence is being undermined by a number of issues, some of which can be stated as a lack of scientific certainty, insufficient research as a result of meager resources, absence of a code of ethics, lack of certification of the experts, shortage of databases, and non-availability of error rate statistics for all the methodologies. There is a lack of a single piece of legislation that encompasses all of the provisions pertaining to digital forensics. In addition, the international character of cybercrime creates a host of new legal issues for digital forensics investigators to contend with. As a result of the fundamentally dynamic character of cybercrime, the existing infrastructure is rendered incapable of handling the resolution of instances of this kind.²¹

3.1. Lack of Standard Data Sets:

The literature shows that researchers in digital forensics are still struggling with the lack of standard data sets for comparative testing.

²⁰ Shichun Ling et al., *The importance of forensic evidence for decisions on criminal guilt*, 61 *SCIENCE AND JUSTICE* 142–149 (2021)

²¹ *Devender Kumar Yadav v. State (NCT of Delhi)*, 2012 SCC OnLine Del 3771

Another important issue is data availability, the limited size, incompleteness, integrity, and quality of these data sets suggest that they are lacking in both scale and scope²². As a result, the public's trust in digital forensic research is in jeopardy. Aside from that, any legitimate science should produce consistent outcomes.

The majority of digital forensics research has focused on data extraction, data processing, and data presentation as evidence, with little effort put into creating a standard corpus. The Common Digital Evidence Storage Format (CDESf) Working Group was founded in 2006 to develop a standard for storing and sharing evidence and information. Due to a lack of resources, the working group was discontinued in 2007²³. The Computer Forensic Reference Data Sets (CFRDS) project, sponsored by the National Institute of Standards and Technology (NIST), is now providing researchers with multiple sample cases, though these cases are limited in scope and variety and may only be of limited support to researchers in their experimentation work²⁴.

3.2 Establishing Error Rate:

The second Daubert criteria requires that a known error rate be associated with the methodology and equipment utilised for forensic collection and evaluation²⁵. False positives and false negatives are used to demonstrate a method's accuracy and reliability. Error rates are the frequency of errors in a method. False positives are the number of occurrences where a condition or characteristic is improperly reported as present, whereas false negatives are the number of times where a condition or

²²Mark Pollitt, *A History of Digital Forensics*, 337 *AICT IFIP ADVANCES IN INFORMATION AND COMMUNICATION TECHNOLOGY* 3–15 (2010), https://link.springer.com/chapter/10.1007/978-3-642-15506-2_1 (last visited Feb 25, 2022)

²³Nurul Hidayah Ab Rahman, *Controlled experiments in digital evidence tampering*, 19 *SCIENCE AND JUSTICE* 32–36 (2012), <https://www.sciencedirect.com/science/article/pii/S1742287618300434> (last visited Feb 22, 2022)

²⁴Eve Wilson, *Guiding lawyers: mapping law into hypertext*, 6 *ARTIFICIAL INTELLIGENCE REVIEW* 161–189 (1992)

²⁵C. R. Williams, *Evidence and the expert witness*, 26 *AUSTRALIAN JOURNAL OF FORENSIC SCIENCES* 3–7 (1994)

characteristic is incorrectly reported as absent²⁶. The error rates of a technique's accuracy and reliability are used to indicate the confidence in that technique's accuracy and reliability. However, random mistakes are errors that occur as a result of changes that are unknown and unpredictable during the experiment. The bulk of digital forensic failures are systemic, resulting from defective or inappropriate application methodology and tools, among other factors²⁷. Calculating and assigning arbitrary error rates to a method or tool does not indicate that the method or tool is dependable or accurate. Furthermore, crucial population components, such as blood for DNA analysis, are predicted to remain stable during the study period. In instances where the digital infrastructure is dynamic, new media (like Facebook or cloud data) and hardware (like solid-state drives) operate fundamentally differently (for example, the Internet of Things)²⁸. A tool or process that works perfectly on one type of hard drive may be entirely wrong on another.

3.3. Standardization Issues:

In digital forensics, there are a large variety of electronic devices and data types to deal with; all owned by different software developers and device makers. It is challenging to set standards for such a large and diverse group of stakeholders²⁹. To make problems worse, the actors are unwilling to follow particular norms and rules, often resulting in possible conflicts of interest. Academics and practitioners have long lamented the dearth of standard operating procedures (SOPs) in digital forensics, emphasizing the significance of methodical and sound methodology.

²⁶Jane Goodman-Delahunty & Kosuke Wakabayashi, *Adversarial Forensic Science Experts: An Empirical Study of Jury Deliberation*, 24 *CURRENT ISSUES IN CRIMINAL JUSTICE* 85–103 (2012)

²⁷Simson Garfinkel, *Digital forensics XML and the DFXML toolset*, 8 *DIGITAL INVESTIGATION* 161–174 (2012)

²⁸Diana S. Dolliver et al., *Hybrid approaches to digital forensic investigations: A comparative analysis in an institutional context*, 23 *DIGITAL INVESTIGATION* 124–137 (2017)

²⁹Sungmi Park et al., *A comparative study on data protection legislations and government standards to implement digital forensic readiness as mandatory requirement*, 1 *DFRWS 2018 EU - PROCEEDINGS OF THE 5TH ANNUAL DFRWS EUROPE* S93–S100 (2018)

Despite this, the domain has only a few marginally productive standards and methodologies. A variety of legislation and fast-emerging technology are limiting the growth of standardization in this field of knowledge³⁰. As a result, no single set of guidelines or standards will be able to cover all aspects of digital forensics, and hence a variety of rules and guidelines will be produced. Due to the nascent nature of the sector, there are currently no clear norms and standards for administering, reporting, and analyzing such evidence. Unlike physical crimes, electronic crimes can occur anywhere and at any time, whether in the cloud or on social media sites like Facebook³¹. The rapid advancement of electronic computers, storage, and communication has hampered standardization. The utilization of modern methodologies has also led in new and expanding disciplines such as social media forensics, cloud forensics, and Internet of Things forensics. Increasingly, corporations are concentrating attention and resources on digital data and forensics. These firms thrive on providing clients with as much choice and privacy as possible, and they are ready to provide users with the same. These features also continue to offer new, distinctive, and difficult legal concerns to this industry. As a result, the focus has been on defining applicable standards and best practice guidelines³².

The absence of universally acknowledged norms or sound practices in the scientific and law enforcement areas shows the absence of best practices in specific sectors. This issue also affects the Daubert general acceptance criteria, which is a major worry³³. Even for the scientific community that helped produce best practices and guidelines, ensuring their adaptation and execution is out of reach.

³⁰Nicole Lang Beebe & Lishu Liu, *Ranking algorithms for digital forensic string search hits*, *PROCEEDINGS OF THE DIGITAL FORENSIC RESEARCH CONFERENCE, DFRWS 2014 USA S124–S132* (2014)

³¹Ben Martini et al., *Conceptual evidence collection and analysis methodology for Android devices*, *IFIP Advances in Information and Communication Technology, THE CLOUD SECURITY ECOSYSTEM: TECHNICAL, LEGAL, BUSINESS AND MANAGEMENT ISSUES* 285–307 (2015)

³²Nima Zahadat, *Digital Forensics, A Need for Credentials and Standards*, *THE JOURNAL OF DIGITAL FORENSICS, SECURITY AND LAW* (2019)

³³Cinthya Grajeda et al., *Availability of datasets for digital forensics – And what is missing*, *22 DIGITAL INVESTIGATION S94–S105* (2017)

4. Diversification and Rapid Evolution in Subfields of Digital Forensics:

The pace and variety of evolving techniques and devices in digital computing and communications has made it challenging to build sound scientific conceptions and thoroughly evaluate best practices. Topics include IoT, social networking, cloud computing, storage, encryption, and other emerging technologies³⁴. In addition, it takes a long time for a new field to mature into a precise scientific discipline. Moreover, theories and practices are argued and analysed for years before being authorised or rejected based on strong scientific concepts and principles³⁵. However, the history of digital communications is too limited and comprehensive to be relevant in developing forensic science as a distinct profession³⁶. These domains demand new technical and regulatory solutions. This section does not intend to provide a complete investigation of the numerous sub-fields, such as social media or cloud forensics, but rather an understanding of how the emergence of these areas impacts existing acceptance of digital forensics as a credible scientific subject.

Digital audio, digital video, cell phones and digital fax machines are all considered to be "electronic form evidence," according to Section 79A of the Information Technology Act of 2000. This definition encompasses any information with probative value that is kept or communicated electronically. The other meaning of "e-evidence" or "digital evidence" is "any information that can be used as proof in court that is stored or sent in digital form" or "information that can be used as proof that is stored or sent in binary form." E-mails, digital photographs, ATM transaction logs, Word-processing histories, Instant message, E-accounting programs, Spreadsheets, Internet browser, Computer memory and backup, digital

³⁴Paul Roberts, *Paradigms of forensic science and legal process: a critical diagnosis*, 8 *PHILOSOPHICAL TRANSACTIONS: BIOLOGICAL SCIENCES* 315–321 (2015), <http://dx.doi.org/10.1098/rstb.2014.0256> (last visited Mar 05, 2022)

³⁵Burkhard Schafer and Stephen Mason, *The characteristics of electronic evidence in digital format*, in *Electronic Evidence*, LexisNexis, 2013.

³⁶David M. Hilbert & David F. Redmiles, *Extracting usability information from user interface events*, 32 *ACM COMPUTING SURVEYS* 384–421 (2000)

Videos or audio files, Mobile data and Virtual games/Multimedia are all examples of digital evidence³⁷.

The evidence is typically located on hard disks/drives. Data on the hard drive are both volatile and nonvolatile. The data that is volatile is at risk of being lost whenever the computer system is powered down or shut down, whereas the data that is nonvolatile is saved or preserved on the hard drive of the system. It is possible to find evidence of these crimes on the computer's hard drive in numerous forms, such as files saved or made by the user (e.g. spread-sheets and images, videos and audios, or documents), emails, calendars, or files that are encrypted or password-protected. Log files, hidden or backup files, and other data areas, such as Meta data, are all examples of data areas. Digital evidence is abundant, quickly manipulated, difficult to erase, expensive, and instantly available.

In the case of *State of Punjab vs, Amritsar Beverages Ltd*³⁸, it was judicially made clear by the findings that the proper course of actions for the officers in such case was to prepare the copies of the hard disk or obtain a hard copy, affixed with the signatures along official seal on it, and also furnish a copy to the dealer or to the concerned person.

In case of *Dharambir v. Central Bureau of Investigation*³⁹, the apex court in the judgment considerably observed that, "Even if the hard disc is restored to its original position of a blank hard disc by erasing what was recorded on it, it would still seize information which identified that some text or file in any form was recorded on it at one time and consequently removed. With the use of software programmes it is probable to find out the specific time when such changes occurred in the hard disc. To that extent even a blank hard disc which has once been used in any mode, for any objective, will contain some information and will therefore be an electronic record."

³⁷Tejas Karia, Akhil Anand and Bahaar Dhawan, the Supreme Court of India re-defines admissibility of electronic evidence in India. 2 <https://www.linkedin.com/pulse/electronic-evidence-digital-cyber-lawindia-adv-prashant-mali->, (last accessed 28 May 2022)

³⁸2006 Ind Law SC 3911

³⁹148(2008)DLT 289

4.1. Social media forensics:

Social media evidence is now being used in both traditional and cybercrime prosecutions. Trials based on social media evidence are becoming more regular. However, it raises new legal and technical issues for the field of digital forensics⁴⁰. The data's omnipresence, intimacy, and footprint-like character attracts to investigators. Detectives would be pleased, if not grateful, to acquire substantial amounts of evidence from the suspect or victim. As a result, if they properly evaluate the evidence (data), they may be able to provide invaluable aid during the criminal investigation process. Metadata related with content and other information on social media networks may also be useful in investigations⁴¹. However, social media data is easily accessible for use as evidence in both legal and investigative procedures. They might be used to support an alibi, or they can be symptomatic of former or ongoing criminal behavior. On the other hand, investigators must overcome numerous technological and legal challenges to access data held on social media networks. The richness and diversity of data stored on networks creates technical obstacles, while legal issues arise about evidence admissibility and data collection⁴². To be considered as real, social media evidence requires additional circumstantial and confirming evidence.

In rare cases, the defendant's constitutional privacy rights preclude public media gathering evidence⁴³. Aside from legal issues, the diversity of social media sites and their rapid unstructured growth present substantial data collection concerns. Social media forensics must also analyse evidence retention and retrieval processes, as well as chain of

⁴⁰ Mohammed I. Alghamdi, *Digital forensics in cyber security - recent trends, threats, and opportunities*, 8 PERIODICALS OF ENGINEERING AND NATURAL SCIENCES 1321–1330 (2020), <http://pen.ius.edu.ba/index.php/pen/article/view/1463> (last visited Mar 06, 2022)

⁴¹ Sebastian Neuner et al., *Time is on my side: Steganography in filesystem metadata*, DFRWS 2016 USA - PROCEEDINGS OF THE 16TH ANNUAL USA DIGITAL FORENSICS RESEARCH CONFERENCE S76–S86 (2016)

⁴² P. A. Collier & B. J. Spaul, *A forensic methodology for countering computer crime*, 6 ARTIFICIAL INTELLIGENCE REVIEW 203–215 (1992)

⁴³ Adedayo M. & Shao Ying, *Privacy Impacts of Data Encryption on the Efficiency of Digital Forensics Technology*, 4 INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS (2013)

custody procedures, in order to provide more competent evidence in the Court. Another challenge is integrating and correlating data from social media to better understand the crime⁴⁴. Hundreds, if not thousands, of disparate pieces of information are forensically collected and analysed during an investigation to establish links between suspects, crime scene, and victim. The data correlation procedure is generally lengthy and complex, resulting in information overload for the detectives or investigators involved. Investigators must first organise and manage all of the data into a single, unified picture before the information can be useful in the investigation. A consistent data representation helps swiftly filter out extraneous material while getting useful knowledge and insight⁴⁵. These skills are not provided by current approaches and technologies.

4.2. Cloud forensic:

Cloud forensics allows investigators to find digital evidence implicated in a crime that has been stored in the cloud (virtual storage). Capturing and analysing forensic data stored in the cloud is a complex task. The incredibly widespread and complicated cloud architecture causes many of the issues. The multi-tenant usage model, virtualization, and the extremely volatile nature of the data are all aspects to be considered⁴⁶. Furthermore, issues about privacy are also important. This highlights the need for increased attention, as well as legal and technical frameworks. Currently, many recognised digital forensic methods, such as searching and data collection, are not relevant to the cloud due to lack of individual ownership of cloud-based devices and data⁴⁷. The most common cloud concerns stem from the distributed nature of resources (Applications, Storage, etc.) and the large number of users. The legal constraints on

⁴⁴Ryan & Shpantzer

⁴⁵Aditya Mahajan et al., *Forensic Analysis of Instant Messenger Applications on Android Devices*, 68 *INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS* 38–44 (2013)

⁴⁶Warusia Yassin et al., *Cloud Forensic Challenges and Recommendations: A Review*, 2 *JOURNAL OF CYBER SECURITY* 19–29 (2020)

⁴⁷Ameer Pichan et al., *Cloud forensics: Technical challenges, solutions and comparative analysis*, 13 *DIGITAL INVESTIGATION* 38–57 (2015)

personal information, security, and ownership add to the complexity⁴⁸. It is becoming increasingly challenging to handle the "chain of custody" in a cloud setting due to the cloud's extremely dispersed and multitenant nature. In the cloud investigation, there are thousands of virtual computers, servers, and cloud users, but only one is vital to the investigation. Genuine gadgets are difficult to locate or disable. Although investigators may be granted access to the data device, it is possible that the device does not belong to a single person. The act of stopping the machine and photographing it may infringe on the privacy or rights of other users⁴⁹. The process will also cause service interruptions for anyone who uses the service.

Investigators' ability to collect and analyse evidence from a cloud environment is ultimately determined by the tools and techniques used. Deplorable gaps exist in the automated software tools available to investigators for dealing with cloud forensics⁵⁰. As a result of the absence of uniformity in cloud architecture, it is difficult to create specialist data collection and analysis tools.

4.3. Encryption techniques:

Encryption protects users' privacy and the integrity of communications saved in computers, devices, or digitally on the Internet. Encryption protects the privacy and integrity of data saved on a computer, device, or the Internet. Most operating systems now enable encryption, allowing all users to benefit from improved security and data protection. Furthermore, digital forensic examiners and investigators are finding it increasingly difficult to obtain evidence from encrypted data files⁵¹. Several studies have found that encryption is the most challenging issue

⁴⁸Farid Daryabar et al., *Forensic investigation of OneDrive, Box, GoogleDrive and Dropbox applications on Android and iOS devices*, 48 AUSTRALIAN JOURNAL OF FORENSIC SCIENCES 615–642 (2016)

⁴⁹Christopher Stelly & Vassil Roussev, *Nugget: A digital forensics language*, DFRWS 2018 EU - PROCEEDINGS OF THE 5TH ANNUAL DFRWS EUROPE S38–S47 (2018)

⁵⁰Supra Note 6 at 2

⁵¹Niall McGrath, *Forensically extracting file encrypted contents on OS X using HFS+ journal file*, 18 DIGITAL INVESTIGATION S157 (2016)

to deal with in electronic tests and investigations⁵². The majority of the reasons for using encryption, are to ensure the privacy of personal information and to safeguard intellectual property⁵³. Criminals, however, are fully aware of the benefits of cryptographic methods and use them to elude forensic investigations. Encryption software can also swiftly encrypt data and encrypt entire devices. Depending on the situation, devices can be configured to delete or destroy all data if an authorised individual or group denies access. Examining and prosecuting are only allowed to access tiny chunks of data in around 60% of all investigations.

Contrary to popular belief, forensic investigators frequently work with heavily encrypted material. However, forensic examiners have a number of different technologies accessible to them to break, crack, or penetrate strong encryption. Current ubiquitous device encryption and whole disc encryption technologies may make it impossible to obtain all relevant digital evidence after shutdown. So, when shutting down a system, examiners should use live forensic acquisition. According to existing regulations, recording data without shutting down the device may allow the defense counsel to use this information. In this case, the defense attorneys may accuse the investigators of purposefully or inadvertently distorting the evidence, jeopardising its integrity and admissibility in the Court⁵⁴. As a result, best practises, rules, and processes will need to be revised. However, enhancements should be made to provide forensic investigators access to live systems while protecting data integrity⁵⁵. Similarly, a new method is needed to ensure the integrity of data collected during live forensics. This appears to be a trade-off between enhanced client privacy and successful enquiry.

⁵²Frederik Armknecht & Andreas Dewald, *Privacy-preserving email forensics*, PROCEEDINGS OF THE DIGITAL FORENSIC RESEARCH CONFERENCE, DFRWS 2015 USA S127–S136 (2015)

⁵³*Supra* Note 3 at 2

⁵⁴David S. Wall, *Policing Cybercrimes: Situating the Public Police in Networks of Security within Cyberspace*, 8 POLICE PRACTICE AND RESEARCH 183–205 (2007)

⁵⁵Tony Morgan, *Competence and responsibility in intelligent systems*, 6 ARTIFICIAL INTELLIGENCE REVIEW 217–226 (1992)

The encryption has enabled significant technological advancements and has improved overall data security. Efforts have been made to find common ground between encryption and privacy legislation. Ineffective domestic restrictions governing international firms have made proposed solutions unfeasible. Researchers may be able to explore brute force attacks on encryption systems in the future because to quantum computing⁵⁶. However, as almost all existing encryption systems rely on numerical complexity to protect against brute force attacks, the introduction of quantum computing may make many of the mathematical challenges manageable. Contrast this with Honey Encryption techniques, which rely on deceiving the attacker rather than adding computational complexity⁵⁷. As a result, encryption and forensics would always be at odds.

In this case, present technology and legal framework would make it impossible to enforce tight standards like "preserve everything, but change nothing"⁵⁸. It is impracticable to adopt this criterion in light of the volatile and already popular trend of dynamic data. This rigorous strategy elicits inappropriate and inevitable criticism of digital evidence, which is unhelpful. Even when investigators capture and preserve data from active systems, the legal infrastructure should insist on the preservation of volatile computer data, as has been found in some situations. Also, forensic inspection of a live system is an increasing trend, albeit it does not provide a comprehensive answer to encryption concerns, but may help in some circumstances⁵⁹.

⁵⁶Victor R. KEBANDE et al., *A generic Digital Forensic Readiness model for BYOD using honeypot technology*, 2016 IST-AFRICA CONFERENCE, IST-AFRICA 2016 (2016)

⁵⁷Kevin D. Fairbanks et al., *Timekeeper: A metadata archiving method for honeypot forensics*, PROCEEDINGS OF THE 2007 IEEE WORKSHOP ON INFORMATION ASSURANCE, IAW 114–118 (2007)

⁵⁸Vassil Roussev et al., *Real-time digital forensics and triage*, 10 DIGITAL INVESTIGATION 158–167 (2013)

⁵⁹Tatiana Trejos et al., *Scientific foundations and current state of trace evidence—A review*, 18 FORENSIC CHEMISTRY (2020)

4.4. Multimedia forensics:

Digital evidence in the form of multimedia (photos and videos) is increasingly becoming a recognised forensic artifact. Every day, millions of photos, audios, and videos are created, transferred, preserved, and manipulated on public Internet platforms, which can be used as evidence by prosecutors and lawyers. A photograph's precision and authenticity, for example, may be questioned given the ubiquitous usage of digital cameras and the general availability of free editing software⁶⁰. As a result, properly authenticating photographs and other images is crucial. Forensics has evolved over the last decade to incorporate a wide range of methods and technologies that focus on still images⁶¹.

In the case of *State of Maharastra vs. Dr. Praful B Desai*⁶² the main issue in this case was- Whether a witness can be examined by means of E Conferencing? The Supreme Court observed that due to advancement of science and technology, which permits live conversation with visibility with someone who is or cannot be physically present with that facility then a live E- testimony of witness can be taken with due care and caution.

In the case of *State of Punjab vs, Amritsar Beverages Ltd. 2006*⁶³, it was judicially made clear by the findings that the proper course of actions for the officers in such case was to prepare the copies of the hard disk or obtain a hard copy, affixed with the signatures along official seal on it, and also furnish a copy to the dealer or to the concerned person.

Despite their differences in maturity and limitations, most systems do not consider or properly handle anti-forensic strategies used to multimedia. The main challenge now is recognising and discriminating between lawful and unauthorised data processing activity. Image manipulation, such as adjusting the compression ratio or reducing the

⁶⁰ Micah K. Johnson & Hany Farid, *Exposing digital forgeries through chromatic aberration*, 2006 PROCEEDINGS OF THE MULTIMEDIA AND SECURITY WORKSHOP 2006, MM AND SEC'06 48–55 (2006)

⁶¹ Hui Zeng et al., *A Multi-purpose countermeasure against image anti-forensics using autoregressive model*, 189 NEUROCOMPUTING 117–122 (2016)

⁶² AIR 2003 SC 2053

⁶³ Ind Law SC 3911

amount of noise, is not considered tampering⁶⁴. A threshold is needed to distinguish legitimate from fraudulent processing. However, similar modifying or editing processes can be legal in one situation but misleading in another. There are several ways to store and capture photographs, audio, and video.

In the matter of Jagjit Singh vs., State of Haryana⁶⁵, The Haryana Legislative Assembly Speaker disqualified a Member on the ground of defection. The Supreme Court of India while hearing, considered and appreciated the digital form of evidence in form of transcripts of E-media including Aaj Tak, Zee News and Haryana News etc. and indicated the extent in paragraph no, 25 of the judgment.

In the matter of State (NCT of Delhi) vs. Navjot Sandhu⁶⁶, an appeal was filed against the conviction held in Indian Parliament Attack on Dec, 13, 2001. In this case the apex court accepted the proof of mobile telephone calls and location tracking details.

The use of forensic techniques designed for one type of storage device may not be accurate for another. It is therefore incorrect to infer their suitability without first conducting rigorous and controlled testing. Testing novel forensic tools and methodologies for non-standard material types, formats, and editing processes is also an issue⁶⁷. Due to the vast amount of multimedia data involved, the verification procedure is difficult to complete due to the lack of unified and actual data sets. The combination of these factors is expected to substantially complicate and challenge scientific validation.

4.5. IoT forensic:

The number of devices manufactured globally is increasing. Demand is rising due to the advancement of mobile technology and online digital communications. Next big thing in digital and mobile computing and

⁶⁴Rainer Böhme & Matthias Kirchner, Counter-forensics: Attacking image forensics, 9781461407577 DIGITAL IMAGE FORENSICS: THERE IS MORE TO A PICTURE THAN MEETS THE EYE 327–366 (2013)

⁶⁵(2006) 11 SCC 1

⁶⁶(2005) 11 SCC 600

⁶⁷Muhammad Yasin et al., Analysis of Internet Download Manager for collection of digital forensic artefacts, 7 DIGITAL INVESTIGATION 90–94 (2010)

communications is "Internet of Things" (IoT)⁶⁸. Furthermore, the rapid proliferation of the Internet of Things is spawning new and innovative apps and services that will enrich and eventually change our way of life and business on a worldwide scale. For individuals working in the field of digital forensics, the Internet of Things (IoT) will provide considerable obstacles. Criminals, particularly organised crime syndicates, could leverage modern technology and applications in ways previously unimaginable⁶⁹. Cyberattacks that use flaws in health or safety equipment or cause critical infrastructure (including power, water, and road infrastructure) to fail put people's and nations' lives in peril.

To overcome these new challenges, it is necessary to develop and execute digital forensic methodologies based on IoT applications and infrastructure. The vast number of gadgets connected to the Internet or mobile digital networks stores and continuously transmits data⁷⁰. If adequate controls and security measures are not in place, new crime syndicates and extremist organisations may emerge, gaining control of key information and data. The Internet of Things can provide a vast amount of evidence. Changes in legislative systems are required to prevent against criminally motivated crime and injustice. It is a new paradigm that challenges conventional concepts like jurisdiction, integrity, and chain of custody.

In case of *Nidhi Kakkar v. Munish Kakkar*⁷¹, the main question before the court was- Whether e-mail text brought before court, is admissible as an evidence or not? After the examination the provision of Evidence Act, 1872 and IT Act, 2000-it was observed that if person produced text of information generated through computer or any digital device, it should be permissible in evidence, if the sufficient proof was tendered in a way brought through Evidence Act. The printed edition created by wife that enclosed the text of what was significant for case was held as admissible.

⁶⁸ *Supra* Note 31 at 7

⁶⁹ *Supra* Note 3 at 2

⁷⁰ *Supra* Note 8 at 3

⁷¹ 2011 162 PLR 113

In the leading case of- Avnish Bajaj v. State,⁷² it was observed by the Apex court that- in absence of suitable content filters, that can detect the words in the inventory or the pornographic material that was being offered for sale or exhibiting, then website will have risk of being imputed to it the information that such thing was in fact obscene. The creation of the internet and the likelihood of a widespread use through instantaneous transmission of pornographic material, calls for a stringent standard are in need to be brought

The Internet of Things may be able to store more data than now stored in social media networks and the cloud⁷³. The number and kind of connected devices may vary depending on their intended use, resulting in enhanced communication and mechanical data such as climatic temperature, speed, and capacity. The resulting data would be massive and possibly more dynamic. However, despite the fact that the disciplines surrounding Internet of Things forensics are growing in number, there are currently just a few studies addressing this particular topic, particularly when it comes to open issues associated with the Internet of Things⁷⁴

5. Conclusion:

However, much like any other scientific subject, we feel that digital forensic science is a young and developing field that will require time to mature and establish itself. It is inaccurate to call digital forensics a "failed science" without understanding the limitations of scientific validity and the domain's complexities. The window of opportunity for digital forensics to flourish is shrinking⁷⁵. The regulators are also putting in significant effort to ensure that quality control measures are implemented in the sector. Legal considerations (such as privacy restrictions) provide a significant stumbling obstacle to the acceptability

⁷² 116 (2005) DLT 427

⁷³ *Supra* Note 54 at 11

⁷⁴ *Supra* Note 27 at 6

⁷⁵ Jungin Kang et al., *A Digital Forensic Framework for Automated User Activity Reconstruction*, 7863 LNCS Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) 263–277 (2013), https://link.springer.com/chapter/10.1007/978-3-642-38033-4_19 (last visited Feb 26, 2022)

of Digital Evidence. Digital forensics is the newest of the forensic fields. The underlying technologies in digital forensics are far too complex and dynamic to be practical.

Nonetheless, the employment of scientific techniques in digital forensics is not used as a justification to ignore the usage and advancement of scientific practises in the field. In any case, the purpose is to show that it is common and to encourage more research in this area. Researchers must focus on developing empirical approaches that adapt to shifting legal infrastructure. Scholars in this discipline must also develop new experimental verification methods and examine the field's fundamental aspects and dynamics in light of technological improvements and their impact on electronic evidence⁷⁶.

Two fundamental aspects of scientific techniques are validity and dependability. A method or approach is valid if it completes the task for which it was designed. Precision and consistency are two distinct properties of reliability essential for the correct systematic procedure or technique. These features are studied, evaluated, and refined until they are acceptable in scientific inquiry⁷⁷. As a result, it is crucial for academics and practitioners to validate their methods before employing them. It is also important because it is only via extensive testing in a wide range of settings that approaches can be demonstrated to be trustworthy and acceptable.

Benchmarking in digital forensics is extremely difficult to do because of the quick development and constant change that digital communications and technology undergoes today. Due to their recent quick growth, they are also increasing the area of digital forensics. However, legal acceptance of digital forensic methods requires both quality and scientific backing. This requires a comprehensive

⁷⁶Darren Quick & Kim Kwang Raymond Choo, *Forensic collection of cloud storage data: Does the act of collection result in changes to the data or its metadata?*, 10 *Digital Investigation* 266–277 (2013)

⁷⁷Ian Evett, *The logical foundations of forensic science: Towards reliable knowledge*, 370 *Philosophical Transactions of the Royal Society B: Biological Sciences* (2015)

investigation⁷⁸. Thus, even in the absence of universally accepted standards and specified methods, researchers can establish the validity and reliability of their recommended or improved methodologies if they follow the right protocols. Instead than establishing the entire forensic technique at once, they should first develop the validity and reliability requirements. Thus, outlining and testing multiple procedures from the bottom up would assist build trust in the overall process.

It is also vital to develop unique approaches for validating the reliability and accuracy of digital evidence, as well as ensuring that it meets scientific and legal standards. Furthermore, it is appropriate to measure statistical error rates and compute percentage certainty using specialised approaches when applicable. Efficient evaluation processes will also benefit from particular mistake mitigation strategies for certain jobs⁷⁹. Development of proper testing procedures and models should also be a priority for digital forensic researchers. Without agreed data sets, open source forensic testing is impossible.

Forensic settings that commonly exploit these susceptibilities are generally employed as a starting point. Achieving the essential standards for scientific evaluation and contributing to the requisite credibility for electronic evidence would also be advantageous given the current and future hurdles. In short, the digital forensic community must focus on developing solutions that have been thoroughly tested and evaluated⁸⁰. The great diversity of applications and the quick evolution of this technology make developing worldwide standards for digital forensics difficult. Similarly, confirming forensic operations using established scientific approaches such as testing on standard data corpora is difficult. As a result, researchers can help improve proposed methodologies' accuracy and dependability, ensuring that they meet legal criteria in court. Prior to adopting any new methods, accuracy must be thoroughly analysed and tested to ensure its validity. These approaches' possible

⁷⁸Eric Van Buskirk & Vincent T. Liu, *Digital Evidence: Challenging the Presumption of Reliability*, 1 JOURNAL OF DIGITAL FORENSIC PRACTICE 19–26 (2006)

⁷⁹Eoghan Casey, *Digital forensics: Coming of age*, 6 DIGITAL INVESTIGATION 1–2 (2009)

⁸⁰*Supra* Note 5 at 2

error rates and limitations must be acknowledged prior to usage, and they must be tested under varied scenarios. Comprehensive testing and systematic verification are also required to establish the presumption of authenticity. Digital Forensics must therefore use very precise approaches based on good scientific procedures and principles if it is to progress and survive⁸¹.

Author's Profile:

Dr. K.V.K. Santhy

Associate Professor of Criminal Law, NALSAR University of Law;

Email: santhy@nalsar.ac.in

Abhishek Sharma Padmanabhan

Assistant Professor of Law, CHRIST (Deemed to be University);

Email sharmapabhishek@gmail.com

⁸¹*Paul Roberts, Science in the criminal process, 14 OXFORD JOURNAL OF LEGAL STUDIES 469–506 (1994)*

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