

Through Email Only

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Ministry of Home Affairs
Bureau of Police Research and Development
(Research and Correctional Administration Division)

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To

1. The Directors General/Inspectors General of Police of all the States/UTs.
2. The Directors General/Inspectors General of Prisons of all the States/UTs.
3. The Heads of all CPOs/CAPFs.

Subject: Outcome of 08 research studies completed by the BPR&D in the year 2020-21–reg.

The Bureau of Police Research & Development (BPR&D), since its inception on 28.08.1970, has the mandate to identify the needs and problems of the police services in the country and initiate, stimulate and guide research in this field, in coordination with various Institutions, Organizations, Ministries, Universities, State Police and provide inputs for policy making at the ministerial and court levels. Policies, with strong underpinning of researched inputs, which afford deep insight into matters, have the potential of being panacea for the issues they intend to address.

2. To fulfill this mandate, the BPR&D has completed 294 research studies, so far, on the subjects related to law enforcement, criminal justice system, correctional administration, etc. The brief of 286 completed research studies, is available at the BPR&D website: <https://bprd.nic.in>, under the title National Police Research Repository, in the Research & CA Section.

3. Please find enclosed a copy of the brief of 08 other research studies completed by the BPR&D in the year 2020-21, for perusal and further needful action.

4. This is issued with the approval of the DG, BPR&D.

Encl: As above.

(Anupama Nilekar Chandra, IPS)
IG/Director (R&CA)
Phone No. 011-26781314
Email: dirrd@bprd.nic.in



NATIONAL POLICE RESEARCH REPOSITORY

**Research Studies on Police and Prison Issues
[2020-21]**

Bureau of Police Research & Development
Promoting Good Practices and Standards

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1. EXAMINE THE INFLUENCE OF POLICE EFFECTIVENESS ON PUBLIC WELLBEING

Prof. Dheeraj Sharma, IIM, Ahmedabad

Hypothesis

1. How can Perceived Police Inactivity (PPI) influence satisfaction with public safety?
2. Has PPI tapered public trust in the police?
3. Can PPI make an impact on public fear of crime?
4. How can PPI affect the public's trust in government?
5. Does PPI influence public feeling of quality of life?
6. Can PPI alter the public's psychological well-being?

Methodology

1. In order to get a deeper understanding of the events surrounding the Azad Maidan riots in-depth interviews with over 45 citizens were conducted.
2. Based on the inputs from the interviews, a questionnaire was developed to quantitatively measure various sentiments reflected in the in-depth interviews.
3. The sample for the study was drawn from residents in Mumbai area.
4. 1004 survey questionnaires were distributed to various randomly selected individuals.
5. The data collection technique used is mall intercept sampling.

Findings

1. Perceived Police Inactivity (PPI) negatively influences satisfaction with public safety.
2. PPI makes a negative influence on the public trust in the police.
3. A positive association was found between perceived police inactivity and the fear of crime.
4. PPI tapers public trust in government.
5. PPI makes a powerful impact on the public feeling of quality of life.
6. PPI makes a negative impact on the psychological well-being of an individual.

Recommendations

1. The Indian police department should adopt the Public Attitude Survey method and modify it in accordance with the Indian scenario.
2. The police should be encouraged to adopt the basics of good customer care and to deliver good service to the people who initiate contact.
3. Training and re-training is another process which can be used to transform police servants.
4. Police departments should follow a streamlined process of giving information to the media.
5. The Indian police department should adopt a method similar to the Crime Survey for England and Wales (formerly British Crime Survey).

2. SOCIAL, PSYCHOLOGICAL AND ECONOMIC PROBLEMS OF WOMEN PRISONERS AND THEIR ACCOMPANYING CHILDREN AND STATUS OF THEIR REHABILITATION

Prof. Deepti Shrivastava, Bhopal, MP

Objectives

1. To gain a clear understanding of the social, psychological and economic problems faced by women prisoners and their children.
2. To identify causational factors responsible for problems of women prisoners.
3. To ascertain the impact of problems on female prisoners as well as on their children.
4. To explore the possibilities of contribution of N.G.O. and Social Organization both within and outside prisons in rehabilitation of women prisoners.
5. To suggest remedial measures to deal with problems of female prisoners and their children.

Methodology

1. Purposive multistage sampling method was used for the study, along with stratified random sampling.
2. Questionnaire and interview schedule method for collecting data were used.
3. A total 1425 inmates (Convicts, Under-trials, and, Released) from Uttar-Pradesh, Andhra Pradesh, Bihar, Maharashtra and West Bengal were interviewed in the study.

Findings

1. Increased Number of Women Prisoners –As against 11094 women detained in the Indian prisons during 2001, there are 15037 women prisoners in 2010, indicating a 35.54 % increase in women prison population over the year 2001, which increased to 62.74 till 2014.
2. Women Prisoner Population- In Indian prisons, women prisoners constitute 4.2 % of the total prison population.
3. Women are vulnerable: Generally, Women prisoners come from economically and socially disadvantaged segments of the society. Many have histories of alcoholism and drug abuse. Most of the women prisoners experienced violence or sexual abuse before incarceration.
4. Sample Size- Highest number of women prisoners are detained in Uttar Pradesh followed by Bihar.
5. Imprisoned Mother: The study found that out of N=1425 women prisoners n=853 women prisoners are incarcerated mothers i.e. 29.19% women living with their very young children while remaining n= 437 i.e. 30.66 % women prisoner's children living outside the prison, mothers separated from their children. In both the conditions,

incarcerated mother and children face several problems. Out of N= 1425 women prisoners 26.31% Women prisoners were released offenders.

6. Age of Women Prisoners: More than 3/4th of respondents belongs to the age group of 21-42 years. The most vulnerable age group of women prisoners is found to be 21-30 years (68.69%). There is a gradual decline in the percentage of those who are in the higher age group of 43-53, and above 54 years.
7. Caste Composition of Women Prisoners: A majority (41.33%) of respondents belonging to Scheduled Castes followed by Scheduled Tribes 20.84%, and Other Backward Castes 19.57%. General category comprises only 18.24 %.

(a) Findings Regarding Women Prisoner's Social problems:

1. Visitation by Family Members: Out of 1425 women prisoners, 65% of them mentioned that their family members visited them periodically, while 35% of them mentioned that no family members are visiting them at all.
2. Problem Sharing: Out of 1425 respondents, 925 respondents are enjoying the periodic visits of their family members. Majority of them (58%) share problems with their parents and relatives during their visits, whereas 35% of women prisoners share problems with their husband and children during their visit.
3. Levels of Education of Respondents: The educational status of respondents is found to be very low. A majority of respondents (66.87%) is illiterate while 25% of them are educated only up to secondary level. Only 8% of them are degree holders.
4. Religion of Respondents: Out of 1425 sampled women prisoners 52.98% are Hindu, whereas 13.82 are Muslim followed by 16.28% Christian, 8.56% Sikh and 8.5% are Jains.
5. Marital Status of women prisoners: Out of 1425 women prisoners, 32.91% were married whereas 29% were unmarried. 13.75% women prisoners are separated, 4.42% are divorced and 5.05% are widowed.
6. Inhabitants of Respondents: Out of 1425 women prisoners, 63.22% come from rural areas, whereas 36.77% are from urban areas.
7. Occupational Status of Respondent: Out of 1425 respondents, 34.73% women are unemployed, whereas 15.1% women worked as daily wagers before incarceration. A sizeable number of women prisoners (34.73%) are housewife while 15.50% women prisoners were self-employed, and only 1% women worked as government servants.
8. Financial Condition of the Family of Respondent: Out of 1425 respondents, 44.77% of the respondents belonged to a family having poor financial condition, whereas 26.42 % respondents belonged to a family having an average financial condition. Only 26.80 % respondents belonged to a family having good financial condition.
9. Type of Custody of Respondent: Out of 1425 respondents, 78.80% of women prisoners were under trial while 21.19% women prisoners were convicted.
10. Criminal Record- A majority of women prisoners (80%) were first time offenders, whereas 20% of them were incarcerated for a second or third time. Most of the repeaters (50.17%) were incarcerated under section 498A IPC. While 24.56% of them were

detained under the PITA (prostitution), 22.80% under the NDPS Act, and 2.10% of them were arrested under the Dowry Prohibition Act.

11. Types of Crime Category of Respondents: Out of 1425 respondents, 74.94% women prisoners were charged under IPC crimes, whereas only 25% women prisoners were detained under SLL crimes.
12. Period in Custody: Out of 1425 Respondents, a majority of women prisoners (59%) were detained in prisons for a period of three years to five years, whereas 30% of the women prisoners spent one year to two years in the prison, while only 11% women spent a period of one month to six months in prisons.

(b) Findings Regarding Women Prisoner's Psychological Problems:

1. Psychological problems: The study found that Women prisoners have impulsive feelings of shock and depression. 75% of women also discussed about their mental health problems prior to coming into prison, particularly depression. Interestingly, some of the women with drug problems explained that their drug use acted as a form of 'self-medication'.
2. Problem of Insomnia- It was observed that sleep disturbance amongst the women prisoners is quite prevalent because of the stress caused due to their non-adaptability in the circumstances of imprisonment and the social stigma attached to it. The data revealed that the majority of them (75%) admitted the problem of sleeplessness, having prior history of self-medication for sleeping sickness.
3. Post-Traumatic Stress Disorder: 98% respondents suffered from Post-Traumatic Stress Disorder.
4. Emotionally Numb: 59% respondents felt emotionally numb while 38% respondents were emotionally lively.
5. Fear of Social Stigma: Out of N=1425 respondents n=1050 respondents, i.e., 73.6 % women had emotional insecurity while n=375 i.e. 26.3 respondents who were released prisoners did not have this problem.
6. Legal Aid: Out of N= 1425 respondents, 32% evaluated legal aid as satisfactory and 39% average, while 13% graded as bad and 14% very bad. Released women prisoners stated that legal aid is not at all sufficient for them.
7. Medical Facilities- Out of N=1425 respondents only 16% respondents were satisfied with the Medical Facilities. Women prisoners across the five states had rated the standard of medical facilities as bad.

(c) Findings Regarding Children of Women Prisoners:

1. Impact of Incarceration on Children: Study found that out of 853 women prisoners 73% women replied negatively for appropriate development of their children, only 27% incarcerated mothers were satisfied with the nurturing of their children and with facilities provided by the prison administration.

2. Obstacles in Children's Development Due to Mother's Incarceration: Study reveals that 22% mothers observed coldness in their children, while 12% complained of weak physical growth of their children due to the impact of incarceration.
3. Supreme Court Guidelines- Study reveals that accompanied children of imprisoned mothers are not getting sufficient educational and recreational facility as per the Hon'ble Supreme Court Guidelines in all sample States.
4. Status of Rehabilitation: Study reveals that N=1425 respondents n=375 i.e. 26.3% respondents were released prisoners out 20% women prisoners still struggling for their rehabilitation, while 6.3 % women prisoners were somehow assimilated in society.
5. Rating on accommodation- A vast majority of women prisoners have rated their accommodation provided during incarceration as "average".
6. Rating on Clothing and bedding and extra clothes-The data shows that 52% of women prisoners have rated the aforesaid facilities provided during incarceration as "satisfactory".
7. Rating on Visiting System-The study reveals that more than half of the respondents (54%) rated the existing visiting system not up to the mark, especially for women prisoners, which needs to be made more effective to maintain the emotional aspects with their family, particularly with their children and husband.
8. Rating on the behaviour of prison staff- 37% of the women prisoner reported that their interaction with some members of the custodial staff has a positive impact on their well-being during incarceration. However, 386 women prisoners consider the behaviour of prison-staff as uncouth and rough hence, bad.
9. Rating on Medical Facilities- A vast majority of women prisoners have rated the standard of medical facilities provided to them during incarceration as "bad".
10. Rating on Income Generating Skills-The study reveals that 37% of the women inmates consider the income generating skills taught to them during incarceration as 'bad' while 17 % of them consider it as "average".
11. Rating on Childcare & Educational facilities-The data shows that 40% of the women prisoners estimated the level of childcare and educational facilities provided during their incarceration as 'satisfactory'. However, 15% of them assessed the childcare facilities for their children as "bad".
12. Rating on Free Legal Aid- The data shows that 39.57% of women prisoners have graded the free legal aid services provided to them during incarceration as "average" while 14% of them rated it "very bad".

Recommendations

1. Joint efforts: To reduce the problems of women prisoner, joint efforts are required to be made not only by all segments of the criminal justice system, but also by the society as a whole because their problems are more a social problem rather than legal ones.
2. Gender-Sensitive Prison Management–In focusing on the overwhelming number of males in the criminal justice system, programs, policies and services often fail to develop a diversity of options for dealing with the gender and cultural-specific

problems of women prisoners who are often overlooked in the prison system based on small fraction.

3. Special Training to prison staff – The study revealed that, staff approach in women's prisons did not differ from the approaches taken in male prisons. They are performing most of the work as per the approved guidelines issued by the department, but the staff is not skilled to redress the specific problems of women prisoners.
4. Equal access to work–They have been given little or no access to activities due to lack of space. The lack of childcare facilities/nurseries in prisons may also deter women with small children from participating in prison activities.
5. Gender-specific Healthcare- The study reveals that at the time of admission women, come with many untreated infectious health problems due to their incapability to avail the health services. Moreover, the majority of women suffer from post- traumatic disorder due to prior victimization.
6. Preparation for release and after care support-As stated earlier, 54% of women prisoners expressed their dissatisfaction with preparatory work for their release. They are experiencing several social family problems after their release.
7. Need for People's, Public Participation -Prison officers should share with the media and the community, the problems of women prisoner and the role of community in their social reintegration in the best interests of their children. The prison officer should also publicize good practices and success stories and role models on successful reformation and reintegration.
8. It is further recommended that active public participation in the prevention of crime and treatment of offenders must be made a part of national policy of prisons. Furthermore, the state government shall open avenues for such participation and shall extend all possible assistance including financial support to voluntary organizations.
9. Alternatives to Custodial Sentences for Mothers-It is suggested that to protect women prisoners from the collision effect of Prisonization, alternatives to imprisonment such as Probation service and community service order are the best ways to provide relief from the social stigma attached to incarceration.
10. Use of Temporary Release mechanisms –It is suggested that extensive use of temporary release mechanisms (parole) for convicted women prisoners needs to be implemented by way to encourage them to share their family/social responsibilities and to maintain their emotional/personal bonds.
11. Correctional Administration Should Adopt Good International Practices- As is prevalent in Italy, the sentence of women prisoner is automatically postponed if she is pregnant or if she has a baby less than six months old and there is also a possibility of postponement of sentence if she has a baby less than one year older.
12. Execution of UNO: The study recommends that prison personnel working with/ for children at all stages of the criminal justice process, as well as any other professionals such as teachers and social workers who may come into contact with children of incarcerated parents, be trained to appropriately provide any needed support to the children of incarcerated parents.

13. The study recommends the prison administration should ensure availability of proper facility for the biological, psychological and social growth of the child viz. Crèche and recreational amenities.
14. The Supreme Court in *R D Upadhyaya v. State of Andhra Pradesh*, 2006 issued detailed guidelines in favour of accompanying children of women prisoners. In the light of these guidelines, it is suggested that there is an urgent need for establishment of the Children Welfare Board in each state which can constantly monitor implementation of judicial pronouncement concerning child welfare.
15. It is also suggested that the state government should provide sensitive assistance to children of women prisoners by training of professional groups.

3. MEASURING OF INCIDENCE OF CRIME VICTIMIZATION & COST OF CRIME: AN EXPLORATORY ANALYSIS IN TAMIL NADU

Prof. Dr. P. Madhava Soma Sundaram, Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu

Objectives

1. Estimate the incidences of various types of crime victimizations that have occurred in the society and based on that, the Cost of Crime occurrence in Tamil Nadu;
2. Analyze the cost-benefit of the security provided to the people; and
3. Suggesting various measures to the policy makers including the determination of the manpower planning of the police Department.

Methodology

The statistical methodology of regression analysis was adopted to determine the actual crime incidences to a level of exactness that happens in the society. After determination of the incidences of the crimes, the cost incurred by the police authorities and the expenditure incurred by the victims were determined. This leads to the next step in determining the cost-benefit of the security provided to the people and the next step to determine the exact estimation of the manpower requirement of the Tamil Nadu police.

Findings

1. The study attempted to estimate the actual incidences of crime victimization in Tamil Nadu, by determining the multiplier. The procedure for finding the multiplier, was established, tested, using data from urban and rural sample, and the multiplier was determined. For this purpose, 2960 respondents were interviewed, regarding their crime victimization, during the years-2008, 2009 and 2010, in rural and urban setting. The multiplier for the urban spaces was found to be 2.02, and for the rural spaces to be 4.22.
2. Using these values (multipliers), the actual incidences of crime happening in various locations were determined, by multiplying these values to the reported crime figures with the NCRB data (NCRB, 2008 to 2010). The crime incidences were estimated for each district, in Tamil Nadu, for every year from 2008 to 2012.
3. The other main objective of this research was to estimate the cost of crime, in Tamil Nadu. For this purpose, data from the victims of crime was collected for three years (2008, 2009 and 2010), on 'Tangible' and 'Intangible' cost, as spent by the victims, included in the sample. 'Tangible Costs, was further divided into two groups; 'Tangible I' and Tangible II'.
 - Tangible I comprised the cost of victims towards medical costs and loss of wages.
 - Tangible II Anticipatory costs- that is cost spent by victims towards preventive crime (after becoming victims), such as maintenance of dogs insurance costs, cost on security etc.

- Intangible costs covered the victim's loss in terms of pain, suffering, loss of quality of life, fear, converted, subjectively, by the victims themselves.
 - Property value costs covered the cost of victims due to loss of property.
4. The profile of the sample was; Majority of the respondents of the study were males (72.8%), educated up to school level (55.74%), married (86.2%), living in a joint family setup (62.0%), and with an income range of Rs. 10001 to Rs. 15,000 (29.84%).
 5. The study found that majority of the respondents (69.5%) felt that the crime in their locality is very high. 74% of the respondents felt that property crime was high. Considering the personal crimes like Hurt, grievous hurt etc, 62% of the respondents felt that there was medium rate of personal crimes in their locality.
 6. One of the main focuses of this research was to study the pain felt by respondents, due to crime. The study found that almost all the respondents (99.3%) underwent mental pain due to crime. 21.3% had undergone physical pain. Considering the duration of pain, on an average the mental pain took more time (150 months) to subside as compared to physical pain which subsided in 12 months, among the respondents included in this study.
 7. The study found that 57% of the respondents reported the crime and 42.9% did not report the crime to the police.
 8. As far as reasons to why respondents are not reporting crime to the police, 23.5% of the respondents felt that the crime was not serious and 29.5% felt that it was a private matter. 15.2% felt that it was waste of time and 31.1% felt that the police would not help.
 9. This study found that only 2.6% of the respondents said their victimization was taken to court and 13.1% felt that their case was not taken to court. Considering the respondents where cases were taken to court, the study found that 2.6% felt that the cases are pending for long time in court. Focusing on the satisfaction with the judgment delivered by the court, 0.3% of the respondents felt satisfied with the court's judgments and 1.3% felt 'Not Satisfied'.
 10. In order to find the relationship between selected variables of the study, Karl Pearson's correlation was calculated. It is seen that there is negative correlation between age and perception of crime in the locality ($r = -0.123$; $p < 0.05$ level). This indicates that as age of the respondent increases, his opinion on the crime in the locality decreased. This may be due to the fact that as the age of the respondent increases, maybe he/ she gives less attention to crime.
 11. There is a strong positive correlation between age and police efficiency ($r = 0.172$; $p < 0.01$ level). This indicates, as the age of the respondent increases, his feeling of reliability of police and their efficiency also increases. There is a strong connection between age and court efficiency ($r = 0.149$; $p < 0.01$ level) The study found that as the age increases, the perception of the respondents to the efficiency of courts also increased.
 12. It was found that there is a negative correlation between age and neighbourhood involvement ($r = -0.144$; $p < 0.05$ level), from respondents feelings of involvement in the neighbourhood activities, decreased.

13. It was found that there is a negative correlation between age and neighbourhood involvement ($r = -0.144$; $p < .05$ level) from it can be understood that, as the age increases, the respondents feelings of involvement in the neighbourhood activities, decreased.
14. It was seen that there is a strong positive correlation between perception of crime in the locality and extent of crime victimization experience ($r = -0.306$; $p < 0.1$ level). It means that as the extent of crime victimization experience, by the respondent increases, his/her perception of crime in the locality also increases. He/she feels that the locality is more insecure. Further there is a negative correlation between perception of crime in the locality and fear of crime ($r = 0.122$; $p < .05$ level). This indicates that as the perception crime in the locality increases, the fear of crime decreases.
15. The study found that there is a negative correlation between police efficiency and fear of crime ($r = -0.281$; $p < .01$ level). This means that as the respondents' perception of efficiency of police increases, the respondents' fear of crime decreases. In other words, faith in the police decreases the fear of the civilians.

Recommendations

1. Increase expenditure on the police.
2. Undertake Micro level studies in Commissionerates of police in India.
3. Create awareness on Insurance.
4. Upgrade crime prevention infrastructure.
5. Study unreported crimes.

4. ROLE OF THE NGOs IN PRISONERS' REFORMATION & REHABILITATION

Shri Ravindra Singh Yadav, ICARE, Betul, MP

Objectives

1. To critically evaluate the need of NGOs in prison management;
2. To examine the contribution of existing involved NGOs in prison management;
3. To identify effective and active NGOs in the field of Correctional Administration;
4. To explore and ascertain the limitations of NGOs in prison management; and
5. To suggest strategies to make effective contribution of the NGOs in prisoners' reformation and rehabilitation.

Methodology

1. An exploratory research approach was adopted. The exploration of new phenomena in this way may help the researcher's need for better understanding, may test the feasibility of a more extensive study, or determine the best methods to be used in a subsequent study. For these reasons, exploratory research is broad in focus and rarely provides definite answers to specific research issues. The objective of exploratory research is to identify key issues and key variables.
2. A total 10844 respondents were selected from Uttar Pradesh, Haryana and Gujarat.

Findings

1. The study reveals that most of the prisoners, i.e., 35.3% are young, in the age group of 21-30 years while above fifty one of sixty-one age group prisoners contributing only 17.88 percent.
2. Data shows that a maximum 3256 male and 198 women prisoners were illiterate while 1235 males, 65 women prisoners were educated till only primary level, 4023 male and 89 women prisoners were educated till matriculation, only 24 respondents had a professional degree. A maximum number of 198 women prisoners were illiterate, only 03 women prisoners completed their higher studies, i.e., Post Graduate.
3. Study reveals that in sampled states 45.21 percent children those who lived at home after their parent's conviction were in very grave condition. Nobody was interested in taking care of them due to non-payment and social stigma most of them left their studies in this situation. NGOs help a lot to protect them, provide them with learning material and even enable prisoners' children with a strong perception to face the odds after the release of their parents.
4. The study reveals that out of 10844 respondents 14.5% prisoners were educated through NGO schemes.

5. The study revealed that with the help of NGOs 10% of respondents were rehabilitated in society whereas 22% got help for aftercare services.
6. Data depicted that 39.21 male as well as 3.70% female prisoners have benefited with free legal aid with the help of NGOs.
7. The study found that existing rehabilitation status of prisoners is very poor and negligible in sample States, whereas 50% of the prisoners got help in rehabilitation and reformation for after care to solve their several problems rehabilitation.

Recommendations

1. The study suggests that at present NGOs are working for prisoners as per their whims and fancies on the basis of trial-and-error method, rather than rendering expert services which have measurable outcome and which can be coded in quantitative as well as qualitative terms. It will be useful to take their help for successful implementation of government policy at the state level. As per the Mullah Committee recommendations prison department should identify areas in which NGOs can work meticulously.
2. To bridge the gap between prison officers and NGOs a coordination committee could be set up at the state level to synchronize the performance of the NGOs in prisons to make an action plan for reformation and rehabilitation of prisoners.
3. The study suggests that there is an immediate need to organize national and regional level seminars, workshops to sensitize and build capacity among the NGOs on various issues pertaining to the needs of prisoners outside the prisons, based on the findings of the other studies conducted for rehabilitation and reformation of prisoners.
4. The study suggests that state prison head quarter should keep a proper computerized record of released prisoners for their aftercare through NGOs, which is at present badly neglected.

5. UNDERSTANDING STAKEHOLDER REACTION TO POLICE ACTION IN VIOLENT MOB SITUATION

Dr. Rajesh Chakrabarti, Bharti Institute of Public Policy, Indian School of Business, Mohali, Punjab

Objectives

1. Strategies for controlling mass protest without curbing the basic rights of the citizens;
2. Under what situation should police intervene and use force or police refrain from using force;
3. What are the various strategies available to the police force to contain and defuse the mob violence?
4. What are the formal and informal preventive methods used in India to contain mass protests and violence?
5. Case studies of successful and failed police inaction in India in the last decade;
6. The role of technology in gathering evidence and monitoring the riots;
7. Public and Media relations before, after and during the riots;
8. Guidelines for action and post action stages for the riots; and
9. Gathering first and second information to estimate the scale and timing of the riots beforehand.

Methodology

A qualitative research methodology has been used in the research study that included a study of relevant media reports of the incident and the international literature on policing; focused group discussions to identify issues and stakeholders; as well as a visit to Patna and Ara, to interview various members of the police force and the public at large to assess their reaction to the incident.

Findings

FGD 1 – Stakeholder sample: Active members of the police from across States

1. The participants were of the view that when the Government and political parties could be considered active stakeholders, society may be considered as a passive one, not in the sense of being indifferent but in the sense that they bore the consequences of the action but could not necessarily act promptly enough to change the course of events. It was also mentioned that the classification would depend upon the nature of violence (communal/non-communal) where passive stakeholders will take on the mantle of active stakeholders only when they would be called to the forefront in different situations.
2. When questioned about the decision makers while handling mob-violence situations, the response of the participants was unanimous in that the District Police (Superintendent of Police) would be the chief decision maker but depending upon the

scale of violence, the decision may warrant the support of the DGP, to check the spread of violence, District Magistrate, political executives and the Chief Minister.

3. The decision to use force or restraint in such situations typically would depend upon the cause of the incident and the potential impact of the same. Basically, it would depend on the decision of individual decision makers. But in situations involving national security, national revenue or incidents that are political in nature, political leaders/Government may be involved in decision making. In reality, it could also be an individual from a political party other than a Government official.
4. While discussing the various strategies to contain and diffuse the violence, formal and informal preventive measures were mentioned such as Criminal Procedure Code, Section 144, The Police Manual, and text book strategies, soft skills of police personnel and through networking with media. It would also include the strategy of 'wait and watch'. The police could also scan the local print media before the violence as a precautionary measure. A press meet may be called and in case of communal disturbance, the religious leaders/community leaders and alleged perpetrators would be advised. To strengthen the evidence against the perpetrators after the mob-violence, Police room records would be used.
5. On being questioned about the need for reforms in the system, the unanimous opinion was the need for political reform, correction of the lop-sided legal system, fixing of the gaps in the Constitution of India, strengthening of power of police personnel and appropriate changes to be brought in the Indian Police Act and State Police Act and IPC.

FGD 2 – Stakeholder sample: Non-government personnel

1. The group perceived civilians as key stakeholders in an incident of violent mob situation. According to them victims of the violence, the State, the agitating group, Police and political parties were other stakeholders. The group considered the mob as active stakeholders, being treated by the police action/inaction whereas the onlookers were considered as passive stakeholders while being treated by their silence and indifference.
2. The participants were of the view that police and the political party in power were the decision makers in a violent mob situation and perceived the political agenda or ideology the reason behind the use of force or restraint by the police during such situations. They believe that the police should understand the issue behind the violence before deciding to use either force or restraint on the protesting mob. The strategies to be used could vary from preventive custody of key potential perpetrators, use of Section 30 and section 144 of Cr.PC and mock drills by the police personnel while informal measures like conducting a flag march to instill confidence among the civilians, using media to communicate curbs on society and counseling the identified perpetrators may be used. They also advocated the use of limited force if required.
3. The preventive measures suggested included heavy deployment of force as a deterrent, frequent vehicle checks, frisking of individuals and questioning, display of paraphernalia like arms and barbed wire to restrain the violators and more importantly,

frequent communication between the police and citizens. The views of the responsible citizen group for the actions to be taken by the authorities (police and Government) during the pre-action and post-action stages in handling mob-violence were police-public partnership, correct information to be disseminated to the public and interaction between them while they endorsed the use of mild lathi charge, water cannons, tear-gas shells. The group advocated segregation of the student community from the agitating group and assessing the communal leanings of the deployed police (for instance refraining from deploying Andhra police to contain the Telangana violence).

4. The participants' conviction was that by lending more support to some of the responsible stakeholders whose views do not get sufficient attention like that of a non-profit organizations, continuous interaction between voluntary organizations and police, encouraging interaction between students and other similar groups and bringing about a change in the mindset of the citizens about the police force would be an assured way to bring about a more harmonious society.

Recommendations

1. For more effective crowd management should include the basics of management principles like planning, organizing, staffing, directing and evaluating the strategies apart from the size, demeanor and other aspects of the protesting crowd.
2. For effective crowd management, the following techniques may be adhered: -
 - Knowledge of the constitutional rights.
 - Training of personnel.
 - Seeking support of the community.
 - Reasonable use of force in an objective manner.
 - A professional well managed relationship with media.
3. The use of technology by the police in the form of videotaping the funeral procession and the resultant carnage and damage led to the arrest of few protestors who were identified by their clothes captured by the camera. This process could have been made more effective if cameras had been installed at various junctions which could capture the facial features of the protestors rather than their clothes. It could be argued that the police was in the dark about the route to be taken by the funeral procession. But the time taken for the procession to arrive in Patna from Ara would have given ample time to install the cameras at strategic positions.
4. A facial recognition system which is a computer application for automatically identifying a person from a digital image from a video source. The technique could be a traditional one where some facial algorithms identify the facial features which could be either geometric or photometric or the new 3-Dimensional recognition to capture the distinctive features on the surface of a face. Another emerging technique is the skin texture analysis which uses the visual details of the skin as captured by the digital or scanned images.
5. An effective way of reaching out to people, police could be active members of the social media network to spread messages of reassurance to the community and gain their support.

6. POLICE ACCOUNTABILITY, MOTIVATION AND CONTROL

Shri P K Siddharth, IPS (Retd.)

Objectives

1. To assess the ground realities with regard to the three chosen variables including motivation, accountability and control in the identified police stations and amongst the police personnel working in these police stations;
2. To assess the issues and challenges faced by the police personnel with regard to motivation, accountability and control in the identified police stations;
3. To recommend the 'way forward, to ensure the motivation, guidance and control of the police force to make the institution of police accountable towards public at large, upholding the constitutional rights and liberty of the people by interviewing police personnel, representatives of national human rights commission, victims of crime, civil society/human rights organisation, common citizens especially women, SCs/STs and police research organizations.

Methodology

1. Non-probability purposive sampling was adopted.
2. A total sample of 116 were selected from Delhi (South District), Haryana (Faridabad and Gurgaon), and Uttar Pradesh (Ghaziabad and Gautam Buddha Nagar).

Findings

1. **Factors influencing motivation:** It has been observed that motivation is quite high in the P.S. level staff. Factors including promotion and opportunity for professional growth, award for good work and weekly off found a positive influence of motivation in the police personnel. All factors received an average score of 8 and above in all States. Instant award is also a significant factor (average score of 7.8) for police motivation.
2. **Factors adversely affecting motivation:** It is observed that almost all average scores at the selected districts are above 6 out of 10, which indicates that police have very little impact of these negative factors on their work motivation. However, they are of the opinion and little worried on order of transfer, humiliation by political leaders, rude behavior of senior officers (mean score <6) at the district/state level. Police personnel reported their concern on humiliation on protesting against corruption by colleagues (mean score <5) which may discourage and pull down their motivation levels.
3. **Job satisfaction and Motivation:** The results indicate that a majority of police officers are satisfied with the job (levels of 5-7) in all selected districts. However, 3.3% of the sample size is found to be highly dissatisfied with the present job. Faridabad reported 8.3% and South district 7.7% of the total number of personnel at the police stations are not satisfied at all with the current job. On the contrary, same number of personnel is found fully satisfied with their jobs at the current level and location.

4. **Police Accountability:** It is observed that in all districts P.S. level staff feel their accountability towards the Constitution and law of the country (mean score 9.6), followed by the senior officials (mean score 9.1) and victim and their family (mean score 7.6).
5. In all districts, police personnel at the police station are more comfortable in submitting the response to senior officers (mean score 9.6), followed by victim and their family (mean score 7.2).
6. Police personnel were found least interested in discussing the information with the local MLA and MP. Moreover, they wanted to reveal the information following the law of the country.
7. Regarding questions on readiness to reveal information on RTI to general public, crime victims and access to case diaries, it is observed that majority of respondents (57.4%) at all police stations agreed to reveal information through RTI officer.
8. Majority of respondents revealed of no regularity in the public meetings either at police station level or district level. Exceptionally, 66.7% of the respondents at south district of Delhi agreed to conduct of general public meetings
9. **Police Control:** Analyzing the responses regarding the influence on their postings and transfers, all districts agreed to transfer policy for their postings and transfer (mean score >7).
10. It has also been noticed that influence of recommendation of senior officers and politicians also have a significant role (mean score >5) in the postings and transfers of the police officers. Further, it was found that all districts agree to role of C.R. and service record for their promotions. The influence of service records is reported with mean score 8.8 (max 10) in overall districts.
11. Almost all respondents agree to the regular check on status of police station by the senior officers of the district/state level.
12. Interestingly, we find a mixed reaction on the availability of CCTV at the reception. Tele-recording system at the reception is lacking in almost all districts.
13. Finally, respondents were asked on the need of police personnel at the police station. Most of respondents (more than 75%) of Faridabad, Gurgaon, GB Nagar and Ghaziabad have opined that current strength of police personnel is appropriate and is according to the need at the police station.
14. However, majority of the respondents (about 50%) at south district of Delhi had some different opinion and felt the shortage of police personnel.

Analysis of Survey of Crime Victims:

15. Respondents (76.9%) agree that police reaches within one hour of the incident. However, concern is about 7.7% of victims, where police took more than a day to arrive for the help.
16. Most of respondents (73.3%) agree to timely registration of the FIR, while 22.2% victims were found dissatisfied and FIR was not registered even in 48 hours of the crime. 93% of victims agree for the record of their statement correctly in the FIR.

17. Victims and the Police hold sharply different views and perception about the accountability; motivation and control of senior officers and key aspects of policing.
18. The survey results indicates that most of respondents (>85%) have scored below 5 on motivation level, and accountability levels of the police officers in the police station. Only around 13% respondents opined that motivation level of police staff is high and 19.6% perceived that the police are held accountable to their duties. It is also noticed that most respondents (around 70%) perceived that seniors have little control on the police station (score less than 5).
19. Overall most of the respondents are found dissatisfied with the investigation done by the police on the crime. Around 80% respondents scored below 5 on the satisfaction level.

Survey results of senior officers (District/State and BPR&D)

The survey result indicates that according to the senior police officers, the motivation and job satisfaction level is not high because of the adverse conditions and lack of facilities.

- The average scores on extent of corruption (mean score 4.71);
- Behaviour of police personnel (mean score 5.4);
- Extent of custodial violence (mean score 3.5); and
- Effectiveness of P.S. level staff in achieving the avowed goals (mean score 6.5) clearly indicates that senior officers feel the need of improvement in P.S. level staff to stop corruption, improve behaviour of the staff to make them more effective in achieving the avowed goals.
- Interestingly, all officers denied of any performance audit of the police station or the home department undertaken by an independent/impartial agency.
- Overall, officers feel the need of regular monitoring and effective public Redressal mechanism, maintain a transparent, time bound and result oriented police system.

Recommendations

1. Adequate police training with technology tools and up gradation of skills.
2. Adequate supervision that supports officers in carrying out their duties without any influence and reporting them correctly with transparency.
3. An independent body to regularly check the procedures for overseeing the feedback, evaluation and complaint procedures. The complaint procedures should connect the Police stations directly to the headquarters and the independent bodies.
4. Regular feedback from P.S. level staff regarding their basic requirements, welfare and security of their families to contribute in the development of new policies, procedures and instructions
5. Forum to invite suggestions from the public to voice their concerns
6. Monitoring of police actions and creating a work culture to promote transparency and evaluation.
7. Social audit and independent evaluation of PS involving feedback in order to improve future activities and prevent future wrongdoings.

7. A REVIEW OF DESIGN & TECHNOLOGY IN VARIOUS APPLICATIONS IMPLEMENTING CRIME/ CRIMINAL DATA, WITH A SPECIAL FOCUS ON NEED FOR INFORMATION EXCHANGE

Shri Anurag Gupta, IPS & Shri Rajeev Kumar, IPS

Hypothesis

It is the hypothesis (and point of investigation of current research) that the second proposed model (In which a central agency develops model of information exchange rather than model of information storage) is a better one and it is the route of crime record computerization which should be followed in India. This premise is based on the implementation of models of crime data exchange in the USA. This premise is also based on the fact that open standards of Information Exchange have been developed in many other areas such as in Finance, Health Care, Computer Incidents/ Response, chemistry, biology etc.

Methodology

The study took basically four business models for implementation of the crime/ criminal data. These are: -

1. CIPA (Common Integrated Police Application)
2. CCIS (Crime Criminal Information system) developed inhouse by Jharkhand Police.
3. CCTNS and
4. NIEM

Findings

1} The problems associated with having a central sever and a local server at each location. The CCTNS design has overcome this problem by creating a local sever at each police station location. Having a local server at each location has the following problems: -

- a. The problems associated with syncing of data on local server to central server.
- b. The problem of revision control on each local machine.
- c. Requirement of additional bandwidth because of needless communication between local server and central server.

2} The technology for offline storage/offline-online synchronization tools CCTNS application is very bandwidth intensive because of frequent syncing operations. A major concern in CCTNS applications is non-availability 24x7 internet connectivity.

- a. There a number of technologies which are now available for local storage with offline-online synchronization. Hence one may implement client side storage or Local storage and later sync to remote server to prevent the various problems associated with maintaining a local server.
- b. This will nullify the requirement of local server and also give fast performing and stable solution.

- c. “Client-side storage” means data is passed to the browser’s storage API, which saves it on the local device in the same area as it stores other user-specific information, e.g. preferences and cache. Beyond saving data, the APIs let you retrieve data, and in some cases, perform searches and batch manipulations.

3} The important issues in implementation of these APIs is: -

1. Security – (Sandboxed)

All the four storage APIs tie data to a single “origin”. e.g. if `http://abc.example.com` saves some data, then the browser will only permit `http://abc.example.com` to access that data in the future.

2. Quotas

The browser imposes limits on local data storage capacity. When an application attempts to exceed that limit, the browser will typically show a dialog to let the user confirm the increase.

3. Transactions

To ensure the integrity of the database indexed db and File API supports transaction. It prevents “race conditions” a phenomenon where two sequences of operations are applied to the database at the same time, leading to results that both unpredictable and database whose state is of dubious accuracy.

4. Synchronous and Asynchronous Modes

Most of the storage formats all support synchronous and asynchronous modes. Synchronous mode is blocking, meaning that the storage operation will be executed to completion before the next line of JavaScript is executed. Asynchronous mode will cause the next lines of JavaScript to be executed before the storage operation completes.

With the advent of HTML 5 many new methods emerged which help us to store data in browser storage on the client device.

Recommendations

(a) Need for adopting a standard for representing meta data to study the domain concepts:

In its current form no effort has been made to study the domain concepts relating to data. The NIEM data model has adopted the ISO/ IEC 11179 model for data representation and data exchange. But CCTNS has not adopted any standard for data modeling. It is recommended that CCTNS adopt a data model like ISO/IEC 11179 for data modeling.

(b) Use of document oriented data model instead of RDBMS for modeling CCTNS:

1. Whereas relational databases store data in rows and columns, document databases store data in documents. These documents typically use a structure that is like JSON (JavaScript Object Notation), a format popular among developers.
2. Documents provide an intuitive and natural way to model data that is closely aligned with object-oriented programming - each document is effectively an object. Documents contain one or more fields, where each field contains a typed value. such as a string, date, binary or array.

3. Rather than spreading out a record across multiple columns and tables, each record and its associated data are typically stored together in a single document. This simplifies data access and reduces or even eliminates the need for joins and complex transactions.
4. In a document database, the notion of a schema is dynamic: each document can contain different fields. This flexibility can be particularly helpful for modelling unstructured and polymorphic data. It also makes it easier to evolve an application during development, such as adding new fields.
5. Additionally, document databases generally provide the query robustness that developers have come to expect from relational databases. In particular, data can be queried based on any fields in a document.
6. Document databases are general purpose, useful for a wide variety of applications due to the flexibility of the data model, the ability to query on any field and the natural mapping of the document data model to objects in modern programming languages.

c) Use off line storage in browser rather than an offline application (Using HTML 5)

1. There are primarily two offline capabilities in HTML5: application caching and offline storage (or "client-side storage"). The distinction is core application logic versus data. Application caching involves saving the application's core logic and user-interface. Offline storage is about capturing specific data generated by the user, or resources the user has expressed interest in.
2. The available APIs in HTML5 are Web Storage (also called "Local Storage" or "DOM Storage"), Web SQL Database (or simply "SQL Storage"), IndexedDB, and File Storage. In all cases, the same-origin principle applies: the store is tied to the origin of the site that creates it (typically this amounts to the site domain or subdomain), so it cannot be accessed by any other origin.
3. Web Storage is a very convenient form of offline storage, being just a simple structure of key-value pairs like any JavaScript object. One downside of Web Storage is the lack of transactions.
4. Web SQL Database is an offline SQL database. Implementations today are based on SQLite, a general-purpose open-source SQL engine. It comes with all the pros and cons of traditional databases. On the one hand, you have a fully relational structure, allowing you to rapidly query and manipulate data via joins. Furthermore, there is support for transactions, your database is protected from the kind of race conditions that can arise with Web Storage.
5. IndexedDB is a compromise between Web Storage and Web SQL Database. Like the former, it is relatively simple and like the latter, it is capable of being very fast. As with Web SQL Database, there is also provision for transactions available to protect against race conditions.
6. File API: Directories and System gives you a way to store binary content (as well as plaintext), create folder hierarchies, and a means to store potentially huge data structures. There are separate specifications for its other component APIs: FileReader and FileWriter. The Filesystem API is supported today in Chrome, enabling apps to create and access an entire sandbox directory structure. If one needs a directory

structure, one can use this API to store large chunks of data, e.g. large text documents or even entire movies.

7. IndexedDB is not a browser database but an Object Store. It allows for applications to design, store and manipulate objects. It is in fact more like NoSQL databases, such as mongoDB and CouchDB. Objects are created and manipulated in JavaScript, and then stored and updated in the object store.

(d). Need for data migration and Data export/ import tools built into CCTNS: CCTNS design should have capabilities for migrating data from one database platform to another. There should be further capability that Data can be exported to files and imported using formats that are independent of the database being used. Currently CCTNS CAS do not have any tools for data migration. A successful Data Migration project depends on the use of clearly defined processes implemented using appropriate data migration software and tools which enable:

Data discovery, Data profiling, Data cleansing, Data transformation and Data validation.

(e) Need for ORM Layer in CCTNS CAS design:

Databases are relational, whereas most of the modern programming languages are Object oriented. In order to most effectively access the database in an object-oriented context, an interface translating the object logic to the relational logic is required. This interface is called an object-relational mapping (ORM), and it is made up of objects that give access to data and keep business rules within themselves.

(f) Need for readymade synchronization/ replication servers

1. SymmetricDS supports synchronization across different database platforms through the concept of Database Dialects. A Database Dialect is an abstraction layer that SymmetricDS interacts with to insulate the main synchronization logic from database-specific implementation details⁵. Hence if an application like SymmetricDS is used in CCTNS, it would make it possible to sync data even from different RDBMS applications.
2. SymmetricDS is extendable through extension points. Extension points are custom, reusable Java code that are configured via XML. Extension points hook into key points in the life-cycle of a synchronization to allow custom behavior to be injected. Extension points allow custom behavior such as: publishing data to other sources, transforming data, and taking different actions based on the content or status of a synchronization. This feature of SymmetricDS makes it very flexible and extensible and therefore very useful for CCTNS application.
3. SymmetricDS has a provision for a "Change Notification", whereby after a change to the database is recorded, the SymmetricDS nodes interested in the change are notified. Change notification is configured to perform either a push (trickle-back) or a pull (trickle-poll) of data. CCTNS design currently provides only "pull" of data. Hence use of SymmetricDS like application for synchronization would provide the flexibility and the option to have "push" or "pull" Of data.

4. SymmetricDS permits "Two-Way Table Synchronization". In practice, much of the data in a typical synchronization requires synchronization in just one direction.
5. SymmetricDS supports bi-directional or two-way table synchronization and avoids getting into update loops by only recording data changes outside of synchronization. Hence if an application like SymmetricDS is used to manage synchronization, we can do a two way synchronization.
6. SymmetricDS provides for "Data Filtering and Rerouting". Using SymmetricDS, data can be filtered as it is recorded, extracted, and loaded. Data routing is accomplished by modifying the router configuration. Routers are responsible for identifying what target nodes captured changes should be delivered to. Custom routers are possible in SymmetricDS.
7. In CCTNS database there seems to be a sync field/ flag in every table whether it stores temporary or permanent data.
8. SymmetricDS provides for "Secure Transport". By specifying the "https" protocol for a URL, SymmetricDS will communicate over Secure Sockets Layer (SSL) for an encrypted transport.

(g) Need for creation of Data authorities:

There is a need for a system similar to Geographic Names Information System (GNIS) followed in the USA.

8. USE OF FORENSIC TOOLS TO PROMOTE GOOD GOVERNANCE

Dr. S Krishnamurthy, IPS (Retd.)

Objectives

Use of Forensics is promoted and advanced to enable all corrections and actions including penal and other impositions, which are inevitable as well as necessary in the management of the affairs of a State. The study is intended to sharply focus the concept of 'Good Governance' as a way by which the State and the People can put a combined crusade to seek and ensure the optimization of all National Resources and Pave the way for the collective progress and wellbeing of the society. The entire study envisages to develop a systematic and broad-based enunciation covering various aspects of development and progress and would also be a reflection on the way in which the State has to respond to enforce and uphold the rule of law, by higher standards of efficiency and effectiveness using various tools and aids as well as the processes, which inter-alia would also include a greater awareness about the potential of Forensic in that gigantic efforts.

Methodology

1. Qualitative data collection.
2. Quantitative data collection.
3. Field Research.
4. Use of Government Publications, Reports, Journals, etc.

Findings

1. There is a clear need to promote the idea on the use of forensic tools in law enforcement work and the needed change is surely felt in really massive dimensions. In order to move the systems towards the better, a series of steps are essential. Firstly, there is a need to make the field level personnel aware in real terms on the expanding world of the forensic science that can be employed to help the cause of the law. Thus, there is primary need to promote the levels of awareness on forensic potential that can help the police work. Next, the idea that such a tool depends upon the creative and persistent enterprise of the field level officers must be instilled in their work ethics and duty ethos. Further, steps must be taken to cement the determination on the part of the investigating officer/s to not to let even the faintest of clues to escape their notice – at the time of their visit to scenes of crimes (through thorough and painstaking efforts). Lastly, all these must be coupled with an imaginative mind to creatively think of ideas in relation to each and all cases before them to work in term of securing scientific clues.
2. Though a good part of forensic applications is to be done at the forensic laboratories or other places of tests, the preliminary efforts done at the scene assume immense importance. Two elementary but mutually dependent features merit action in that regard. Firstly, the first levels of investigators and their teams ought to preserve the

scene and also be conscious of all reasonable possibilities in ferreting out all likely physical remnants or clues that may help the investigations at a later stage. Though it may not be realistically possible to forecast the way in which a case will develop, the awareness levels of the investigators in terms of forensic tools are of primary importance. Next, the creative, innovative but inquisitive mind of the investigator will prove to be of crucial and critical value in slowly zeroing in, on areas where forensic tools can be employed to help the advanced case to its logical end.

3. A quick perusal of data on the applications of forensic tools in police investigations in general show that the numerical number of cases where such tools are employed generally show that such efforts are generally restricted to cases generally of homicide, rape and other serious offences against body (predominantly tests are employed in relation to weapons, blood stains, clothing and other materials in rape cases, finger prints in cases of theft, house-breaking and so on) and yet their number does not exceed more than 20% of the total number of serious cases taken up for investigation.
4. It has to be conceded that the basic levels of the prevailing and available forensic tools are not at par with the contemporary international standards. The standards of current technologies in forensic field in India are still in the first-generation levels where as the developed world has moved to third generation standards must compel the concerned to come up with ways to bridge the yawning gap. In that regard, it is noted that most states have forensic laboratories and some of the states have also moved ahead to establish regional forensic resources as well as mobile units to cater to private enterprise initiatives in providing to the public various forensic support, especially in many metropolitan areas.

Recommendations

1. Unique Identity as a Forensic tool has been commended for its ability to breach the anonymity of a perpetrator of a crime thus facilitating Accountability to be fixed for individual or specific failures to further the cause of law.
2. Concept of Preventive Forensics has been rightly promoted though Forensics is traditionally associated with post crime activities.
3. Making available all Forensic support is urged to professionalize Interrogation techniques and in the search for truth, especially from suspects and witnesses who are privy to all circumstances surrounding any crime.
4. Elevating the standards of enforcement and police work is called for to improve the efficacy of the Criminal justice system and all its components.
5. Multi-pronged actions are required to deal with the monster of corruption akin to dealing with mafia that have assumed State capture of institutions.
6. Requirement of large-scale Citizen Engagement and stakeholder empowerment by responsible sharing of Information is mandatory along with allocation of adequate resources to counter the threats from vested interests.
