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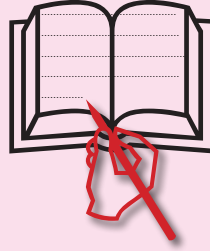
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## CONTENTS

Editorial	2
1. The Commoner Goes Berserk: The Socio-Psychological Subset of a Rebel and a Terror Monger <i>Dr. Manan Dwivedi</i>	4
2. "Maoist-Naxalite Problem : Threat Perception and Tackling Strategy through Responsive Governance" <i>Dr. Krishna Kumar</i>	19
3. Terrorism and Human Rights: Critical Analysis <i>Inderpreet Kaur</i>	28
4. Human Rights-Obstacle for Police and Safety for Criminals <i>Dr. Dalvir Singh Gahlawat</i>	41
5. Intelligent Emergency Response System for Police Vehicles in India <i>Ishan Ganeshan</i>	49
6. Clandestine Drug Laboratories: The Problem, Dangers and Solution <i>Ashok Juneja IPS</i>	66
7. Digitalized Terrorism -The Technological Advancement of Crime <i>Dr. Nidhi S &amp; Dr. Priti Saxena</i>	85
8. "Safe City – Surat"- Suraksha Setu <i>Rakesh Asthana</i>	103
9. Image Crisis of Indian Police <i>Umesh Sharraf</i>	121
10. Public Perception About Indian Police: An Empirical Analysis <i>Bushara Bano &amp; Dr. Parvaiz Talib</i>	132
11. First Information Report and Criminal Justice <i>Dr. Pradeep Singh</i>	149
12. Eleven Guidelines to be followed in all cases of Arrest and Detention <i>Khush Kalra</i>	182
13. Organisational Health, Leadership Effectiveness and Influence Tactics as Perceived by Police Personnel- Some Reflections of Vadodara Police <i>Dhvani Patel &amp; Urmil Nanda Biswas</i>	192
14. Influence of Emotional Intelligence on Adjustment of Police Personnel <i>Dr. Shah Alam</i>	209
15. Forensic Aquatic Entomology: A Review <i>Sahil Sharma &amp; Rajinder Singh</i>	226
16. An Introduction to Major Computer Attacks and Preventive Measures <i>Aparna Kumari, Rashmi Sharma, Dr.A.K.Gupta</i>	237
17. The Emergence of Community Policing Initiative: an Overview of Janamaithri Policing in Kerala <i>Kannan. B &amp; S. Ramdoss</i>	248

# संपादकीय



On occasion of 65<sup>th</sup> Republic Day, we must salute all the stakeholders of the internal security and Indian Police in particular for steering the Nation to the relatively secured internal and external security environ despite all the odds stacked against. The Indian Police has undoubtedly safeguarded and secured our Republic and the democracy with aplomb and bravado, notwithstanding the plethora of glitches, accusations, commissions and omissions.

In this issue of Journal (Jan.-March, 2014) we have discussed the concerns ranging from terrorism, human rights to the image crisis of Police and the public perception of Indian Police.

Terrorism, both external and internal, has emerged as the most potent threat to the internal security. Dr. Manan Diwedi, in his paper, 'The Commoner Goes Berserk: the Socio-Psychological Subset of a Rebel and a Terror Monger', tackles this problem through the socio-psychological perspective. 'In the initial decades of the 1960s through the mid-1980s, psychologists advanced their neophytic themes that mental and psychological disorders were the instrumentalities behind the behaviours and inclinations of terror mongers. In the contemporary context not much is attributed to the mental disorders and discomfitures.' A terrorist is groomed gradually from a young age. The boys (typically aged 10 to 16) who are the easiest to recruit for suicidal missions are 'at the stage of development of moral judgement called retributive justice'. This retributive Justice with its credo of 'eye for eye' certainly points to the revival of total disrespect to the law.

The internal security threats are both external and internal in nature destabilising the nation and societies across the world. The collateral of the menace is the gathering storm of negative public opinion against the state in an international system that put premium on 'Us vs. them' 'Your terrorist is our freedom fighter' 'Liberator of human plight through terror and mayhem' and the blindfold of 'good vs. bad' terrorist.

The paper, 'Maoist-Naxalites Problem: Threat perception and Tackling Strategy through Responsive Governance' by Dr. Krishan Kumar pleads for tackling this scourge through responsive governance. "Maoists claim to represent the marginalised and deprived sections of the society and exploit their frustration and anger against backwardness and malgovernance so as to enlist their support in the movement. They are waging an armed struggle against the Indian State which they consider capitalist and exploitative.....Only sustainable development, socially inclusive policies, participatory and good governance combined with tough security measure can resolve this problem."

Another issue related with terrorism is the problem of human rights. While some human rights enthusiasts plead for the human rights of the terrorist ignoring the blatant violation of the rights that the mayhem and violence unleashed by the terror groups leads to, other condones the violation of human rights by the security forces on the untenable ground. Both approach reeks of cynicism and myopia which in fact weakens the fight against terrorism. The paper 'Terrorism and Human Rights: Critical Analysis' by Inderpreet Kaur and 'Human Rights: Obstacle for Police and Safety for Criminals?' by Dr. Dalvir Singh Gahlawat plead for the balanced approach in this regard.

Another issue that has emerged as the fault lines of the internal security and Indian Police is the image crisis and rather negative public perception of the Police. Both has nosedived southward posing veritable challenge for all the stakeholders of the internal security. The dilemma is further exacerbated by the fact there seems to be zero sum gain resulting out from the efforts to refurbish the image of Police.

Shri Umesh Sharraf, IPS, in his rather cathartic paper, "Image Crisis of Indian Police" sums up this dilemma when he maintains: "Just acting for popular image is chasing a chimera for the police force at this stage of our polity and often results in temporary gains which are frittered away with every police lapse and what police leaders must strive for is an image of professionalism, effectiveness and impartiality. Rest will follow. "While Bushara Bano and Dr. Parvaiz Talib, in their paper, "Public Perception about Indian Police: An Empirical Analysis" rightly comments about the plummeting public perception of the Indian Police. However, one question remains unanswered: Can a police and policing based on the traditional/colonial ethos, system and paradigm expect good image and positive public perception?"

Other papers featured in the issue directly or indirectly further elaborate these challenges facing the Indian Police and policing.

  
Editor

# The Commoner Goes Berserk: The Socio-Psychological Subset of a Rebel and a Terror Monger

Dr. Manan Dwivedi\*

## Keywords

Terrorism, Terrorist, Commoner, Rebel, Socio-Psychological Subset, Terror Monger, Anti-State Force.

## Abstract

*The internal security threats are both external and internal in nature which destabilize the nation and tend to engender a negative public opinion against the state in a much biased international system. The collective behavior of the individual citizen towards the State and the Institutions also changes, leading to a citizen's "behavioral atrophy" vis-vis the political system and the class in general.*

## Introduction

Terrorism is a very well known and a rather calibrated phenomenon which is directly emblematic of the notion of anti-state forces and inclinations which have been playing havoc with the theme of national security and the general well being of the *hoi-polloi* of the Indian nation State. The rationale why and how a ordinary citizen metamorphoses into a rebel with a cause célèbre is not a thesis which needs much of an investigation. In the

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<sup>1</sup>A. Merrari, "Academic Research and Government Policy on Terrorism", *Terrorism and Political Violence*, 3: 1, ( 1991) . pp.no. 88-102

Author Intro.:

\* Assistant Professor, (International Relations and International Administration), Indian Institute of Public Administration, New Delhi, Former Assistant Professor, Gujarat National Law University.

midst of the developing societies of the contemporary context, the plane jane denizens tend to wear the garb of disillusionment and disgruntlement much too early for their years. The socio-political and economic context of the contemporary times also makes the myriad folks militate against the State as its apathy yields unrest and breeds an ever germinating discontent amongst the *hoi-polloi*.<sup>1</sup> The rationale is too easy an exercise to subsequently decipher, wherein, the mass impoverishment along with the notion of alienation being felt by the masses leads to the spawning of a Ghetto like mentality and psychological subset leaving an indelible imprint upon the "victims". The term State repression is much too often utilized as a scapegoat but we need not discount the perception of the State and its attendant obligations and political limitations which emanate from the comprehension of "National Security".<sup>2</sup>

Men rebel in all developing and resuscitating societies and the polities of the South Asia and India being no exception to the rule. The upswing of the "dissenters" and the "violent, ideological and militarist upsurge" of the marginalized and the minority, castes, creeds, mini/ micro cultures, regional and linguistic groups interspersed within the territories of the South Asian nation states and the Indian "Terra Firma." "Imagine then a ship or a fleet in which there is a captain who is taller and stronger than any of the crew, but who is a little deaf and has a similar infirmity in sight, and whose knowledge of navigation is not much better. The sailors are quarreling with one another about the steering—every one is of the opinion that he has a right to steer, though he has never learned the art of navigation"<sup>3</sup> Do we face such a slight in the hands

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<sup>2</sup>National security is the requirement to maintain the survival of the state through the use of economic, military and political power and the exercise of diplomacy. The concept developed mostly in the United States of America after World War II. Initially focusing on military might, it now encompasses a broad range of facets, all of which impinge on the military or economic security of the nation and the values espoused by the national society. Accordingly, in order to possess national security, a nation needs to possess economic security, energy security, environmental security, etc. Security

<sup>3</sup>"Search of Truth: Tolstoy's War and Peace in Plato's Republic," URL: <http://www.mit.edu/~jrising/resources/philo/webres/tolstoyplato.txt>, (Accessed on 4th May, 2011)

of the political elites that reigns over the sub system in the Indian firmament. Thus, anti nationalistic threats of the order of asymmetric warfare, low intensity conflict hewn from external forces along with the theme of casteism, religious and ethnic strife in India, are some of the bottlenecks in the rubric of the regional security and nationalistic ethos of the sub-continent.

The Greek philosopher, Plato draws an analogy between a shaking and torment ridden Naval vessel and a nation state mired in the cacophony of internal insurrections fuelled by popular angst and discontent.<sup>4</sup> The stewards of the ship are akin to the Indian nation state and the nation needs to be aware of these cleavages if the notions challenging the nation state need to be circumvented. Thus, the internal security threats are both external and internal in nature which destabilize the nation and tend to engender a negative public opinion against the state in a much biased international system. The collective behavior of the individual citizen towards the State and the Institutions also changes, leading to a citizen's "behavioral atrophy" vis-vis the political system and the class in general.<sup>5</sup>

Thus, these nation states have to machinate themselves ahead on a road map for incremental changes including more of an accountability, transparency and democratization in their internal security establishments and strategic frameworks. Only then can the themes of nationalism, unity, integrity and prosperous stolidity can be strengthened and sustained as an efficient bedrock for the future placability and stability of the national security environment. One can definitively hark back to the political activism civil of the society<sup>6</sup>. Thus, in the realm of international relations the lore of repetitiveness and recurrence is the order of the day, where-in, such popular angst and

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<sup>4</sup>Alan Bloom, "The Republic of Plato", (New York: Verso Press, 1991)

<sup>5</sup>G.A. Quattrone, "Over attribution and Unit formation: When Behavior Engulfs the Person," *Journal of Personality and Social Psychology*, 36, (1982), pp.no. 246-257

<sup>6</sup>NDTV Correspondent, "Who is Anna Hazare?", URL: <http://www.ndtv.com/article/india/who-is-anna-hazare-96883> (Accessed on 4th June, 2011)

<sup>7</sup>A.R. Burn, "The Penguin History of Greeks," (New York: Penguin Books, 1966)

discontent firms up the foundational elements of rebellion.

Greeks had a fine culture of a conjoined co-existence with City States of the order of Athens, Sparta, Thebes, Corinth, etc, having their internal differences but also their agglomerated identity as a unified and coherent Greece which did militate in a unified manner against the Persians and the Macedonians.<sup>8</sup> The Indian Union too exists as a kind of *mélange* which has its internal complexities and discords and the futuristic need is being felt to ingrain a combined ethos of a nation which is on the move.

Let's move over to a deft delineation of Greek philosophy. The Greeks and the Romans had a strong sense and comprehension of the notion of nationalism and they dealt very severely with the fissiparous elements. The American colonies when they became independent in the year 1787, too, adopted the nationalistic and patriotic fervor of the entrepreneurial Greeks and the all conquistadors Romans. Thus, the Indian security establishment as it was mired in the security and international ramifications of adhering to the ideal of Non-Alignment and non-involvement in the Blocs seems to have led to the following of a culture of tolerance and gratification of the fissiparous trends in the Indian nationalistic narrative and discourse.

The defeat at the hands of the Chinese and the incessant military incursions and bravados of Pakistan did add up to Indian Military awareness and preparedness but it could not firm up the ethos of an enlightened internal and national security operational bless. Thus, India internally and gradually adopted the mantle of being a "Soft State" which could be coerced through the modicum of asymmetric warfare and internal insurgencies sans a full fledged war. Thus, an aided and abated war of attrition was objectified by the neighbors by fomenting fissures in the religious demographics of the Indian and the South Asian nation States. The myriad threats were encouraged by encouraging the elements of impoverished masses and the disaffected political lots in the Indian nation State.

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<sup>8</sup>Xenophon, "The Memorable Thoughts of Socrates", ( New York: Watch maker Publishing, 2010)

This is a pointer towards the threat of maoism, naxalism, casteist fissures, regional satrapism, delabilitating ethnic cleavages and other localized conflicts in the nation state at large.<sup>9</sup> The Greek idiom of nationalism and the attendant notion of integrity can be a sufficient pointer towards the theme of nationalism and the patriotic ethos in our besieged nation as a whole, can serve as a societal lid upon the notion of misappropriated and misguided rebellion. It is this rebellion which is generally premised upon the psychological make up and the construct of an individual and the group.

### **The Psychological Framework of Rebellion**

In the context of human and individual rebellion, Ted Gurr, a noted scholar, contends that, "Rebellion is definitely a state of mind but it is also a manifestation of state apathy. Men are quick to aspire beyond their social means and quick to anger when those means prove inadequate, but slow to accept their limitations. This is the tension between your actual state, and what you feel you should be able to achieve; as Gurr says it, "perceived discrepancy between value expectations and value capabilities".<sup>10</sup> Gurr further contends that, "The intensity and scope of RD strongly determine the potential for collective violence." It can be concluded that frustration-aggression is the primeval progenitor of the human potential for attrition and a violent outburst is neither necessary nor sufficient and in the finality greed initiates and sustains conflict but individually felt angst is too serves as a driving and gung-ho spirit and daredevilry generally celebrated as "moral courage." Thus, the more intense and prolonged a feeling of frustration, the greater the probability of aggression.<sup>11</sup>

The context of rational choice theory of International politics and embossed political systems do not add up to much here as

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<sup>9</sup>Pursuttom Bhattacharya, Tridib Chakrabarty, Shibhasis Chakravarty, "Anatomy of Fear: Essays on India's Internal Security", ( New Delhi: Lancers Books, 2004)

<sup>10</sup>Ted Gurr, " Why Men Rebel", ( Princeton: Princeton University Press, 1970) pp. no 48-51

<sup>11</sup>Ibid



the emotionalism and sentimentality takes the primary seat of motion and operation in micro level situations of different levels of deprivation. People act out their frustrations if "they believe that they stand a chance of relieving some of their discontent through violence". Angst ridden and frustrated denizens are more welcoming to arguments that violence sustains a personal and ideology driven tirade. Thus, sentimentality makes awry the calculus, making action less than purely rational.

### **The Psychology of a Terror Monger or a Rebel.....**

The definitional aspect of the psychological tenet of terrorism of all possible variants inclusive of the largest ambit of international terrorism equally imbued with the attendant themes of cross border terrorism and super terrorism et al, deserves a delving inside before one scouts around for the micro level psychological positioning of a singular operative. Jerrald M. Post, a Professor of psychiatry premised at the Program at George Washington University in Washington, penned down a theoretical piece titled as, "Collective Identity: Hatred Bred to the Bone," which appeared in the May 2007 edition of e-Journal USA, Countering the Terrorist Mentality." The learned Professor contends that, "In the context of the theme of countering the scourge of terrorism, we must get into the mind of the terrorists, and that mind is distinctly not deranged. Terrorist groups in a planned and phasal manner eke out emotionally unstable folks as part of their recruitment drives as they posit a mammoth security risk." <sup>12</sup>

Post further contends that, "The habit of Terrorism is the outcome of the quagmires of collective identity, shaped over years, as minors are indoctrinated with meaningful and incisive missives of acrimony, either from community leaders or religious radicals whose interpretations of scripture are rejected by the vast majority of the population. The need of the hour is to comprehend the connivers

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<sup>12</sup>David Mc Keebey, USINFO Staff Writer, " Terrorist Psychology Driven by Hate, Not Emotional Instability", (Online:Web), URL:<http://www.america.gov/st/washfile-english/2007/June/20070620172050IDybeeKcM0.7099573.html> ( Accessed on 2nd June, 2011)

and doers of this violence as part and parcel of individual cultural environs and communicate with those not yet fully committed before their identity becomes indelibly imprinted. For instance, Post contends that while the tenets of Islam prohibit suicide, killing innocents and killing fellow brethren, radicals stand for terrorist attacks of the order of *iftishad*, which refers to martyrdom in the realm of the fold.<sup>13</sup>

The twin tenets of terrorism and an individual errant are inextricably linked with each other, much in the framework of the chicken and egg paradigm. When a lay man conjures up a visage of a terrorist, it appears to be either a traditionally clad ideologue and an organizational man or the imagery might veer around to that of an ordinary mortal clad in a “Kasabasque”<sup>14</sup> baggy trousers with a hand bag slung up on the back of the same diminutive mortal who would pass off as a happy go lucky student or an upstart doing shifts in the IT hub of Gurgaon in the vicissitudes of the National capital territory. It is no gainsaying that the dark underbelly of the Urbana produce the loris superheroes of the present day redemptive World where-in, the “Martyrs” condone the ills perpetrated by them on the masses, people caught in the melee, along with the rigid indoctrination which is unleashed upon an untrained and innocent mind who is intentionally made to get exposed to only one side of the picture and his or her “mainstreaming” is precluded to some later date when the belief structure becomes part and parcel of the thus, disfigured persona of the individual marauder par excellence to place the spotlight of the faith or the ethnic clan. Still, what one needs to pinpointedly recognize that no religion supports the maiming and annihilation of innocent men and women along with the newly bridled operating framework of Suicide instrumentalities which have caused much anxiety and consternation for the security agencies all across the Global Polity.

In the initial decades of the 1960s through the mid-1980s,

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<sup>13</sup>Ibid

<sup>14</sup>Express News Service, “The Balance Sheet and How It Weighs Against Kasab,” ( New Delhi: Indian Express, 22nd February 2011)

psychologists advanced their neophytic theme that mental and psychological disorders were the instrumentalities behind the behaviors and inclinations of the terror mongers. In the contemporary context, not much is attributed to mental disorders and discomfitures. A terrorist develops gradually from a young age. The boys (typically aged 10 to 16) who are easiest to recruit for suicide attacks terrorism are “at the stage of development of moral judgment called retributive justice.” This “an eye for an eye” stage of emotional development was described by the Swiss psychologist, Jean Piaget.<sup>15</sup>

Not all terrorists fight with guns and bombs, and not all of them do not indulge stringently for political gain. Some folks carry on their bitter fight in a more nuanced framework of mind.<sup>16</sup> Monadhika Sharma contends that, “ Such people militate with the instrumentalities of social disobedience. Moreover, they might even passively support those who use more lethal violence. Their antagonists are not tangible objectifications. Early childhood betrayals might fan their subsequent fury in their personal and individualized lives and what is startling is that the general tale of political injustice being meted out to them does not cause them to amalgamate with the rebelhood, but it was intellectual and emotional discrepancies which they had to match up with, which makes them join the rank and file of disbelievers. The wounds caused by this fraud, if not properly healed, can project a subtle rancor into the world as subversive as the bitter heart that pulls the trigger of a gun.”<sup>17</sup> This does not refer to the theme that such deviancy renders the portrayal in the Bollywood a much easier task for the script weavers in Mumbai. Still, the role of popular culture as being a despondent but avid reflector of the visage of a terror monger qualifies for being a cynosure of all eyes.

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<sup>15</sup>Monadhika Sharma, “ Within the Confines of a Terrorist’s Mind”, (Online: Web), URL: <http://www.youthkiawaaz.com/2010/01/within-the-confines-of-a-terrorists-mind/>, ( Accessed on 1st May, 2011)

<sup>16</sup>H.H.A. Cooper, “ What is a Terrorist: A Psychological Perspective”, ( Legal Medical Quarterly, 1 (1977): 16-92

<sup>17</sup>Ibid

In the Hollywood construct, *The Birds*, Alfred Hitchcock dealt with horror depiction by showcasing what genre of destruction harmless birds can indulge in, but thankfully in the real and tangible world they do not involve themselves in such debilitating histrionics. They could viciously attack anyone and everyone without provocation. We humans have the same capacity for aggression as animals, but it is fortunately contained behind the inhibiting effect of the frontal lobe of the brain. Sometimes this inhibition falters, as in Tourette's Disorder, when a person can involuntarily blurt out foul words. Sometimes we use alcohol or other drugs to drown out our inhibitions so that we can feel more "relaxed," and then, sadly, we end up acting recklessly. And sometimes, under the influence of group social pressure, the inhibition can be more or less lifted entirely, to facilitate war and other terrorist atrocities.<sup>18</sup>

A French psychoanalyst, John Lacan, postulated that the social world is a farcical and fraudulent. The social world constructs immediate Worldly demands upon the denizens of any political system as which the French psychoanalyst termed as, the social world or the "the Other," and he expostulated on this truth embedded in the falsehood with a neo maxim that, "There is no Other of the Other."<sup>19</sup> He was referring to that all of the meaning we attribute to our human creations, including language itself, has no value beyond its own reference. Lacan, at least, did not attempt to subvert religion like Freud, nor did he try to "psychologize" religion like Jung and Rank. Lacan simply respected the fact that psychoanalysis could say nothing meaningful about religion.<sup>20</sup> Though, in attempting to comprehending the menace of terrorism, the aspects of religion, cults, personality traits and the lure of ideology along with the cumulative factor of a Community's victimization need to be factored in.

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<sup>18</sup>"The Psychology of Terrorism", (Online: Web), URL: <http://www.guidetopsychology.com/terrorism.htm>, (Accessed on 1st June, 2011)

<sup>19</sup>Lacan, Jacques. "The subversion of the subject and the dialectic of desire in the Freudian unconscious." In *Écrits: A selection* (Alan Sheridan, Trans.). New York: W. W. Norton, 1977, pp. 310-311:

<sup>20</sup>*ibid*

If one attempts to delve inside the psychology of an insurgent, then some light ought to be shed on a few comments from the Media. Susan Sontag, penned down her thoughts in the aftermath of the September 11 attacks,. Where-in, she contended that, "Whatever might be said of the Tuesday's catastrophe, these men were not cowards". Ted Turner, the founder of the Cable News Network, contended that, "I think the 19 hijackers were brave at the very least".<sup>21</sup> These comments evoked vehement criticism as being supportive of an alternative and derelict frame of mind. If one makes an attempt to comprehend the vista of the socio-psychological make up of a terrorist, then, one can refer to the statement of the Irish Police Constable, Ronnie Flanagan, where-in, he contended that, "For me understanding such activity, comes dangerously close to authorizing, sanctioning and approving it".<sup>22</sup> Thus, in a way, the advent of this collective soul searching ought not to take the form, shape and veneer of sermonizing at large upon the threat and need not appear like sympathizing and empathizing with the law breakers and the tormenters of the mankind in all it's ilk's and varieties.

One pugnacious statement of an apprehended terrorist relates that, "I never considered myself a Murderer. We had declared war on the State and the State did not recognize us as combatants. People were killed, molested and households burned down, and we were arrested and were stripped of our freedom and dignity. We did kill people, except for the notion that they were natural opponents..... It was definitely unpleasant to kill and maim and the thought of the suffering of the relatives of the victims brought us suffering but it all was necessary for a higher cause".<sup>23</sup> Thus, despite all the palaver about relative deprivation and the notion of

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<sup>21</sup>J. Greenberg, S. Solomon, Pscyzhenzecki, "In the Wake of 9/11: The Psychology of Terror," ( Washington, D.C. American Psychological Association, 2002.

<sup>22</sup>O' Doherty S, " The Volunteer: A Former IRA's Men's True Story", ( London: Fountain Books, 1993)

<sup>23</sup>Di Giovanni, " Light from Behind the Bars", ( United Kingdom: St. Paul Publications, 1990)

martyrdom and supreme victimhood being the primogeniture of the dark road ahead, the characteristic of mindless retribution and the espousal of a hallowed portal beyond the borders and tangibilities of this World, render the objectification and rationalizing of the anointed zeal as a nebulous, deviant and a dangerous fait accompli which needs to be tamed by the law makers and the State machinery in the name of maintaining order and sanity in the civil societal firmament. The Media and the entertainment industry too has a role to play in either condoning or castigating the scourge of mindless bloodbaths which have ravenously eaten up into the repository of our "Civil Societal hub," that India is.

### **The Media Portrayal of a Quintessential Terror Monger**

In India, the threat of terrorism, through both its modicum of Cross Border Terrorism, International Terrorism and Super Terrorism, tend to be amply portrayed in the domestic Moviedom. Still, the precursor element which has tended to inspire such Manicheastic portrayals owe their traditional origin to the United States Film and Entertainment industry. American foreign policy and economic interests influenced the portrayal of international terrorism in Hollywood blockbuster films from the time of the Iran hostage crisis to the 9/11 terrorist attacks. Films of the order of "Commando" and "Iron Eagle" form the stereotypical and quintessential depiction of the darker side of law enforcement. The Hollywood terrorist after the Cold War, including European terrorists in the "Die Hard" franchise, "Passenger 57", "Patriot Games", "Blown Away", "The Jackal and Ronin" find another facet with their gory and gruesome but very realistic depictions. Fundamentalist Islamic terrorists find their truest manifestation in the silver screen potpourri of the order of, "True Lies" and "Executive Decision" and the return of the communist threat is depicted in all its sincerity in the movies of the order of "Air Force One"; and 9/11 foreshadowing in the Cinematic Construct, "The Siege".<sup>24</sup>

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<sup>24</sup>Helena Vanhala, "The Depiction of Terrorists in Blockbuster Hollywood Films: 1980-2001", ( New York: Macfarland and Co, Inc, 2011) pp.no. 12-40

The Manicheistic portrayal of the terrorists who cast a spell upon the viewers with their lavish life styles and their mimicable whims and idiosyncrasies, have always been a rich draw at the commercial hustings. The designated state does not need to indulge in an out-of-the-ordinary societal and political ministrations, in order to justify its stand, vis-a-vis the tenets of armed rebellion in the scorched rural hinterland of the Indian nation state or be it the matrix dominated cyber and hyper Jungle of a besieged, "luftmensch like Los Angeles" or "a maimed Manhattan." Juxtaposed against this Statist commandeering of its Goebellesian propaganda apparatus, the non-state antagonist living the lives of the likes of Kanu Sanyal, are exhausted in their single minded devotion to extricate the masses out of the so-called morass of state ordained Democracy and praxis, which itself is questionable. The antagonist leads a rightly vilified existence, between the multitude of "Manicheistic portrayals"<sup>25</sup> and mundane Media renderings, which is not completely uncalled for.

Thus, be it the Statist Media or the popular culture products, the stereotypes are always encouraged over the tangibilities in the real time Middle East or North Africa. One can have a brief look inside the thematic percepts involved in the Cultural Construct, "True Lies", which showcases the dark and lurid World of a Terrorist leader and an Operative bereft of all sanity and replete

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<sup>25</sup>Manicheistic Portrayals refer to the heresy and admonition, spread by the Media and the Propaganda machinations of a powerful State actor or a group, which can make or mar favorable Public Opinion, about a Political, Religious or any other genre of Adversary. The stratagem involves the vilification of a Public personality which is positioned in an adversarial manner vis-à-vis, the more powerful actor in the power game. The vilification campaign launched by the US Media against Saddam Hussein and Ayatollah Khomeini as the "Great Satan" or as the enemy in the form of a diabolical "Them" pitted against the West or the "Us" in a battle till one vanquishes and obliterates the other in a divine and moral struggle for one-upmanship. The Hitler like portrayal of Saddam Hussein in the Persian Gulf War-I, in the year 1991, during Operation Desert Storm and the deionization of the Viet Kong, the National Liberation Forces led by Ho Chi Minh as the "Communist Aggressors" during the Vietnam War are some of the outstanding instances of Manicheistic depiction of weaker adversaries, in an attempt to sully and tarnish their reputation.

with whimsical entrepreneurship in a messianic zeal to undo the Western Civilization with the devotion of a Zealot. Although most of the film is a comedy, here is the serious plot line: an Arab terrorist comes to America demanding that America pull all military forces out of the Persian gulf region or he' is all set to decimate innocent American denizens. Now where does Hollywood get such strange and outrageous ideas? A post on the Internet website, Planck's Constant informs that, "Actually, most of the plot is based on the 1991 French film *La Totale!* Director James Cameron was inspired to add the "threat of mass killing if the US didn't get out of the Middle East" from real world events that occurred only a year and a half before the film hit the theaters: specifically the 1993 World Trade Center bombing on 26 February 1993."<sup>26</sup> The alternative mindset is best portrayed by the following exchange, "At the 0:59 mark in the video, actor Art Malik playing Arab terrorist Salim Abu Aziz announces: "You have murdered our women, and our children, and bombed our cities from afar, like cowards, and you dare to call "us" terrorists!"<sup>27</sup>

## To Conclude

Psychologically speaking, if one dwells at large upon the pertinent poser, "What about national defense?", then one might be prompted to answer this poser. One individualistic riposte can be, "Well, I'm not about to try to tinker with national defense strategy, whether through commentary or through protest. Psychology concerns the individual, and love is an individual act. No government can order you to love, and no government can order you to hate. And for that matter, peace is also a matter of individual will, not of politics. All politics today has forsaken real love and is lost in the no-man's land of competition, hatred, and vengeance. So ultimately you, as an individual, have to live—and die—with the destiny of your own conscience and with whatever peace you bring into the world

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<sup>26</sup>"Reel Bad Arabs: True Lies, 1994", (Online: Web), URL: [http://planckconstant.org/blog1/2010/09/reel\\_bad\\_arabs\\_true\\_lies\\_1994.html](http://planckconstant.org/blog1/2010/09/reel_bad_arabs_true_lies_1994.html), ( Accessed on 1st May, 2011)

<sup>27</sup>*Ibid*



through your refusal to hate. This brings us close to the notion of anarchism which breeds a socio- political culture of retribution, utmost chaos and Hobbesian Pandemonium where, man can be guided on to a path of what Thomas Hobbes as a Political Thinker would term as. "The State of Nature" where life is nasty, brutish and short. The attendant Spencerian norm of "Survival of the Fittest" in a lawless , institutionless and a largely rudderless society and Polity would then assume preponderance. Also, as an attendant narrative, the word justice need not be misread as done by the commentators who talked of "wartime courage" in the aftermath of the September 11 attacks and mesmerizingly forgot the Greek idiom that "Courage without Justice being meted to all cannot be a suitable panacea for the ills of the society." Thus, immediate retribution tends to be the guiding abiding idiom of the rebels with or without a cause. ■

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# “Maoist-naxalite Problem : Threat Perception and Tackling Strategy through Responsive Governance”

Dr. Krishna Kumar\*

## Keywords

Tackling Strategy, Maoist-Naxalite Problem, Governance, Responsive Governance.

## Abstract

*Maoist-Naxalite movement poses the most formidable challenge to internal security of India. The Maoists are equipped with modern weapons, arms and ammunition. Their activity has spread to about 230 districts in 13 states. They claim to represent the marginalized and deprived sections of society and exploit their anger and frustration against backwardness and malgovernance so as to enlist their support in the movement. They are waging an armed struggle against Indian State which they consider as capitalist and exploitative. Culturally and environmentally devastating model of development and corrupt and indifferent bureaucratic system have perpetuated this problem. Autonomy promised to them in the constitution has remained merely on paper. Forest, land and Mining Mafia and environmentally destructive development projects pose a serious threat to their survival and livelihood. Only sustainable development, socially inclusive policies, participatory and good governance combined with tough security measures can resolve this problem.*

## Introduction

Safety and security of a nation is vital not only for its economic development but also for social cohesion and mental growth

Author Intro.:

\* Assistant Professor, Public Administration, G.M.N Colage, Ambala.

of its citizens. India faces many challenges on its internal security front. The Maoist-Naxalite menace poses the most formidable challenge to India's internal security. Their activity has spread to about 230 districts in 13 states<sup>1</sup>. This entire area passing through Jharkhand, Bihar, West Bengal, Chhatisgarh, Orissa and northern parts of Andhra and Maharashtra is known as Red-Corridor. The total number of naxals in the country is pegged at 2 lac. Trained and armed militants number between 45,000. Recent intelligence reports suggest that they are spreading their influence to new areas of Karnatka, Kerala and Tamilnadu<sup>2</sup>. In May 2006, Prime Minister Manmohan Singh described the Maoist /Nexalite insurgency as India's most serious internal security challenge<sup>3</sup>. They perceive the Indian State as capitalist and exploitative and believe that they can overthrow it through armed struggle. They have intensified their activities in recent past and are resorting to abduction and coercion to fulfill their objectives. They are equipped with modern arms, ammunition and lethal weapons. Claiming to represent the marginalized and deprived sections of society, they exploit the anger and frustration of tribal people against poverty, inequality, unemployment and Malgovernance to elicit the support of local people in their movement. The Naxal leader, Koteswar Rao, claimed that they would overthrow the Indian state before 2050<sup>4</sup>. Magnitude and complexity of problems demand holistic approach to deal with extremists on governance and security fronts.

## **Role of Governance**

Governance has been defined "as the manner in which power is exercised in the management of country's economic and social resources for development."<sup>5</sup> It is machinery by means of which progressive policies, programmes and schemes are translated into action and their fruits are delivered to the masses. Constitution and its provisions are guiding principles in formulation of laws and policies for the purpose of governance. The Scheduled tribes by virtue of social and historical reasons are marginalized and deprived sections of society. Therefore, special provisions have been made in the constitution for protection of their culture, customs and traditional rights by incorporating schedule V and VI <sup>6</sup>. Also there

are provisions in part IV of the constitution dealing with Directive Principle of State Policy which is fundamental in governance of country and is meant to usher in an era of social democracy. Dr. B. R. Ambedkar in his concluding speech in constituent assembly explained: "Political democracy cannot last unless there lies at the base of it social democracy....."<sup>7</sup>. Constitution provides for social, economic and political justice, equality of status and opportunity to achieve this objective<sup>8</sup>. Since India is multi-religious, multi-cultural and multi-racial society, so inclusive and pluralistic approach will be best suited to subserve various interests and sections of society. Ironically development policies pursued by government and programmes undertaken to realize the above objective increased social, and regional in-equality contrary to the very provisions of constitution. Unfortunately Scheduled Tribes or Adivasis, whose interests Maoist claim to the represent are the worst affected. The process of capitalism and resultant model of development poses a serious threat to the very survival and livelihood of tribals. In the post globalised period, the role of capitalists in influencing policies have increased considerably. "They are not only interacting and interfering with individual officers or politicians but with political parties and systems as a whole"<sup>9</sup>. There are serious discrepancies in Policy, Procedure and Practice of governance. Lack of transparency and absence of effective system of accountability have further aggravated this problem. For example there is secrecy in Memorandum of Understanding (MOU's) signed by Government with private corporations which people have been resisting since long. If it is made transparent, these MoU's will disclose the fact that government is selling the country's minerals to private corporations for a pittance, a small royalty<sup>10</sup>. Setting up of big projects and plants in tribal areas have enormous human, social and environmental consequences. It would require cutting of trees in large tracts of land threatening the livelihood and survival of tribal people as the tribal population depends on the forests for minor forest produce such as tendu leaves, Mahua, tamarind and timber<sup>11</sup>.

Therefore, the tribal people have been waging struggle against faulty policies and wrong model of development as these can deprive them from their traditional rights on land, water and forests which

is *raison-detre* of their survival. Ignorance and negligence of tribal areas in matter of development have caused anger and alienation among tribals against government. Inequality in Ownership of natural resources and persisting poverty have accentuated this problem<sup>12</sup>. Development policies pursued by successive governments at Union and states are faulty and involve huge environmental consequences. Multinational corporations are getting access to enormous land, minerals and forest resources of tribal areas<sup>13</sup>. These exploit the resources against stipulated norms in connivance with corrupt politicians, bureaucrats and police officers. Therefore, the tribals have deep resentment against the policies and actions of state. The Maoist exploit this anger and frustration of tribals against governing system by seeking their support and sympathy to achieve their objectives. They believe in Maoist ideology that power comes from the barrel of gun. In a meeting held in 2007, Maoists resolved to create a "compact revolutionary zone" to facilitate the movement of its cadres and leaders<sup>14</sup>. Thus, there is urgent need to review the strategy to counter the Maoist threat. First and foremost requirement is to restore the governing system as the present system has failed to be accountable, efficient and people friendly in order to meet the needs and aspirations of the tribals.

### **Alienation and Left Wing Terrorism**

Maoist enjoy considerable support among the tribals because they are victim of both faulty policies of development and injustice.<sup>15</sup> Therefore it is essential to regain the trust of the Tribals. They will pose their faith in governance only if they perceive it just, worthwhile and responsive to their demand and aspirations. It would require fulfilling promises and commitments made by State to the Tribals at the time of Independence. Constitution incorporates two schedules: schedule VI for tribals of North East and Schedule V for the rest of India<sup>16</sup>. These schedules envisage a special administrative arrangement for protection of traditional political, economic and cultural rights. The Governor working under the advice of the President has authority to prohibit the transfer of land to regulate the allotment of land and curb the business of money lending to protect the traditional rights of tribals. He is also required to submit annual

report on the governance of these areas<sup>17</sup>. Tribal Advisory Councils are to be constituted to give advice on such matters as welfare and advancement of the Scheduled Tribes<sup>18</sup>. But these constitutional provisions have been respected more in their violations rather than in their observance. The governors are indifferent to tribal governance, and national and state laws override tribal jurisdiction. Tribal Councils have been coopted<sup>19</sup>. Similarly governor's report is hardly given the importance that it deserves. It is not discussed properly and concrete suggestions are not submitted to improve the governing system in the tribal areas. For the purpose of granting autonomy to the tribals in matters of governance, the government enacted a special legislation – the Panchayati Raj (Extension to Scheduled Areas) Act in 1996- which extends to all-the scheduled areas located in nine states of country.<sup>20</sup> It seeks to strengthen the Gramsabha by providing that it will be competent to safeguard and preserve the traditions and customs of the people, their cultural identity, community resources and customary mode of dispute resolution<sup>21</sup>.

But in fact it is merely a defunct body and hardly has any role either in approving the projects or in preserving community resources. Poor governance, rampant corruption and plunder of natural resources by forest and Mining Mafia have undermined the faith of tribals in the governing process. They are terrorized by police and forest officials and exploited by contractors and real estate agents. The new mining and industrial policy has made mockery of fifth schedule in the post liberalization period<sup>22</sup>. It has caused immense environmental damage and large tracts of land lie barren as a result of illegal mining<sup>23</sup>. Though large projects are planned to be set-up yet there are no worthwhile social impact assessment of the development projects in tribal areas and not enough measures are taken to mitigate the environmental pollution<sup>24</sup>. No effective system for redressal of grievances of the affected people exists in the region. Politicians visit the region only during election time to seek their votes<sup>25</sup>." They have paid lip service to implement the provisions of fifth schedule or to strengthen Gramsabha. Autonomy and self government remain a farfetched dream for the tribals. Moreover, compensation in lieu of land transferred for development projects is

meager and since the tribal people do not have requisite skills, they get only lowest paid jobs<sup>26</sup>. Consequently, these projects are seen as threat to their survival and existence.

The resulting frustration and alienation among the tribals is the root cause of growth of leftist extremism in the tribal areas. It is not merely a law and order problem but it also requires good governance and tough security measures to counter this threat. The government should seriously reform the inefficient and corruption ridden public service delivery system<sup>27</sup>. The development programmes and poverty alleviation schemes remain merely on paper and their benefits do not reach the target groups. Laws made for upliftment of the tribals are not properly implemented.

### **Policy Recommendations**

Therefore, there is urgent need to revive the governance which respects the culture and traditions of the tribals by strengthening Gramsabha in the real sense and making it responsive and people friendly to meet the needs and aspirations of these people. Good governance which derives its legitimacy from rule of law, responsiveness and concern for human rights can be restored by gaining the trust and cooperation of people. At present, the Maoist are running a parallel government. They collect large sums of money through extortion. A substantial portion of this amount is utilized for armament and weapon procurement<sup>28</sup>. Consequently they are acquiring lethal and sophisticated weapons to strengthen their armed struggle against the state. In a study, quoted by the Institute of Peace and Conflict Studies out of 70 million illegal small arms in the world, 40 million are believed to be in central India. To intensify their armed struggle, they have acquired gelatin sticks, detonators, rocket launchers, improvised explosive devices.<sup>29</sup> Only good governance and tough security measures can make a dent on such nefarious designs of the Maoists. It is also essential that police officials and security agencies respect the human rights while conducting search and seizure operations against the Naxalities. Maoist claim that as police and local bureaucracy commit excesses and atrocities, their popularity will increase in the same proportion. Therefore, these should not harass, arrest or humiliate the people



merely on the suspicion of being nexalite sympathizer. Second Administrative Reforms Commission (ARC) has recommended "The concept of Police as a 'Service' instead of a 'force'. It encompasses the ideas of effective accountability, citizen centricity and respect for human rights and dignity of individual. These values should permeate all aspects of policing <sup>30</sup>."

A proper and effective system of training can bring this change in the mindset of Police Officials. It should be designed to inculcate human values and desired behavior. Second A.R.C. has recommended that that "Training should focus on bringing in attitudinal change in police so that they become more responsive and sensitive to citizen's needs<sup>31</sup>." Laws must be just and humane<sup>32</sup> and must not be discriminatory and they should be administered in fair and transparent manner. Only such a humane face of policing and governance securing the honour and dignity of people can erode the mass support base of the Maoists and restrict them from conducting public meetings or recruit local people.

Also it is essential that state police forces need to be professionalised and modernized to preempt any maoist threat and strategy. Sadly, the state governments have not displayed the requisite will to make the police an autonomous and impartial institution. Consequently, police forces have been found lagging behind the Maoist<sup>33</sup> in strategy, planning and operational levels on many occasions. Therefore, there is urgent need to implement police reforms and to equip the police force with modern arms and ammunition, means of transport and communication and ample opportunities for training in latest combing methods and techniques, salary commensurate with their duties and responsibilities, promotion prospects, so as to make the force professional. As the state police forces are acquainted with local circumstances and terrains. Only well equipped, modern and professionalized police could weaken maoist stronghold. Further, greater cooperation and coordination is required between centre and states and among different security and intelligence agencies to function as a team. The Security and Intelligence Agencies need to operate in close tandem with local people since they can provide information which is vital input to contain the influence and operations of the maoists.

There can be no worthwhile development unless the good governance is resorted to maoists do not want any development work in the tribal belt. They destroy school buildings and dig up the roads making tribal areas backward and inaccessible<sup>34</sup> as they exploit the feeling and anger of people against backwardness and Malgovernance. Tribals are not against development as the local bureaucracy claims, but they are against the top down approach and environmentally destructive policies of development. Therefore, to revive the governance it is biggest requirement that development must be envisaged and clearly manifest itself as an inclusive project and people affected by plan or policy are treated as stakeholders.<sup>35</sup> True autonomy should be granted to tribal areas for administrative, legal, financial and representative purpose. Sustainable development, socially inclusive policies, participatory and good governance combined with tough security measures can resolve this most grave problem posing a serious threat to internal security of India. ■

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# Terrorism and Human Rights Critical Analysis

Inderpreet Kaur\*

## Keywords

Human Rights, Terrorism, NHRC, TADA, POTa.

## Abstract

*The National Human Rights Commission in its opinion on the Prevention of Terrorism Bill, 2000 provided that the correct remedy for speedy trial and punishment of the crimes connected with terrorism in India is proper strengthening of the crime investigation and prosecution machinery of the criminal justice system wherein there are a large number of acquittals today. It is so not because of lack of any Law but due to the lack of proper investigation and prosecution, and the adequate number of courts to try the offences.*

## Introduction

Terrorism is not a new phenomenon. It is known to have existed in one form or the other, at the several stages in the history of the world. It is only that in the recent times it has turned into a critical issue of utmost importance: the issues of very survival of human civilization. Terrorism has come to engulf global peace and human safety. It has made its target the person, property, place and communications in a bid to paralyze the individual liberty and dignity of persons on one hand and peace and security on earth on the other hand.<sup>1</sup> It is believed that terrorism is a disease of modern society. It is a virus

Author Intro.:

\* Senior Research Fellow (SRF), Department of Law, Punjabi University, Patiala.

growing in an ill body. The truth is terrorism has emerged as the gravest threat, not only to individual nations, not indeed, just to the entire civilized world-as is finally acknowledged now-but possibly, even to the long term survival of the human race itself. Terrorism has become the new face of warfare in the present era, and the warfare in this century has equipped itself with weapons of limitless destruction.<sup>2</sup> There are various causes and factors for the growth and spread of terrorism. Terrorism does not arise in isolation but is linked to different ideologies that may be religious or political. To be more specific it may be said that extreme religious feelings, politics, ideology, poverty, unemployment, backwardness, revenge, vengeance, grievances, political instability, despair, foreign support etc may drive a person towards terrorism.

Terrorism in varied forms has been prevalent in the society from its very inception. Use of force, threats or coercion has been a part of human nature and is widely applied to resolve conflicts irrespective of its justification or legitimacy. History is replete with such instances throughout the world. In terrorism also such means are used by individuals or groups with an intension to create terror and undermine the authority of law. An insight into the genesis of terrorism may be had with reference to ancient Greece and Roman Catholics. According to its classical definition, the assassination of Julius Caesar on the ides of March in 44 BC was an act of terrorism.<sup>1</sup> Terrorism.<sup>3</sup> Though religious, political or ideological based does not arise in a vacuum, there are various causes and influences which force a person to trend the nefarious path of violence, bloodshed, hate and terror. Extreme religious feelings, politics, ideology, poverty, unemployment, backwardness, misguided sense of adventure; foreign support etc may drive a person towards terrorism and violence.

## Meaning of Terrorism

Terrorism through religious, political or ideological based manifestation

<sup>1</sup>Chandra Satish, international Terrorism and its Control, introduction (1989)

<sup>2</sup>Gill K.P.S and Sahni Ajay, The Global Threat Of Terror -Ideological, Material and Political Linkages, 1(2002).

<sup>3</sup>See Generally, Friedlander Robert A. ,Terror Violence -aspects of social control, (1983); See also Stern Jessica, The Ultimate Terrorists, 36 (1999).

does not arise in a vacuum; there are various causes and influences which force a person to tend the nefarious path of violence, bloodshed, hate and terror. Extreme religious feelings, politics, ideology, poverty, unemployment, backwardness, revenge, vengeance, grievances, political instability, despair, misguided sense of adventure, foreign support etc. may drive a person towards terrorism and violence. Terrorism is barbarism. The term "terrorism" and "terrorist" carry a strong negative connotation. These terms are often used as political labels to condemn violence or threat of violence by certain actors as immoral, indiscriminate or unjustified. Those labeled "terrorists" rarely identify themselves as such and typically use other euphemistic terms specific to their situation, such as: separatist, freedom fighter, liberator, revolutionary, vigilante, militant, paramilitary, gurriela, rebel, jehadior mujaheddin or fedayeen or any similar meaning word in other languages. World wide the terrorists prefer terms they reflects ideological or ethnic struggle. Insurgent groups that use suicide attacks therefore do not like their attacks to be described as suicide terrorism. They prefer to use term like "martyrdom".....<sup>4</sup>

Terrorism is a grave problem which has threatened the peace, security and stability of the entire world but there is a lack of consensus on arriving at a single universally acceptable definition of this phenomenon. It is primarily due to the fact that the problem of terrorism has different facets to it .The terrorists are spreading terror and bloodshed due to different motivations, objects and rationales. Moreover, their profiles and operations also differ. At the time of its inception, this phenomenon was largely the outcome of revolutionary ideas, but with the passage of time it acquired a political dimension to it. Religion and ideology are the other major factors responsible for it.

### Definitions of Terrorism

- According to Act 1 (2) of the 1937 League of Nations Convention for the Prevention and Punishment of Terrorism, Terrorism is defined as: "The criminal acts directed against state and intended and calculated to create a state of terror in

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<sup>4</sup>Allison Robert, Global Terrorism-ideology and Operation, 6(2008).

the minds of person or the general public.<sup>5</sup>

- Brian Jenkins defines terrorism as “The threat of violence- or a campaign of violence designed primarily to instill fear- to terrorize- Terrorism is violence for effect- violence aimed at the people watching.”<sup>6</sup>
- The US State Department has defined terrorism as “terrorism is premeditated, politically motivated violence; Perpetrated against non-combatant targets by sub national groups or clandestine agents usually intended to influence an audience.”<sup>7</sup>
- Michael Stohl defines it as “The purposeful act or threat of act of violence to reate fear and/or a complaint behavior in victim and/or audience of act of threat.”<sup>8</sup>

## Terrorism and Need to Protect Human Rights

Human Rights are available to the man kind in a peaceful environment. Violence against a person and the protection of Human Rights are incompatible concerns. Now a day’s terrorist violence, state sponsored terrorism, nexus terrorism and not to forget repeat suicide attacks are quite common in the world. Hijackings, diplomatic killings, bombings, kidnappings and hostage takings, suicide attacks, massive deaths and destruction caused by nefarious acts of terrorists have become the order of the day. The terrorism many be politically motivated or ideologically based or sponsored by one country against the other in the shape of the proxy war. But in any case its method being violative of Human Rights, it is neither legally justified nor ethically acceptable. Terrorism seriously jeopardizes Human Rights, threaten Democracy and aims notably to destabilize legitimately constituted Govt. and undermines the pluralistic civil society. All acts, methods and practices of terrorism are

<sup>5</sup>League of Nations Doc.C.546.M 383.1937.5 (1937).

<sup>6</sup>Jenkin Brian, international Terrorism, A new mode of conflict, 1 (1975).

<sup>7</sup>Patterens of Global Terrorism,-2000.Released by the office of the coordinator for counter Terrorism, April 2001.

<sup>8</sup>Stohl Micheal, The Politics of Terrorism, 3 (1988).

criminal and unjustifiable where ever and by whoever committed.

Today, both the world at large and India in particular, faces the daunting challenges in protecting Human Rights of the common people regardless of the country. No country in the world can be said to be totally free from the deadly scourge of terrorism.<sup>9</sup> The United Nations Security Council in its resolution 1373 adopted on 12th Nov., 2001 declared that Acts of Terrorism constitute one of the serious threats to International peace and Security in 21st century and challenge to all states and to all humanity.<sup>10</sup> The concept of Human rights is universally applicable. The Human Rights standard of the United Nations that is most directly relevant to criminal justice administration and which find a place in the Criminal Laws of different countries find echo in the following instruments:

- The Universal Declaration of Human Rights 1948 also called as 'International *Magna Carta of all Mankind*.'
- The Convention on the Prevention and Punishment of the crime of Genocide, 1948.
- The International Convention on the suppression and punishment of the crime of Apartheid, 1973.
- The Convention against torture and other cruel, inhuman or degrading treatment or punishment, 1984.
- The International Covenant on Civil and Political Right, 1966.
- The Declaration on the Human Rights of individual who are not nationals of the country in which the NHRC'S annual report for 1994-95 provides that terrorism can never be justified, regardless of its supposed motivation. Terrorism aims at the destruction of human rights and civil society. It must therefore be combated by those who would protect such rights and such society. States have an obligation to eliminate terrorism

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<sup>9</sup>see Annual Report of the national human rights commissions, 15 (2005-2006)

<sup>10</sup>it is worth mentioning here that, more recently United Nations Security Council by way of resolution 1456, 1566 and 1624 has clarified that attention to Human Rights must indeed play an important role in the anti terrorism initiatives required by the *United Nations Security Council Resolution 1373*



and duty to cooperate with each other to this end. In taking all necessary and effective measures to do so, states must act in accordance with international standard of human rights.<sup>11</sup>

Since terrorism can never be justified least of all as a supposed means of promoting Human Rights, the NHRC has strongly asserted both at the international level, that the language of Human Rights should not be manipulated by terrorists or their apologists, nor the forum for debate of such rights be misused for purposes that are incompatible with their proper promotion and protection.<sup>12</sup>

The National Human Rights Commission in its opinion on the Prevention of Terrorism bill, 2000 provided that the correct remedy for speedy trial and punishment of the crimes connected with terrorism in India is proper strengthening of the crime investigation and prosecution machinery the criminal justice system wherein there are a large number of acquittals today. It is not so because of lack of any Law but due to lack of proper investigation and prosecution, and the adequate number of courts to try the offences. Unless this root problem is redressed by adopting draconian laws will only lead to their grave misuse as has been with the case with the previous Terrorist and Disruptive Activities (Prevention) Act, 1987 ( hereinafter referred as TADA ).<sup>13</sup>

### **Factors Responsible for Terrorism**

In the study on the genesis of the terrorism, several factors responsible for the growth and spread of terrorism have been identified. Extreme religious feelings, poverty, feelings of revenge, misguided youth harboring a sense of adventure, unemployment, non-redressal of grievances, colonialism, communalism, racialism, ill-motivated politics, Human Right violations, economic exploitation, unemployment, feeling of alienation, communication gap and an over all decay of moral values in the society have been found, along with various other factors, responsible for the growth at spread of terrorism. It is resorted by a individual, group, organization, cult,

<sup>11</sup>See the Annual Report of The Human Right Commission 1994-95

<sup>12</sup>*id*, 1997-98.

<sup>13</sup>*id*, 2000-2001

sect, national or international outfit etc. unlike ordinary criminals the terrorists are mostly indoctrinated to undertake terrorist activities. Infused hate could be the first emotional step towards terrorism. Terrorism is without doubt the product of a sick mind, nurtured by a brooding sense of injustice and is sustained by halted.

### **Combating Terrorism and Human Right Violations**

At the meeting of Asia Pacific forum of National Human Right Institution on 11<sup>th</sup> Nov, 2002, the then Prime Minister, Shri Atal Bihari Vajpayee pointed out that the single greatest enemy of Human Right Terrorism fuelled by religious extremism. Referring the deprivation of Human Rights to terrorists and the protest voiced by Human Rights institutions, he said, “we have sometimes to take tough decisions – even infringing some of our freedom and abridging some of our Human Right temporarily- to firmly counter terrorism so that our future generations can live in peace and harmony.<sup>14</sup> he security forces should try to maintain a fine balance between the protection of citizens rights on the one hand. The police have a tough task at hand as the cops have to perform a difficult job of dealing with terrorist activities, under world mafia, armed gangs, drug- mafia, communal riots and political turmoil.. Therefore, they have to be tough in controlling such situations but in doing so, they have to adopt a balanced approach, which is essential to meet the ends of justice.

But at the times the counter terrorism operations may also result in violation of Human Rights of innocents. The India Section of the Amnesty Internationals 2008 report details cases of unlawful killings in the turbulent zones of Kashmir and North - East. Unlawful killings, enforced disappearances and toucher are violation of International Humanitarian law, set out in treaties to which India is a party. They also constitute International crimes. In April 2008, the Amnesty India had called on the Govt. of India to comply with International obligation and act on the commitment displayed through signing the United Nations Convention for the protection of all persons from enforced disappearances on the 6th Feb.2007, by

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<sup>14</sup>Gaur Mahendra (Editor), Terrorism and Human Rights, preface (2003).

ordering independent investigation into all the current allegations of enforced disappearances. The protection of Human Rights is the cardinal importance to administration of criminal justice at all stages of investigation trial and punishment. Though there is no unanimity regarding the catalog of Rights. But certain minimum Rights are to be protected by all civilized system of criminal procedure.<sup>15</sup>

Louise Arbour, the United Nation Human Rights Commissioner (2004-2008) stated that the response to terrorism, which she described as 'confused' is in danger of Jeopardizing Civil liberties and there is a constant threat to Human Rights in areas where there is an armed conflict.<sup>16</sup> Similarly the counter terrorism committees on legal experts has acknowledged that aspects of the anti-terrorism Laws enacted by states to comply with the United Nations Security Council Resolution 1373, passed after the 9111 U.S strikes would not be fully compatible with Human Rights concerns.<sup>17</sup> More recently, the Security Council has clarified, in resolutions 1456, 1566 and 1624 that attention to Human Rights must indeed play a central role in the Anti-Terrorism initiatives required by resolution 1373 S.C. Res. 1456, UN. Doc.S/Res./1456 (Jan 20, 2003).

### **Criticism of Anti-Terrorism Law and Human Rights**

As the problem of terrorism is very serious in India so it was felt that it cannot be tackled under the ordinary laws of the land as a result special Anti-Terrorism Laws have time and again been enacted. As the Anti-Terrorism Laws like the TADA, POTA and presently applicable Unlawful Activities Preventions Act, 1967 etc. have made a marked departure from the ordinary principles of Criminal Law with respect to presumption of innocence, bail, admissibility of confession before the police, provision for setting up of special

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<sup>15</sup>Ahir. Rajiv, A Brief History of Modern India

<sup>216</sup>Fischlin Daniel and Nandorfy Martha, The Concise Guide to Global Human Rights, 139 (2007).

<sup>17</sup>United Nations, Human Right Committee briefed on work of Counter Terrorism Committee, Press Release No. HR/CT1630

courts for terrorist related offences, so they have been criticized by Human Rights groups as being violative of various mandates. The constitutional validity of the provisions of Anti-terror Act, TADA was challenged in the Supreme Court in the case of **Kartar Singh v. State of Punjab**; <sup>18</sup> The Supreme Court upheld the validity and importance of the Anti-Terror laws but provided certain guidelines to ensure that the stringent laws are not misused.

### **Criticism of Anti-Terror Laws in the Wake of Human Rights in India**

The Anti-Terror Law in India have been widely criticized both at the National and International levels. The critics of the Anti-Terror laws point out that ordinary laws like the Indian Penal Code, 1860, the Arms Act, 1959; the Explosives Act, 1884, the Explosive Substances Act, 1908; the Anti-Hijacking Act, 1972, the Code of Criminal Procedure can take care of the various terrorist related activities and there is no requirement of Anti-Terror Laws. Justice Krishna Iyer, the eminent Judge had also opposed POTA. He warned that in the guise of Anti-Terrorist enactment, everything precious in our constitutionally sanctified Criminal Justice could not be subverted. He approvingly quoted the United Nations High Commissioner for Human Rights, Mary Robinson, who warned governments that measures to eradicate terrorism must not lead to excessive curbs on Human Rights and fundamental freedom.<sup>19</sup> The presently applicable Unlawful Activities Prevention Act, 1967 is also criticized by the Human Rights defender as the reincarnation of POTA.

The TADA was criticized by Human Rights activists as a draconian law capable of violating the Human Rights. The members of United Nations Human Rights Committee alleged that several provisions of TADA were incompatible with the provisions of International Covenant for Civil and Political Rights. It was alleged that even though TADA had been upheld on technicalities, but in spirit and reality it was not only violative of fundamental rights, but was in

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<sup>18</sup>The Hindustan Times, Chandigarh, 26 Feb, 2008, P- 9.

<sup>19</sup>Justice V.R. Krishna Iyer, *legally speaking*, 242 (2002)

conflict with International Covenants of Human Rights of which India is signatory.<sup>20</sup> At the time of repeal of TADA, the question raised was: Has TADA performed as perceptibly useful function in combating terrorism? Senior Police Officers in Punjab, Kashmir, Maharashtra and Delhi at least thought so. Their contention was that repealing this act would be like “throwing the baby out with the water”, but there were individuals who contended that realities on the ground indicated that TADA incrementally added little to the anti-insurgency or terrorist operations. Their contention was that the presence of equally severe laws (like J&K Public Safety Act, 1978) had made TADA largely superfluous. More crucially, the wanton application of preventive detention laws seemed to have alienated an average person in the religious minority community and eroded his faith in the institution of democratic governance. The Minorities Commission pointed out in early 1994 the misapplication of TADA against religious minorities.<sup>21</sup> If we look at the present position with respect of anti-terrorism laws in India the 26th to 29th Nov.2008, Mumbai carnage led to the creation of the National Investigation Agency Act, 2008 and some amendments were also carried forward in the UAPA, 1967 to make it better equipped to deal with terrorism in India. At the time of the passage of the UAPA (Amendment) Bill, 2008 some political parties had some reservations about these new changes .It was argued that certain provision of Unlawful Activities (Prevention) Bill could be dangerous and liable to misuse. The prominent Muslim organizations and bodies also came out strongly against the latest amendments to the UAPA saying the law will be “misused” against minorities as was the case with POTA and TADA earlier. It was alleged that except the provision that the confession of accused in police custody would be admissible as evidence, everything that was present in POTA and TADA has been included in the new law and giving extraordinary powers to Police is definitely going to be misused. Muslim Organizations were particularly upset with the provision

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<sup>20</sup>Sacher Rajinder, “TADA Violates Constitution”, *The Indian Express*, Chandigarh, 25th of April, 1994,6.

to extend Police custody of an accused without bail for 180 days.

Similarly the Amnesty International had also appealed to President Pratibha Patil not to approve the legislation, which would double the number of days police can detain terror suspects before filing charges, from 90 days to 180 days. "Security concerns should never be used to jeopardize people's basic Human Rights." Says Madhu Malhotra, Asia Pacific Programme, Deputy Director at Amnesty International.<sup>22'</sup>

But on the other hand the amendments to UAPA in 2000 have also been justified on the ground that through these amendments the government has only tried to strike a fair balance with respect to strike a fair with respect for fundamental rights and without compromising the ability of security and law enforcement agencies to tackle the menace of terrorism effectively. It has also felt that time had come for a really very effective legislation to combat terrorism in the aftermath of the Mumbai attack. However, any such law would not in any way infringe on Article 21 and the law will be there with reasonable restrictions.

## Suggestions

To deal with terrorism, multi-pronged strategies are required to be adopted. Therefore, the state must take all the legitimate actions to secure and safeguard the life and property of its citizens against the merciless acts of terror. There is an urgent need to differentiate between combating terrorism and dealing with terrorists, which require separate strategies. As such combating terrorism requires firm policies and plans and dealing with terrorist activities must be through effective legal mechanism. Hence the country urgently needs effective counter terrorism strategies which are capable of addressing the various issues related with Terrorism in India. The Anti-terrorism strategies will include a highly effective system of intelligence gathering, surveillance, co-ordination

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<sup>22</sup>*The India Today*, 19<sup>th</sup> Jan, 2009, P-44

between different agencies, an efficient National Investigation Agency, conscious role of the judiciary, responsible political parties, vigilant communities, proactive role of the government and private bodies. Rather at the present point of time there is a dire need for a national campaign against terrorism.

The aforesaid strategies may include policy that should deal with terrorism and its linkage with transnational organized crime, illicit trafficking in narcotics and drugs, money laundering, terrorist financing, illegal arms trafficking and proliferation of nuclear, chemical, biological and other potentially deadly materials and their means of delivery. The new counter of terrorism policy calls for a common commitment to meet the cross border threats posed by International terrorism. Thus the terrorism is a complex problem in view of its nature and manifestations. Therefore, the challenge needs to be addressed planning and action. Though the present study is primarily aimed to study the legal framework to handle terrorism, yet related preventive and remedial means and measures must go hand in hand with law enforcement. Of course every aspect needs to operate through the parameters of the rule of law. I would like to make following suggestions:-

- Need for Special Laws
- Meaningful Preventive Measures
- Effective Operational Measures
- Socio-Economic and Political Programmes and Policies
- International Co-operation and Concerted Efforts
- Penal Provisions like:-
  - i) Possession of Certain Unauthorized Arms and Ammunition.
  - ii) Provision for Minimum Punishment.
  - iii) Long Term Jail for Petty Offences.
  - iv) Death Penalty.

## Conclusion

The aforesaid discussion leads to conclude that the Terrorism constitutes a flagrant violation of Human Rights and is a crime against humanity. Therefore, to plead Human Rights for terrorists is a contradiction in terms. However, once a terrorist is captured or arrested he has certain Human Rights and then the procedure established by law has to be followed. The United Nations Secretary General, Kafi Annan has set out an alternative vision of the complementarities of human rights and counter- terrorism. Though national security is of paramount importance without protecting the safety and security of national individual rights cannot be protected. However, the worth of the nation is the worth of the individuals constituting it. Article 21 of the constitution which guarantees a life with dignity is non-derogable. Both national integrity as well as individual dignity are core values in the constitution and are compatible and not in consistent.

The need of the hour is to maintain a fair balance between the two. Care must be taken to distinguish the terrorist from the innocent. If the state adopts indiscriminate measures of repression resulting in obliterating the distinction between the offender and the innocent and its measures are repressive to such an extent where it may not be easy to decipher one from the other, it would be totally incompatible with liberal values of humanity, equality, liberty and justice. The state has the constitutional duty to uphold the authority with firmness and determination by directing its repressive measures towards quelling terrorism without sliding into general repression or exploiting the crisis for its own political advantage or to destroy legitimate opposition. Measures adopted by the state should be to create confidence and faith in the government and democratic accountability should be so maintained that every action of the government is weighted by the scale of the rule of law. Thus, all measures taken by the states to fight terrorism must respect human rights and the principle of the rule of law, while excluding arbitrariness, as well as any discriminatory or racist treatment, and must be subject to appropriate supervision.





# Human Rights: Obstacle for Police and Safety for Criminals?

Dr. Dalvir Singh Gahlawat\*

## Keywords

Obstacle, Good Policing.

## Abstract

*Supreme Court of India more than fifty five years ago in 1986 said: "Our tradition teaches tolerance; our philosophy preaches tolerance; our constitution practices tolerance. Let us not dilute it".*

## Introduction

In the era of liberalization, privatization and globalization where everyone is being influenced by Human Rights Values and Police of no nation can stand in isolation. Most of the past regulatory/narrow/dictatorial systems and values of dealing with the criminals are being broken and gauntleted one by one. This is an urgency of time that Police should be properly schooled to be 'Human Rights Friendly Police', 'Holistic not Cosmetic' and there is need to rebuild and reconstruct the 'Police even- handedness' and establish suitable decision making strategy to bridge up the gap between common man and the authorities of Police Department.

In this transient era of 'Human Rights Awareness' it has become more imperative for police to break the myth of 'Human Rights unfriendly Police'. Of course, this can be easily said than done as it

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Author Intro. :

\* Sub-Inspector, Delhi Police, e-mail: dalvirsingh.gahlawat@gmail.com.

requires rigorous ethical training inputs to the existing Police force, and mandatory for the recruits, in order to have an ideal output at the performance level.

We know that twentieth century has witnessed two contradictory developments i.e.

- 1 Mass deprivation of human values and rights in the two world wars and also in several local wars thereafter.
- 2 Rise of specific recognition of civil liberty within the domestic campus as well as on international level.

As a result, along with mass deprivation of human rights, there has been recognition of some irrefutable rights.

### **Human Rights, Police and Criminal**

The concept of Human Rights is as old as Police itself. It is said that where there is a criminal, there is a police and where there is a police, there are Human Rights as 'Trinity' has cheek by jowl. We cannot separate the one from others. They are intermingled with one another. To define one without imagine others is absolutely dishonesty. Human Rights have become central to human existence with the world wide acceptability, a consciousness for and awareness towards it; on the other hand police are forced to maintain the law order in the society. To protect the 'Human Man' from the Rangas and Billas is the sole responsibility of police force. Of course, sometimes they face many difficulties when the criminals consider the Human Rights as their "Sheltering Tree".

Often we see police dealing with criminal's quotidian and criminals seek shelter of impunity in crime in the shadow of Human Rights. This has become a formidable challenge for police not only in India but all over the world because the term 'Human Rights Violation' is commonly used, inter alia, to refer to police excesses- cruel treatment of prisoners and suspects- colloquially known as the "third degree". This term acquired a special odium during Emergency (1975-77), when according an estimate 1, 07, 56, 964 sterilisations were carried out forcibly in North India alone out of which 2,322 proved fatal.

As far as "Third Degree Treatment" is concerned, it is a symptomatic of sadistic streak in human nature. At the one end of the gamut is impoliteness, which is a badge of every trivial police official and at the other end of the gamut is inhuman handling and even staged 'encounter' deaths.

This is a high time when the country is riding a wave of violence and the significance of Mahatma Gandhi is being analyzed, it is imperative for every citizen to be exposed to the issue of Human Rights. We know that young people in India are in the ferment as they find many problem around them, corruption and joblessness ogle them in face. They authentically feel that political and social systems have let them down. All this builds up strains and tensions, which are more often than not mobilised for the 'politics of agitation'. The general feeling that seems to have internalized among the people in India is that nothing happens without threat and nothing is achieved without an agitation. The ultimate weapon of protest is "extremism", a head-on-collision with the state authorities of which the police happen to be the most visible symbol.

In dealing with such confrontations, the policeman's task is both delicate and complex. He has two things to decide on the spot, one is the time of intervention and the second is the quantum of force to be used to control the situation. Always remember that once a decision is taken, it has to be implemented with the full force of law and with even-handedness. There should be no hesitation to shoot (but never in a fake encounter) and deal ruthlessly with those who stimulate the aggression. Keep in mind that 'Dangerous maladies require drastic remedies.

It is advocated as a maxim that human rights can be possible only in the context of sustainable development and development can take place only in the climate of peace, and without police, disorder, not harmony, will be our fate. In other words we can not imagine the civil society without the police and the secured internal security envion. In India today, development is perceived as exploitative and exclusive. Economic growth has not conformed to the principle of the social justice. Wealth remains concentrated in the hands of a few individuals, families and classes. The benefits of development

have not percolated to the lowest levels of society, resulting in gross disparities between the rich and the poor. Social injustice is a fertile ground for the growth of extremism.

However, there are three fronts on which the battle for Human Rights has to be fought in India. One of them is 'Law enforcement' which is supposed to be maintained by the police. Often we put the blame on police for not dealing with criminals properly or use even -handedness to deal with them and we start to abuse police for all this but have we ever seen or observed that what the poor wretches have to do? Being the coercive machinery of the command, they have remained, for too long, sacrificial goats in the hands of myopic politicians. They are asked to bear responsibility without the power or the freedom to take effective action.

Often we have heard the argument that respect for human rights is somehow opposed to effective law enforcement means to capture the criminal. Securing his conviction, it is considered necessary to "bend the rules" a little. A tendency to use overwhelming force in controlling demonstration, physical pressure to extract information from detainees, or excessive force to secure an arrest can be observed now and then. In this way of thinking, law enforcement is a war against crime. And human rights are merely obstacles thrown in the path of the police by lawyers and NGOs.

Sometimes we heard that cops devise insidious/dangerous ways to harass, humiliate and extort money from youngsters, driving them to desperation/extreme anxiety and sometimes deaths. As per the report of Saira Kurup captioned Stop it, please, Mr Policeman published on September 16, 2012 in Sunday Times of India, New Delhi (p.11):

"A class XII boy in Kolkata was talking to a female classmate at a bus-stop when a cop materialized and asked them to follow him to the police station. When asked why, the boy was told he faced a charge of eve-teasing. "I said to him to ask the girl if I was teasing her. But he didn't listen and started pulling my hair in front of so many people," the boy says on the website. He was locked in jail for three

hours even though his female friend paid the cop Rs. 1000".<sup>(2)</sup>

From such stories as threatening for implicating in false cases, extortion, blackmailing for money, molestations etc which are generated on quotidian bases, everywhere like -Thane, Gurgaon, Rohtak, Kolkata, Pune, Chennai, Bangalore, Mumbai, Vadodara, Panaji, Kanpur etc., it seems that we still enforce colonial laws of the 19th century, even though the British : never proposed them for the public good. The police are afraid that if they talk about human rights, they will lose their power. In this regard a retired IPS officer and former IG, Tripura, K. S. Subramanian says,

"The system brutalises the police in India. They receive no training on gender sensitivity. If they are asked to take action, they just go down on people like a ton of bricks."<sup>(3)</sup>

In fact, violation of human rights by police sometimes becomes the rewards for culprits. Therefore police must be more careful while performing their duty, especially in dealing with those having criminal tendency, because if the law enforcer (Police officer) becomes the lawbreaker, the result is an assault on human dignity, on the law itself and on all institutions of public authority. The implications and effects for the police on human rights violations are multi-fold:

- They erode public confidence
- They alienate the police from the community
- They isolate the police from the community
- They result in the guilty avoiding sentence, and the innocent being punished
- They force police agencies to be reactive, rather than preventive in their approach to crime
- They bring agents and institutions of public authority into disrepute
- They exacerbate/intensify civil unrest

Indeed, the lack of ethical training and the societal environment

both are responsible to the most extent to shape a policeman into Human Rights Friendly/unfriendly Police. I have observed some features which help in making a police officer Human Rights unfriendly:

- ◀ Quick, quick, quick-approach.
- ◀ Rush, rush, rush-attitude
- ◀ Think, speak and act now, here and now and now itself approach
- ◀ Hurry, hurry, hurry-attitude
- ◀ Low moral conscience and poor ethical training
- ◀ No guilt feelings for the immoral act he has done.
- ◀ Perverted/distorted sympathy towards the victims of crime and misinterprets his acts as noble and justifiable.
- ◀ An attitude of! am O.K. and you are not O.K." (4)

In the era of spreading education where everybody is aware of his Rights and Duties it becomes more imperative that in every circumstance Police must be so as well. Moreover Human Rights friendly Police is the demand of the rule of law in a true democracy. Coercive measures/third degree methods being adopted by the police in fighting criminals are no longer acceptable. Police must fight with criminals under the rule of law for the compliance of constitutional mandate. It is significant that Article 21 is non-derogatory. After the emergency, an amendment of Article 359 of the Constitution provides that Article 20 (protection against testimonial compulsion) and Article 21 (right to life) cannot be suspended even during an emergency. Fighting against criminals cannot be more ruthless or unethical. Methods of fighting with criminals must conform to these constitutional requirements.

Sometimes police feel that Human Rights are the 'Shield' for criminals as when they are caught by the police, immediately they scot free taking the advantages of Human Rights. But it may be myopia to think so because doing so they are not creating any obstacle in the

way of police execution at all instead they are following the Human Rights Values which have been violated by police to some extent. The duty of police is to maintain the law and order in society, their work is not to discern as what is wrong or what is right. Human Rights are provided by the Constitution of India and we cannot ignore them. It does not matter who is taking advantages or disadvantages from them.

We have heard that the diamond cuts diamond but never heard that evil finishes the evil. Certainly, the apparition of culprits and offender is haunting the society and it has rather appeared to have acquired a menacing dimension. They commit crimes and threaten the people with their new fangled ideas but it must be remembered that the basic ground of dealing them has to be to protect the human rights and the Rule of Law methods, dealing with criminals should, therefore, not undermine democratic values, violate human rights and challenge the Rule of Law. Consequently, the fighting those having criminal tendency should be carried out in keeping with human rights obligations and the basic doctrine of the Rule of Law. The protection and promotion of human rights under the Rule of Law is essential in prevention of crime. If human rights are violated in the process of fighting with offenders it will be self-defeating. It is imperative that the essential safeguards of due process and fair trial should not be jettisoned/thrown away/ chucked out. We should emphasize that basic human rights must always be protected.

## Conclusion

Speaking on terrorism, Ms. Mary Robinson, the then United Nations Commissioner for Human Rights, cautioned against the violation of human rights in the global 'fixation' with the war against terrorism, said:

"What must never be forgotten is that human rights are no hindrance to the promotion of peace and security. Rather they are an essential element of any strategy to defeat terrorism."<sup>(5)</sup>

But the question to be contemplated is that in spite of all these sweet tongues and big assurance are we able to deal with the criminals

without violating the human rights or not? Of course, we are going through the era of 'Human Rights Regime'. Unless we get rid of the weapons like rudeness, even-handedness, sadistic attitude, third degree treatment, fake encounter; human rights would be a obstacle. ■

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# Intelligent Emergency Response System for Police Vehicles in India

Ishan Ganeshan\*

## Keywords

Data Mining, Intelligent Emergency Response System, Response Units, Patrolling, Subject.

## Abstract

*When faced with emergency situations there might be several critical factors that could preclude the possibility for the victims to call for help. In situations like kidnapping, rape, robbery making use of the traditional voice based methods to call for help might alert the offenders and put the victim's life at a greater risk. This paper describes the proposed Emergency Response System (ERS). It focuses on developing an alternate mechanism through human computer interaction whereby help can be called through a single press of a button and the locations of the callers are tracked in real time by the police vehicles. Also, the administrator (head of the organization) can view the performance of all the police vehicles at any time through a web application. Data mining algorithms are used to analyze crimes in different regions of a city and at different times of the day. Based on this crime mapping, the administrator assigns patrol schedules for different police vehicles throughout the day. Hence, through this study an alternative system of emergency response is proposed which would make it very easy for people to call for help, very easy for police vehicles to know the locations of the callers and identify crime hot spots and for the administrator to keep track of the performance of each police vehicle.*

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Author Intro.:

\* University of Southern Denmark, Odense.

## 1. Introduction

In India, there has been an alarming increase in crimes with every passing year. Every 20 minutes there is a rape happening somewhere in India<sup>1</sup>. During 2001-2011 there has been a 31.4 % increase in crimes committed under the Indian Penal Code (IPC)<sup>2</sup>. Recent events<sup>3</sup> have highlighted the poor state of emergency response in India. There are many problems plaguing the current system. Telecom Regulatory Authority of India<sup>4</sup> has identified the following loopholes in the present emergency response system.

- Too many help line numbers in India 100 for Police, 101 for Fire, 102 for Ambulance. This leads to lack of coordination and makes it difficult for people to remember which number to call.
- No location profiling of the callers.
- Only voice based communication with the caller, which means that if the offender is directly in front of the person, it can become almost impossible for the person to dial the police helpline and tell his/her current location.
- Lack of proper coordination between the police vehicles, police control rooms and the people.

Another notable loophole in the present system is the lack of crime based police patrolling<sup>5</sup>. The crime taking place in a city needs to be analyzed to better know the locations and victims against whom specific types of crimes happen<sup>6</sup>. There is a very large difference between the different times of the day at which there is crime and the police patrolling at those times. Hence, if the assignment of police patrolling at different regions in a day does not follow the crime patterns in that area, then it could lead to wastage of resources.

ERS aims to provide more functionality than is currently available. The system would utilize dynamic streaming information from subject clients and the response unit clients to monitor and detect any anomalies in the performance indicators of the police vehicles. By utilizing advanced data mining algorithms, knowledge of past

history of crime, help request patterns and real time distance location mapping, ERS should be able to predict, detect and enact suitable responses to a wide variety of emergency situations. Hence, in this paper the potential of using real-time GIS for the development and implementation of GIS-based intelligent emergency response system is explored. Such a system is aimed to facilitate quick emergency response of police vehicles to emergencies. The system architecture is outlined along with the design of each component of the system. The data mining algorithm that has been used to detect crime patterns in the crime data is discussed in detail. The role of the administrator in assigning patrolling schedules to police vehicles based on the detected crime patterns is also explained.

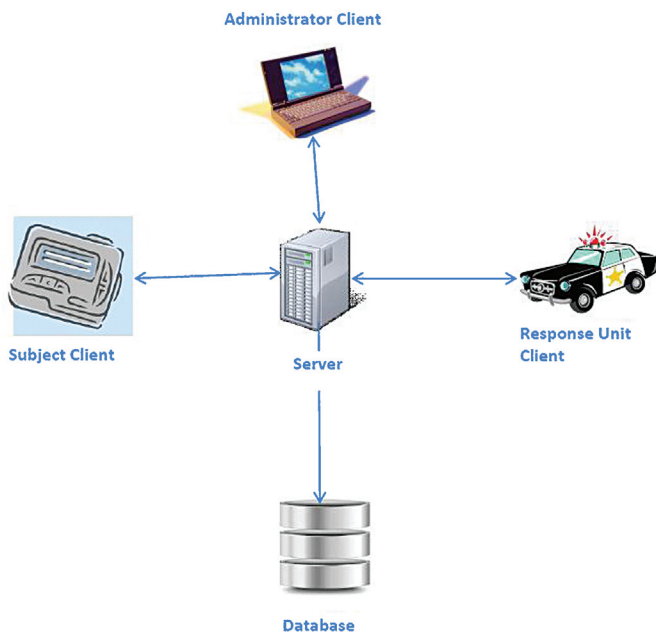
To sum up, the main objectives of this study are: (i) to enable subjects to call for help with just a press of a button; (ii) automatic selection of the nearest police vehicle by the server, (iii) location tracking of the subject, (iii) digitized maps showing the locations of all the police vehicles and the subjects, (iv) crime mapping using data mining algorithms and based on which (v) patrolling schedules would be assigned for the police vehicles, (vi) to develop a web page through which an administrator can keep track of the current performance of the different police vehicles and (vii) to log the activity of each police vehicle for each second of the day into a central database which would keep the police accountable for their every act.

The rest of the paper is organized as follows. Section 2 will present the architecture of the proposed ERS. In section 3, the method used in designing server is presented. In section 4, the results obtained from testing the developed prototype are presented. Section 5 presents conclusions. The paper concludes with a look towards the future work.

## **2. System Architecture of ERS**

Figure 1 shows the system architecture of the proposed ERS. The system consists of three clients namely: Subject Client, Response Unit Client and the Administrator Client. A central server coordinates the actions of all the clients and retrieves/stores

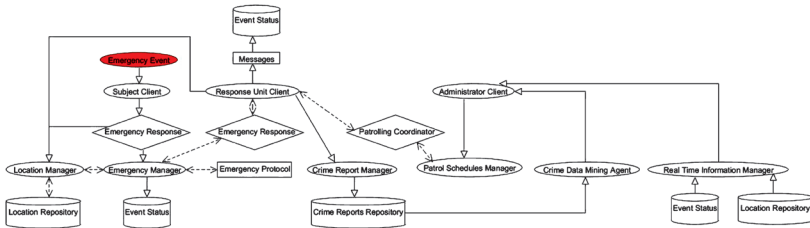
data in a database. The server would be optimized to service thousands of subjects and hundreds of response units at any point in time. Each subject would be provided with a subject client device which would have a help button. The response unit client would be fitted inside each response unit. The response units would receive the patrolling schedules set by the administrator in their respective response unit clients at the start of the day. The server controls and coordinates the data transfer between all the clients. It is the responsibility of the server to authenticate the different clients, analyze crime data patterns, and provide data from the database to the different clients. The administrator client is a web application through which an administrator gets access to the real time state of the different response units and subjects. The administrator sets the patrolling schedules for the different response units on the basis of the crime analysis performed by the data mining agent and also view the locations of the response units and the subjects on a digitized map.



**Figure 1. Architecture of the Emergency Response System**

## Description of the Process and Information flow in ERS

The emergency response process starting from the occurrence of an emergency event to the collection of responses and actions by the different actors of the system is illustrated in figure 2.



**Figure 2. Description of Process and Information Flow in the Emergency Response System**

The emergency response starts from the subject. The subject can call for help by pressing an emergency button. The emergency manager located in the local server in that area would receive the emergency request, process it using an emergency protocol and find the nearest response unit. The request would be sent to the chosen response unit. The response unit can either accept or reject the request. If the request is rejected, the request is redirected to the server which would send it to the next nearest response unit. Once a request is accepted, the details of the subject are passed on to the response unit. The real time locations of the subject would be available on the map inside the response unit. After the case is serviced, the police officer of the response unit would write the crime report of the case. The crime reports are saved in a database. Simultaneously, other response units which are not servicing an emergency request keep patrolling in specific areas assigned by the administrator. The real time locations of the response units are continuously stored in the database and the patrol accuracies are found which determine the accuracy with which the patrolling is performed. The administrator monitors the real time locations of the subjects and the response units through a digitized map. The data mining

agent at the server predicts and detects regions and types of victims which are mostly subjected to specific types of crime at specific times of the day. On the basis of the detected crime trends the administrator assigns the patrolling schedules for the different response units.

### 3. Methods

In this section, the conceptual design of the server and the design of the data mining agent are presented.

#### Conceptual Model of Server

The server is the central element of the system. It performs all the business logic of the application. All the computations and distribution of different resources to different clients are done by the server. The primary task of the server is to coordinate the actions of the subjects, administrator and the different response units at times of emergency. Figure 3 shows the algorithm which the server uses to send the nearest response unit to the subject.

Once, an emergency request is obtained, the algorithm retrieves the subject location from the database along with the locations of the response units. It computes the nearest response unit to the subject location and sends the emergency request to that response unit. Once, the response unit accepts the request, the location of the subject is continuously sent to the response unit. The response unit can request for extra units at any time. The server processes this request and assigns more response units for the specific request. Each response unit then can view the locations of other response units and the subject on the map. If the request for number of extra units becomes greater than four, the server stops assigning any more response units and the administrator is alerted. This is because any situation which requires more than four response units is a very high level emergency situation which needs to be directly coordinated by the administrator.

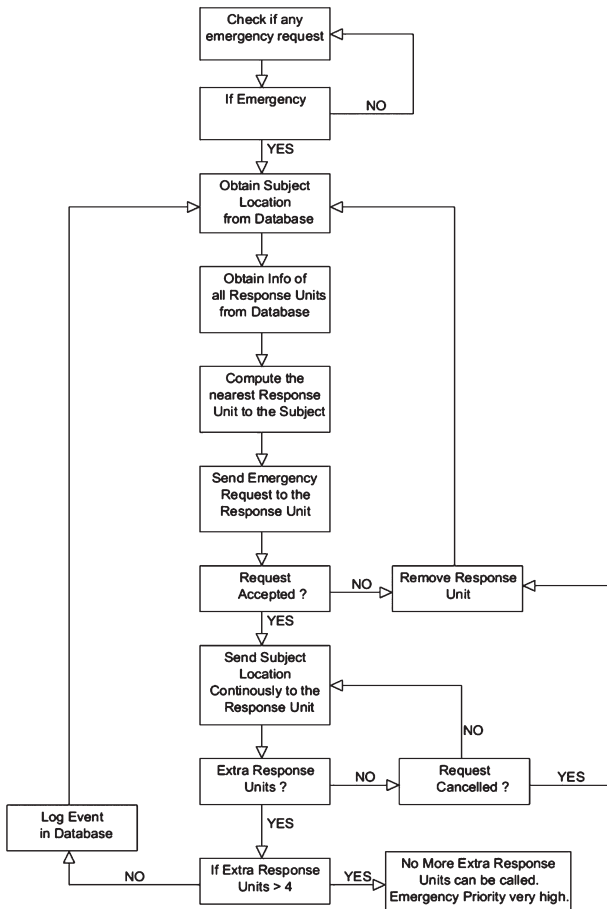


Figure 3. Flowchart of Emergency request processing at the server.

## Data Mining Agent

In ERS, data mining is used to detect and predict where and when and against whom certain types of crimes have a greater probability of being committed. Predictive crime analysis employed by the Santa Cruz Police department in California<sup>7</sup> resulted in 27% reduction in burglaries<sup>8, 9</sup>. Confirm that crimes vary by the time of the day<sup>10</sup>. Mentions that each victim is chosen to be a victim by the perpetrator of crime because of certain unique characteristics.

Hence, there are many factors which influence crimes in a region. Therefore, in ERS the following factors are taken into account to analyze the crimes.

- The time of the day the crime has taken place.
- The type of victim involved in the crime whether he/she belongs to upper/lower caste, is old or young or is a male or a female.
- The type of crime, whether it is a murder, rape, kidnapping or a robbery.
- The location where such a crime has taken place.

### **Design of Data Mining Agent**

Apriori data mining algorithm<sup>11</sup> has been used to perform the data mining. In data mining, Apriori algorithm is used to unravel hidden relations between input variables in large databases. It detects frequent items that occur together in the crime data. Each input variable is considered as a single item in the item set. It employs a breadth first search method to count all the different candidate item sets. The algorithm generates all candidate item sets of length  $k$  from an item set of size  $k-1$ . All those candidates which have an infrequent pattern are pruned. The resultant candidates contain all the frequent  $k$ -length item sets. Hence, after the entire database is scanned, the final set would contain those items that occur most frequently together and satisfy the minimum support threshold.

The role of the data mining agent is to detect patterns of crimes from the generated crime reports. The data mining agent at the server mines for special correlations among the data in the crime reports. The discovered associations between the item sets are analyzed further to find the correlation rules. The outcome of the mined data is used by the administrator to set the patrolling schedules for the different response units. The main role of the data mining agent is to detect those input patterns which occur together most frequently. This would provide information about which kinds of events give rise to certain specific types of crimes.



## Inputs

To mine for crime data, various input variables have been chosen. These are the time of day, type of crime, type of victim, and region of crime. Each day has been divided into 4 time slots of 6 hours each. Each time slot of 6 hours is further divided into 2 time slots overlapping the next time slot.  $Q_x$  and  $Q_y$  denote two separate series of time intervals. Each time slot in both  $Q_x$  and  $Q_y$  is considered as a separate item.

For simulation purposes 12 different regions are considered where crimes are committed. Each region is considered as a separate item. Similarly, each of the four different crime types namely murder, rape, kidnapping and robbery are considered a separate item. Six different input variables have been chosen to represent the characteristics of the victims namely, upper caste, lower caste, old, child, male and female. Each of these variables is a separate item. So, there are a total of 30 input variables in the crime data. In the first step of the apriori algorithm, the frequency of occurrence of each item is calculated separately.

Item	Support
1	10
2	12
3	8
4	9
5	7

For lack of space, let us consider only 5 items. Support is the minimum support level to be qualified as "frequent". In this case, if the minimum support = 4 then all the items can be considered as frequent.

In the next step, lists of all 2-pairs of frequent items are generated. Only those which are frequent in the first step are qualified to be included in list of possible 2-item pairs. Hence, in this way the item sets are pruned in each step. In the second step, only those items

sets which are frequent are selected. The item set  $\{1,3\}$  is less than 4 and hence is pruned away for the next step.

Item	Support
$\{1,2\}$	7
$\{1,3\}$	3
$\{1,4\}$	8
$\{1,5\}$	9
$\{2,3\}$	7
$\{2,4\}$	10
$\{2,5\}$	6
$\{3,4\}$	9
$\{3,5\}$	5
$\{4,5\}$	8

Continuing further, the sets of frequent 3-item sets, 4-item sets are computed. In this way, the data mining algorithm scans the database containing the crime reports for all cases and detects which of the items occur together most frequently and satisfy the minimum support threshold. For example, the algorithm could predict that for  $Q_x$  between 6PM and 12AM and  $Q_y$  between 9pm and 3AM, rapes happen most frequently against upper caste females at a region  $x$ . This means that the time interval of occurrence for such cases at region  $x$  is between 9PM and 12AM. This would help the authorities in knowing when and where the response units should be placed. This would lead to a much better utilization of police resources and would lead to an improved police response to crimes.

#### 4. Results

In this section, the results of testing the proposed ERS would be presented. Through these results it would be shown that ERS would function much more effectively and efficiently as compared to the current system of emergency response in India. The following test would be conducted:

- In the present system of emergency response in India [5], the patrolling of police vehicles is not based on the crime in that area. In ERS, the crime data mining agent at the server detects crime patterns from the crime reports written after each case is serviced. These detected crime patterns provide a detailed description of the type of crime and the types of victims against which crime take place at certain times of the day. These detected crime patterns would make the patrolling of police vehicles throughout a day very efficient. In ERS since, traffic modeling is outside the scope of the paper, to measure the performance of police vehicles to emergencies, the response times are not considered. Instead, the distance between the location of the subject and the nearest police vehicle is used as a performance measurement factor. The results from these tests would further prove that the distances between the police vehicles and the subject at different times of the day would be very high before crime data mining is performed. However, after the data mining agent performs data mining and the administrator assigns patrolling schedules based on these detected crime patterns, the results would show that distance between the nearest police vehicle and the subject would be significantly reduced. These detected crime patterns would be plotted in a graph which would provide a visual description of the crimes and would enable us to get a much better understanding of the crime statistics in a particular area.

Further in this section, the main results obtained from testing of the proposed ERS would be presented. The performance of the response units to emergencies in terms of the distance between the nearest response unit and the subject would be illustrated through graphs. Finally, the crime reports of all the simulated cases would be plotted in a graph to illustrate the crime patterns in a particular region.

### **Simulation Technique**

To simulate the ERS, the following factors have been taken into account:

- A total of 12 different regions within a city have been considered. All these regions have been selected at a reasonable distance away within the city of NOIDA in Uttar Pradesh, India.
- In each of these regions, four different coordinates have been chosen to simulate the patrolling of the police vehicles.
- A day has been divided into 4 different time intervals of 6 hours each, namely 12am-6am, 6am-12pm, 12pm-6pm, 6pm-12am.
- 4 different response units were simulated.
- A total of 100 cases before data mining and 100 cases after data mining were simulated.
- The location of the subject was randomly assigned programmatically within the city of NOIDA.
- The coordinates for simulation of patrolling of the different response units and the subjects were obtained through Google maps.

## Data Mining Analysis

For simulation of ERS, 100 cases were run before performing crime data mining and 100 cases were run after performing crime data mining. In each case, the subject sent a help request from a different location. After servicing of each case crime reports were written to generate crime data.

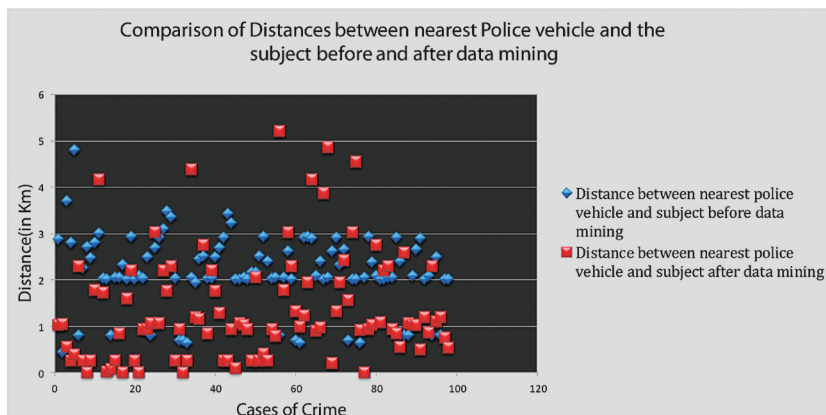


Figure 4. A plot of the distance between the nearest response unit and the subject before and after data mining vs the different cases of crime

These crime reports were persisted into a database which then was used by the data mining agent to detect crime patterns. These detected crime patterns then were used to enter the new patrolling schedules. Once, the new patrolling schedules were entered 100 more cases were run. The distance between the nearest response unit and the location of the subject before and after data mining were plotted in graph as shown in figure 4. As we can see from this figure, the blue markers represent the cases before data mining was performed. The red markers represent the cases after data mining was performed. From the concentration of the grouping of the red and the blue markers it can be clearly inferred that before data mining was performed in most cases the distance of the nearest response unit lay in the interval 2-4 km. However, after data mining this distance lay in the interval 0.2-3 Km. This shows that the patrolling of the response units after the crime data mining was significantly more efficient which resulted in more cases where the response units were near to the scene of the crime. Figure 5 shows a plot of the average distances of the response unit to the subject before and after data mining against the total simulated cases. We can clearly see that the average distance between the nearest response units to the subject before data mining was higher compared to the distance after the data mining. The average distances are listed in Table 1.

**Table 1. List of the average distance between the nearest response unit and the subject before and after data mining**

Total No. of Cases	Average Distance between Response unit and Subject before data mining (in Km)	Average distance between Response Unit and Subject after data mining (in Km)
200	2.17	1.36

From the experiments it is clear that after data mining the average distances between the response units and the subjects have been significantly reduced.

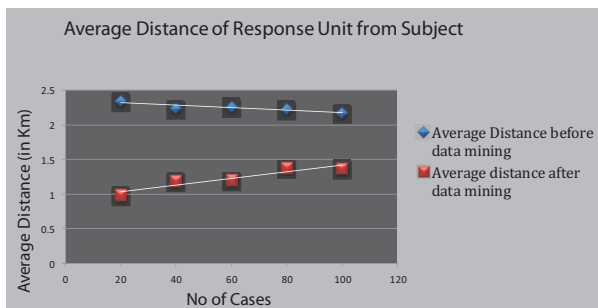


Figure 5. A plot of the average distance between the nearest response unit and the subject before and after data mining vs the total cases of crime.

As already mentioned, crime reports were written after each case was serviced. In these crime reports only three types of crimes were considered for simulation purposes namely rapes against upper caste females, murder against lower caste males and kidnapping of lower caste females. So, at the end of 100 cases using the crime statistics a graph was plotted as shown in figure 6 which clearly shows the crime patterns in a particular area. As we can see from this figure, rapes against upper caste females are the highest between 6am-12pm. Similarly, murder against lower caste males are the highest between 12pm-6pm. Hence, with these crime statistics the authorities can get a clear indication of the crime patterns in a particular area and thus, the patrolling schedules of the police vehicles can be set more efficiently.

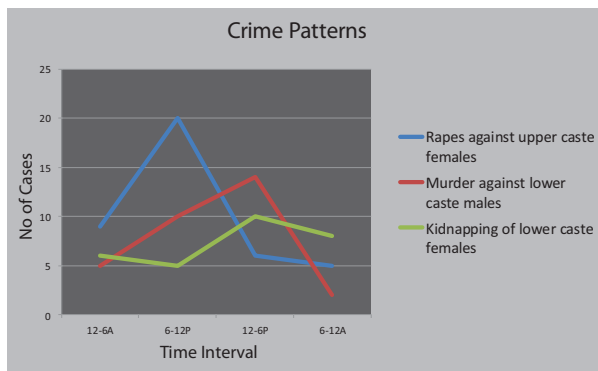


Figure 6. A plot of the no of cases of certain type of crimes against the different time intervals.

Hence, in this section we have observed that the proposed ERS is a significant improvement in comparison to the present system of emergency response in India.

## 5. Conclusions

In this paper, an alternate mechanism of emergency response for police vehicles in India named ERS was proposed. ERS is proposed to be useful for the whole life cycle of an emergency. This paper outlines the different technologies and the integration between the different components of the ERS. The proposed system architecture of the ERS would enable a seamless integration of the different technologies used by the different components of the system. ERS has been designed as a distributed and real time system. ERS brings together simple method for subjects to call for help, an efficient algorithm for computing the nearest response unit and coordinating the different response units, real time tracking of the subjects in the maps inside a response unit, monitoring of all response units and subjects on a digitized map by the head of the organization, real time tracking of the performance indicators of all the response units on a web page accessible to the head of the organization, facility to write crime reports after a case is serviced containing the victims profile, a cutting edge software based frequency data mining technique for detecting the crime patterns and finally the facility for the head of the organization to set patrol schedules for different response units.

It is true that ERS is just a prototype and a conceptual model of a more effective emergency response system. The results obtained from the prototypical development of the ERS prove that such a system is indeed practically and technologically feasible. It has shown that the conceptual model of the ERS is a significant improvement over the current state of emergency response in India<sup>4,12</sup>. It has already been mentioned that existing emergency response system in India has proven to be inadequate. The results further show that a crime pattern based patrolling of police vehicles could drastically reduce the distance between the nearest police vehicle and the scene of the crime. Also, ERS has shown an alternate way of calling for help by just press of a button, instead of a traditional call for help through

telephones. One of the objectives of this paper

has been to set the solutions for the problems of crimes in India into a software technological perspective and propose an alternate system which could improve upon the current system and eventually help in reducing the crime rates in India.

## 6. Future Work

As already mentioned, traffic modeling has not been considered in this paper. In the future, modeling the patrolling of the police vehicles on the basis of the traffic models of that city would make the ERS function more efficiently and would be able to mimic a real world environment more closely. To take the development of ERS further, it would be important to also develop hardware components and test the system in a real world environment. ■

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# Clandestine Drug Laboratories the Problem, Dangers and Solution

Ashok Juneja\*, IPS

## Keywords

Clandestine, Drug, Drug Laboratories, Illegal, Covert, Phencyclidine, MDA, MDMA, LSD, CAT, Substances.

## Abstract

*Dealing with clandestine drug labs require technical expertise. Responders must understand illicit drug chemistry; how to neutralize risk of explosions, fires, chemical burns and toxic fumes; how to treat medical conditions caused by chemical burns. Local police agencies must be trained how to detect and deal with clandestine drug labs. An early recognition of and response to the problem is critical to preventing it from becoming entrenched.*

## Introduction

A clandestine drug laboratory (CDL), in law enforcement parlance, is an illegal and covert operation that produces a controlled substances by chemical reactions. It is operated by the criminal element to circumvent the legal requirements with the goal of supplying drug of abuse to the illicit market. Majority of clandestine labs are involved in the production of methamphetamine but a number of other drugs may also be synthesized, including phencyclidine (PCP) methylenedioxy amphetamine (MDA) & MDMA, LSD, methcathinone (CAT) & other controlled substances.

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Author Intro.:

\* Inspector General of Police, Chhattisgarh

Clandestine drug labs have been discovered in houses, apartments, hotel rooms, baiters rooms, storage units, mines, buried cargo containers & a variety of other structures. They are often found in rural or remote areas where greater privacy is available; often these facilities are moved frequently to prevent detection. Because of flammable & reactive hazards of the chemicals used in clandestine drug synthesis, many labs are discovered only after explosion of fires. Health risks in clandestine labs also include exposures to poisonous chemicals & encounters with potentially armed & dangerous individuals involved in the illicit drug synthesis. Clandestine labs are typically small & use common household appliances, glassware & readily available chemicals. The persons manufacturing illicit drugs seldom are trained chemists & many have limited educations

Clandestine laboratories have manufactured illicit drugs since 1960s, but the problem has become much more widespread in the past 10 years or so largely because of their growing popularity. The specific methods used to synthesize illicit drugs have changed over time as legal restrictions on the sale of precursor & reagent chemicals are enacted. Many drugs can be synthesized illicitly for e.g. Amphetamine, Methamphetamine, MDA, MDMA, 4-Phenyl piperidine, Fentenayl, phencyclidine, LSD, Methcathione and Methaqualone. The greatest adaptation to this restriction has occurred in the synthesis of methamphetamine. Methamphetamine accounts for 80 to 90% of total drug produced in the labs. Accordingly the problems of clandestine drug labs is closely tied with the problems associated with methamphetamine abuse.

### **Features of Clandestine laboratories**

- Clandestine drug laboratories often house substantial quantities of highly toxic, corrosive, flammable & explosive chemicals.
- These clan labs may be found in such locations as hotel & motel rooms, barns, trailers, recreational vehicles, apartments and rural areas.
- Clandestine laboratory sites have been the scene of explosions, fires, toxic fumes, poisonous gases, environmental damage &

numerous injuries & deaths.

- For every pounds of finished product, five to six pounds of chemical waste are produced.
- Clandestine laboratory enforcement programs cover all phases of planning, investigation, seizure, arrest, prosecution, dismantling, waste removal & remediation of contaminated property.

## Types of clandestine labs

### 1. Synthesis labs

- most frequently encountered type of CDL.
- manufactured a controlled substance from 2 or more precursor chemicals.

### 2. Extraction labs

- ◀ Remove or extract the drugs from raw plant material e.g. morphine from opium poppies
- ◀ Raw plant material is changed into finished drug by the use of chemical solvents and/or acids.
- ◀ chemical structure of the drug is not altered.

### 3. Conversion labs

- Alters the extracted drug into a refined product by changing the chemical structure e.g. process cocaine base to cocaine hydrochloride.

### 4. Tableting labs

- Operated solely to divide the refined product into individual's bases.
- Methamphetamine synthesis
- Precursor synthesis
- Phencyclidine process

**Detection:** Signs of possible lab include:

- Strong & unusual chemical odors
- Lab equipments (glass tubes, beakers, Bunsen burner, funnels)
- Fortifications on houses or out building such as heavily barred windows or doors.
- Chemical cans or drums in the front or back yard.
- New high fences with no visible live stock or animals.

**Site operations:** Safety steps to be taken to deactivate the chemical process in progress as suggested by DEA:

- Examine & determine if heating or cooling is taking place .
- Some reactions involving the heating of a chemical & then condensing utilizing tap water in these cases remove the heat allow the glassware to cool before turning off the water.
- If vacuum or gravity filtration is occurring allow this process to finish
- If compressed gas is being used in a reaction, it should be first shut off at the cylinder top then the regulator should be shut down.

### Strategy for enforcement

- ◀ Creation of multi agency planning team to develop a strategic plan. The team should include representative from law enforcement, health dept. environmental dept. and prosecution.
- ◀ Selection & training of personnel, including law enforcement agencies, prosecutors, fire fighters, health & environmental staff.
- ◀ Selection & required use of personal protective equipment.

- ◀ Development of a system to monitor the sale & distribution of the precursor's chemicals that is essential to produce drug.
- ◀ Development of policies & procedures for clandestine Lab. clean up, disposal of contaminated materials, site remediation & security.
- ◀ Development of community education & awareness programs that familiarize the general purpose.
- ◀ Close coordination between investigators & forensic chemists is important at various stages of clandestine lab. investigations since of the highly technical nature of this investigation.

#### **Dangers of clandestine labs :**

- Extreme potential for fires, explosions
- explosive to hazardous chemicals & fumes
- Hazardous waste sites.

#### **Inspecting scene of crime :-**

- Use discretion regarding initial entry into scene
- Weigh risks before deciding to make entry into scene to evacuate suspects &/or innocent parties.
- Approach scene from an up-wind, up-gradient direction.
- Use any air purifying respirator
- Wear gloves
- Do not intentionally touch, smell or inhale any chemicals or vapors
- Detain & evacuate occupants from the scene immediately.
- Notify the fire department.
- Notify the Narcotics unit.

### The types & classes of chemicals used in illicit labs can be broken down in 03 general classes :

- **Precursors:** Precursor chemicals are chemicals that donate all or a portion of their structure or moiety to the structure of an intermediate or target compound.
- **Reagents:** Reagents are chemicals that facilitate the reaction of the precursors but do not contribute to the final structure of the target compound.
- **Solvents:** Solvent are used to dissolve, isolate or manipulate precursors, reagents or final products.

### The method of preparation of clandestine drugs include the following technique :

1. **Reflux :** Reflux i.e. A process of boiling one or more organic chemicals in a round bottomed reaction flask.
2. **Distillation :** Distillation is similar to reflux but the condenser is now placed at an angle down & away from the reaction flask instead of being returned to the flask, the condensed liquids is collected in a another vessel in this manner the liquid is isolated from the original solution.
3. **Extraction :** It is a process of isolating a chemical with a solvent.
4. **Reductions :** Reductions are processes in which atomic hydrogen is added to a molecule. This usually requires some type of metallic catalyst, a hydrogen source and a suitable vessel. Reductions for illicitly produced drugs generally fall into 03 categories: -
  - dissolving metal reductions
  - Metal hydride reductions
  - Catalytic reductions
5. **Acid salt formations :** This process is called powdering out. Nearly all controlled substances are nitrogenous bases that

form acid salts when reacted with a suitable mineral or organic acid. The formation of a water soluble salt is important if the drug is to be absorbed by the body.

6. **Filtration** : Filtration is the act of removing the solids in a solve by pouring the solution into a filter paper. The filtration process can either retain the finished product (as in powdering out) or remove the undesirable solids from the solution.

### Chemical toxicity

The chemicals present can generally be categorized by type of toxicity as :

- Corrosives: strong acids & bases
- Solvents: ethyl & diethyl ether, acetone, toluene
- Pharmacologically active reagents include methamphetamine, ephedrine, pseudoephedrine & other drugs.

The occurrence of impurities of manufacture or precursor of origin is of considerable importance to the forensic drug chemist since it provides information as to :

- Whether the drug is clandestinely made
- Synthetic route, precursor & reagents being used
- The reaction condition or apparatus necessary for the synthesis .

Following are some of the examples of manufacture of drugs in clandestine laboratories:

**Methamphetamine** : The synthesis of MDA & MDMA closely mimic the synthesis of amphetamine & methamphetamine

MDA is usually synthesized by  $\text{LiAlH}_4$  reduction of the intermediate 3,4 methylenedioxy phenyl-2 nitropropene .MDMA is synthesized using 3,4 methylene dioxyphenylacetone, methylamine & aluminum amalgam reducing medium.

**Amphetamine** : Amphetamine can be synthesized from phenyl



propranolamine, an over the counter decongestant & appetite suppressant, using the reduction methods similar for ephedrine.

- ◀ Over 70% of the laboratories used the Leuckart reaction, refluxing P 2 P with ammonium formate or formamide, then adding HCL and refluxing again.
- ◀ Preparation of 1- Phenyl- 2- nitropropene intermediate by reacting benzaldehyde & nitroethane in butylamine solution followed by reduction of the intermediate to amphetamine.

Reacting a mixture of P2P, ethanol, ammonia, aluminum & mercuric chloride to form amphetamine.

**Methylene dioxy amphetamine (MDA) :** The most frequently used method involved reacting isosafrole with a mixture of hydrogen peroxide & formic acid to form the 1-(3,4-methylene dioxy phenyl) -2- propanone intermediate.

- ◀ The intermediate was then reacted with formamide or ammonium formate & then HCL to form MDA.
- ◀ MDA formation with a mixture of piperonal nitroethane, ammonium acetate & acetic acid.

**Heroin:** Currently heroin is classified as coming from 03 major areas of the world:-

- ◀ SWA heroin
- ◀ SEA heroin
- ◀ Mexican heroin

In addition to morphine, crude opium obtained from *papaversomniferum* contains over 25 additional alkaloids. These are divided into '5' chemical groups:-

- ◀ phenanthrene
- ◀ benzyloquinoline
- ◀ tetrahydroisoquinoline

- ◀ cryptotopine
- ◀ Alkaloids of unknown structure.

### **Clandestine processing of heroin from opium : -**

- ◀ Extraction of morphine from opium & purification of morphine base.
- ◀ Synthesis of heroin base from morphine.
- ◀ Conversion of heroin base to heroin HCL.
- ◀ Common chemicals used in the production of heroin HCL from morphine & opium.
- ◀ Alkaline material e.g. CaO (lime), Ca(OH)<sub>2</sub> slaked lime, NH<sub>4</sub> OH, Na<sub>2</sub> CO<sub>3</sub>, NaHCO<sub>3</sub>, & lime CaCO<sub>3</sub>
- ◀ Acids such as tartaric acid, HCL & NH<sub>4</sub>CL,
- ◀ Acetylating agent: AC<sub>2</sub>O Acetyl chloride
- ◀ Solvents: Acetone, ethyl ether, ethyl alcohol, methyl ethyl ketone
- ◀ A deceptive agent: activated charcoal for filtering & decolorizing

**4. Phenyl piperidines :** A series of totally synthetic analgesics with abuse potential comparable to morphine are the 4- phenyl piperidines. The lead compound in the series, meperidine is not known to be clandestinely manufactured. Its " reversed ester " 1-methyl -4- phenyl -4- propionoxy-piperidine (MPPP) in which the carboxyl group in meperidine is replaced with propionoxy group has been used as heroin substitute in the illicit drug market.

**Fentanayl** (N- phenyls -N- (1-2 (phenyl ethyl) -4- piperidinil) porpanamide is another modifications of the meperidine structure which has been used as a 'synthetic heroin'.

Precursor synthesis: Most popular method of synthesizing p 2 p has been the base - catalyzed condensation of phenyl acetic acid and acetic anhydride in the presence of a base such as sodium acetate

or pyridine for about 18 hrs. Several other synthetic methods have been encountered for the conversion of phenylacetic acid to PCP by using .

- ◀ Lead acetate
- ◀ Thorium oxide

**Ephedrine methods :** L-Ephedrine & its d-stereoisomer pseudo-ephedrine are naturally occurring substances found in the plant species ephedra. Ephedrines are structurally similar to methamphetamine. Ephedrine differs from methamphetamine by a single hydroxyl group. Replacing the hydroxyl group with hydrogen is achieved using one of the reduction process.

**Phencyclidine:** Involves combining a cyclohexanone/ sodium bisulfite aq. solution with KCN/piperidine aq. solution to form the intermediate 1- piperidino- cyclohexane carbonitrite. The intermediate is then added to a phenyl MgBr Grignard reagent to form PCP.

- ◀ Reacting piperidine hydrochloride, cyclohexanone & potassium or sodium cyanide to form PCP .
- ◀ Piperidine & cyclohexanone is reacted in the presence of a catalytic amount of P- toluene-sulfonic acid in benzene with the azeotropic distillation of water to form 1-(1-cyclohexenyl ) piperidine intermediate. The Grignard reagent is added to form PCP

### Lysergic and diethylamide :

- ◀ Lysergic acid + Lithium Hydroxide + Diethyl amine - LSD
- ◀ Ergotamine -- Lysergic acid azide + diethyl amine - LSD

### Methcathinone :

Methcathinone (CAT) is a synthetic substance also made from ephedrine or pseudoephedrine. Instead of reducing the hydroxy group of the ephedrine, it is oxidized to ketone group. The oxidation is usually facilitated with sodium dichromate,  $KmNO_4$  or  $CrO_3$  .

### **Methaqualone :**

- ◀ The most frequently used method involved preparations of N- acetyl anthranilic acid by reacting anthranilic acid with acetic anhydride. The N- acetylanthranilic acid is then refluxed with o- toluidine in toluene with PCl<sub>3</sub> to obtain methaqualone.
- ◀ Methaqualone was formed by mixing O-toluidine hydrochloride in a solid form with N- acetyl anthranilic acid & heating the two solids.

### **Coordinated drug Laboratory response :**

- The ideal structure for responding to clandestine drug labs is a cooperative process between national, state & local agencies.
- Law Enforcement agencies are responsible for arresting suspects & notifying environmental & local/state health agencies.
- The state pollution department or equivalent is responsible for the removal, transport & disposal of bulk hazardous materials for conducting environmental risk assessments.
- State health departments are responsible for training, testing & certifying illegal drug lab site cleanup contractors & workers, maintaining a list of illegal drug lab sites.
- The presence of these hazardous materials complicates enforcement efforts & requires argumentations of traditional procedures to effectively address health, occupational safety & environmental concern.
- Special expertise requires for clan lab investigations, seizures & clean ops.
- Multidisciplinary teams of central & state agencies is of utmost importance.

### **Emergence & spread of Clandestine Drug labs :**

Clandestine labs have manufactured illicit drugs since at least the

1960s, but the problem has become much more under spread in the past 10 years or so largely because of methamphetamine's growing popularity.

### **Methamphetamine is simpler to produce**

- Instructors are available on internet
- Easy to acquire chemicals
- It is very addictive

An estimated 34 different chemicals can be use to produce methamphetamine

The essential and precursor chemicals can be directed in to the illicit drug market in various ways, among which are the following : -

- Stealing the chemicals
- Smuggling the chemicals along international borders
- Labeling chemicals fraudulently
- Bribing or coercing govt. officials, chemical manufacturers & distributors
- Creating complex bans transactions chains that makes it difficult to track the chemicals
- Buying the chemicals from legitimate chemical suppliers who sell indiscriminately.
- Setting up front companies to disguise illicit chemical purchases as legitimate ones
- Buying chemicals through undocumented cash transactions
- Converting similar, un regulated chemicals into the desired regulated chemicals.

### **Enforcing laws prohibiting clandestine Drug Lab operations :**

- Finding & seizing clandestine drug labs.
- Arresting & prosecuting clandestine drug lab operators &

cooks.

- Seizing & filing for forfeiture of clandestine drug lab operators assets
- Enforcing environmental protections laws against clandestine drug lab operators.
- Controlling the sale & distribution of essential & precursor chemicals used in CDL.
- Training citizens to report suspected clandestine drug labs
- Training police & other responders to identify potential clandestine drug lab.
- Training against drug addictions.

## Conclusion

Clandestine drug labs are but one aspect of the larger set of problems related to illegal drug manufacturing, trafficking, abuse and associated crime. Offenders manufacture a variety of illicit drugs in clandestine drug laboratories. Labs can be found in all sorts of environments-rural farms to urban centres. Chemical manufacturers, whole salers and retail distributors, freight handlers, agents and brokers are all potential sources from which chemicals can be diverted

Dealing with clandestine drug labs require technical expertise. Responders must understand illicit drug chemistry; how to neutralize risk of explosions, fires, chemical burns and toxic fumes; how to treat medical conditions caused by chemical burns. Local police agencies must be trained how to detect and deal with clandestine drug labs. An early recognition of and response to the problem is critical to preventing it from becoming entrenched.

## Busting of Illicit Meth/Ephdrine Labs by Narcotics Control Bureau

- Busted an illicit ATS Laboratory at Kolkata (May, 2003)

- On May 17, 2003, NCB detected and dismantled an illicit ATS laboratory in Kolkata.
- Five persons (three Burmese nationals and two Chinese nationals) were arrested.
- Sized 24 kg. of Ephedrine Hydrochloride along with other chemicals and laboratory equipment.
- In the follow up Chinese delegations visited India in connection with investigation in the case and interrogated the arrested persons.

### **Busting of Illicit Methamphetamine Laboratory in Gurgaon (October, 2006)**

- On October 17, NCB detected and dismantled a laboratory set up to illicitly manufacture methamphetamines.
- Intelligence gathered through follow up in the case of a previous seizure of 550 kg. of ephedrine on 3-9-2006
- The accused had hired a factory premises in Gurgaon.
- Six Hong Kong Chinese nationals and one Canadian of Indian origin arrested in the case.
- Seizure of 550 kg. of ephedrine and other chemicals seized.
- This was the third instance of an ATS laboratory being busted in India.
- Earlier attempts to set up an ATS laboratory in India were in Kolkata (May, 2003) and Hyderabad (August, 2004-DRI)

### **Busting of an attempt to set up an illicit Laboratory Kolkata, (November, 2006)**

- On November 14, NCB seized a container in Kolkata which had been imported from China.
- The container assorted sophisticated laboratory apparatus for setting up an illicit lab to manufacture synthetic drugs.

- Two Indian nationals arrested.

### **Busting of an illicit pseudo ephedrine lab near Mumbai (December, 2007)**

- On December 17, 2007, NCB detected and dismantled a laboratory used to extract pseudoephedrine from combination pharmaceutical preparations.
- Laboratory was set up in a farm house in a remote area of Thane district, about 120 km north of Mumbai.
- Seizure of 290 kg of pseudoephedrine and 900 kg of crushed tablets of pseudoephedrine formulations, besides other chemicals and equipments.
- 5 persons arrested including 2 India, 2 Singapore and 1 Mexico nationals
- Joint operation with Australian Federal Police over last five months
- On December 16, 2007, NCB raided a warehouse in JNPT and seized 963 kg. of a substance purported to be pseudoephedrine and 1 tones of a cover consignment of sodium sulphonate, a common detergent.

### **Busting of an illicit ATS Lab at Vadodhara, Gujarat (November, 2008)**

- A joint operation with Chinese and Hong Kong authorities.
- On November 20, 2008, NCB seized 1.5 kg. of methamphetamine from a car on Vadodhara Mumbai highway and arrested three persons including 1 Canadian of Chinese origin and 2 Malaysian nationals.
- Follow up led to detection and dismantling of an illicit ATS laboratory in a factory premises namely Sakha Organics Pvt. Ltd. UnMokshiSavli area of Vadodhara District.
- 134.32 kg. of in process material seized from the factory premises.



- Another 7 kg. of ATS and 5 kg. of Ephedrine seized in Mumbai in follow up action on 25.11.2008.
- Earlier, a carrier of Taiwan nationality destined for Australia via Manila was arrested at IGI airport on 11.10.2008 for possession of 2 kg. ATS.
- 2 Arrests in Hong Kong- seizure of properties worth HK\$ 44 million.
- 4 arrested in China including CaiZhezeng, who is one of the main organizers and was financing the illicit lab.
- A 17th to 21st February, 2009-Six Chinese and two Hong Kong officers are visiting Mumbai for joint investigations on the Invitation of NCB
- Narcotics Control Commission, China is requested the attested true copies of statement of TSOI recorded in Main land China and seized documents linking TSOI and XIE in committing the offence of drug trafficking in India in any manner including financing are required by this office to incorporate these details in the application for seeking warrant on TSO.

### **Busting of an illicit Methamphetamine Laboratory at Patials, Punjab (June, 2009)**

- A joint operation with NCB, Mumbai/Chandigarh.
- On June 8/9, 2009 seized 25 kg. of methamphetamine and arrested four persons.
- Follow up led to detection and dismantling of an illicit manufacture methamphetamine in Patiala, Punjab.
- Another 3.1 kg of methamphetamine, laboratory equipment and chemicals were seized.

### **Busting of an illicit ephedrine lab near Mumbai (November, 2009)**

- On 26th November, 2009 NCB seized 82.55 kg. of

ephedrine.

- Three person were arrested.

### **Busting of an illicit Methamphetamine Laboratory at Mumbai (August, 2010)**

- On August 19, 2010, NCB detected and dismantled a laboratory.
- Laboratory was set up in a Shed at Asangaon. Thane.
- Seized 8.450 kg of Methamphetamine, 60 kg of Ephedrine, 10 liters of methamphetamine in liquid beside other chemical and equipments in large quality.
- Seven persons (one Dutch national and six Iranian nationals ) were arrested.
- In the follow up action on 23.08.2010, searched a residential premises at Oshawara, Mumbai resulted in seizure of 13 kg of ephedrine and 1 kg of amphetamine. One person (Indian national) was arrested.

### **Busting of an illicit Ephedrine Laboratory at Mumbai (August, 2010)**

- On 20/21.08.2010, NCB detected and dismantled a laboratory.
- Seized 8 kg of amphetamine, 1.470 kg of Methamphetamine, 630 kg of ephedrine powder mixed with PVC resin powder, 280.500 kg of ephedrine tablets, 173 kg. of pseudo ephedrine tablets, 13.500 kg of pseudo-ephedrine powder, 87300 acetified tablets and 26310 Lorfast-D tablets.
- Two persons including one Colombian national were arrested.
- Subsequent raid at the residential premises of the arrested person at Mumbai resulted in seizure of 2.07 kg. of methamphetamine.

- Initial investigations reveal that two Chinese nationals are the chemists/cooks who had manufactured the methamphetamine during their visit to Mumbai from 21st April, 2010 to 11th May, 2010

### **Busting of an illicit Ephedrine lab in Maharashtra (October, 2010)**

- On 26/27.1.2010, NCB Mumbai raided A factory premises in Maharashtra
- On October, 26/27, 2010, the factory premises of M/S Maireswar Organic Chemicals, C-64, MIDC, Mahad, disttRaigard, Maharashtra was raided and 93 kg of Ephedrine was seized.
- The said factory was being used for illegal manufacturing of Ephedrine.
- Two persons were arrested in the process.

### **Busting of an illicit Ephedrine lab in Gujarat (October, 2010)**

- On October 26, 2010, the Ahmedabad Zonal unit of NCB raided a factory premises at Ankleshwar, Distt-Bharuch, Gujrat.
- On October 26, 2010, the factory premises of M/s Mira Organic Pvt. Ltd, Plot No. 618, GIDCPanoli, Ankaleshwar, Distt-Bharuch, Gujrat was raided and 238 kg of Ephedrine was seized.
- The said factory was closed for the last six months as it was incurring losses and was later engaged for illegal manufacturing of Ephedrine.
- Six persons were arrested in the process.

### **Busting of an illicit Ephedrine lab in Maharashtra (February, 2011)**

- On 12.02.2011, officers of the Narcotics Control Bureau,

Mumbai busted a ephedrine laboratory at District Satara, Maharashtra and seized 13 kg of ephedrine. Two persons were arrested. ■

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# Digitalized Terrorism: The Technological Advancement of Crime

Dr. Nidhi S\* & Dr. Priti Saxena\*\*

## Keywords

Terrorism, Digitalized Terrorism, Cyberterrorist, Digitalized Terrorism, Terrorist Attacks, Netizens.

## Abstract

*The start of new millennium has seen a decline in the number of incidents of 'traditional' terrorism such as hijacking and kidnapping but the lethality of the terrorist potential has risen to a frightening degree with the advent of digitalized terrorism, and its links to computer technology. The vulnerability of the critical infrastructure has led to increasing concern that it will be the target of terrorist attacks. In this highly topical study, the authors examine the new terrorist tools and their appalling capacity for the destruction. The authors claim that the technological revolution has effectively 'democratized' computer knowledge to the extent that the forces of law and order no longer have an inherent advantage of power and privilege. Their special challenge in the century will be to match the resourcefulness and ingenuity of their terrorist adversaries. The purpose of the paper is to explore how the Internet is altering the traditional concept of terrorism. What are the ways of terrorists attacks, cyber-terrorists or digitalized terrorism catastrophic phenomenon that has not yet attracted the attention of the Indian Legislature exhaustively. The paper considers whether there is a need to react to the digitalized terrorism and if so, to what extent?*

The growing dependence of our societies on information technology has created a new form of vulnerability. The

Author Intro.:

\* Astit. Prof., Department of Law, Teerthanker Mahaveer University, Moradabad

\*\* Associate Prof & Head, Department of Human Rights, School for Legal Studies, Babasaheb Bhimrao Ambedkar University (A central University), Lucknow.

traditional concepts and methods of terrorism<sup>1,2,3</sup> have taken new dimensions, which are more destructive and deadly in nature. In the age of information technology the terrorists have acquired an expertise to produce the most deadly combination of weapons and technology, which if not properly safeguarded in due course of time, will take its own toll. The damage so produced would be almost irreversible and most catastrophic in nature.<sup>4</sup> To be ignorant towards cyber-Terrorism "Digitalized terrorism" will

<sup>1</sup> Terrorism is an old phenomenon. The first words come from the beginning of first century after Christ. when Romans ruled Palestine, and a Jewish order called the Zealots committed disastrous revolt that ended in the mass suicide. During 1090-1275. a Shiite Muslim sect, Assassins, tried to purify Islam using drug hashish and killing their Sunni rivals. But, the word terrorism comes from the French Revolution (1793-1794). when terror was used by the state as a mean to eliminate counterrevolutionary elements. rsc Professor Dumitru OPREA, PhD "Alexandru Ioan Cuza" University of Iasi, The Information System and the global terrorism. available at SSI'Il.CO111) accessed on 20/1 (/)/09

The definition of "terrorism" has been well studied. defined. and documented. As per Traditional definition of terrorism

<sup>2</sup> It is an act or aggregation of premeditated acts involving criminal violence. intending to intimidate civilian population and coerce governmental decision-making. or. generally. to express disagreement for governmental policies and actions". The basic characteristic of terrorism is the use or threat of violence against persons or property aiming to cause enough harm to attract attention. generate fear, and affect decision-making. Unlike conventional crime. it has its roots on strong ideology. it is basically an effort designed to impose it by illegal and violent means. t See Varvara Mitliaga. Digitalized terrorism: a call for Governmental Action", available at [http://www.bileta.ac.uk/document%\(\).Olibrar\./1 {digitalized terrorism %'\)0- %20a%\)Ocall%20for%\(\)\(\)S'overnl1ental%'\)0:lct iOIUc.!!](http://www.bileta.ac.uk/document%().Olibrar\./1 {digitalized terrorism %')0- %20a%)Ocall%20for%()()S'overnl1ental%')0:lct iOIUc.!!) accessed on 22/ 10/09

<sup>3</sup> One of the enduring axioms of terrorism is that it is designed to generate publicity and attract attention to the terrorists and their cause. media publicity is indispensable for an attack to be successful and attain its scope. Furthermore. attacks are always premeditated and carefully planned. Terrorism's act either nationally or. internationally. especially after the development of telecommunication and transportation.

The FBI definition of terrorism- "The unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population. or any segment thereof, in furtherance of political or social objectives".

Department of State definition of terrorism defined the term as "Premeditated politically motivated violence perpetrated against noncombatant targets by sub-national groups or clandestine agents".

<sup>4</sup> Praveen Dalal, Cyber. and its solutions: an Indian perspective available at <http://>

be such as giving terrorists the chance to approach targets that would otherwise be utterly unassailable, such as national defense systems and air traffic control systems. The more technologically developed a country is, the more vulnerable it becomes to cyber attacks against its infrastructure. In short, we are facing the worst form of terrorism popularly known as “cyber-terrorists or digitalized-terrorism”<sup>5</sup>.

The expression “cyber-terrorism or digitalized-terrorism,” includes an intentional negative and harmful use of the information technology for producing destructive and harmful effects to the property, whether tangible or intangible, of others<sup>6</sup>. Why would a terrorist decide to use the internet, rather than using the usual methods of assassination, hostage taking and guerrilla warfare?

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[www.naavi.org/praveendalal/pdcvberterrorismoct.\)S0402.html](http://www.naavi.org/praveendalal/pdcvberterrorismoct.)S0402.html) accessed on 22

<sup>5</sup> The definition of “Cyber terrorism.” cannot be made exhaustive as the nature of crime is such that it must be left to be inclusive in nature. The nature of “cyberspace” is such that new methods and technologies are invented regularly; hence it is not advisable to put the definition in a straightjacket formula or pigeon hole (See: Praveen Dalal “Cyber Terrorism and its solutions. An Indian perspective, Available at <http://www.naavi.org/praveendalal/pdcvberterrorismoct.50402.htm>) accessed on 22/3/09

Also, The U.S. National Infrastructure Protection Centre defined the term as “A Criminal act perpetrated by the use of computers and telecommunications capabilities, resulting in violence, destruction and/or disruption of services to create fear by causing confusion and uncertainty within a given population, with the goal of influencing a government or population to conform to particular political, social or ideological agenda”.

But another opinion regarding the term Cyber- terrorism, is given by Dorothy E. Denning. (Cyberterrorism -Testimony before the Special Oversight Panel on Terrorism. Committee on Armed Services. US House of Representatives, 23 May 2000. available at <http://www.cs.georgetown.edu/~denning/infosec/cyberterror.html>) accessed on 24/10/09) is .. not any malicious use or information technology constitutes cyber-terrorism. Cyber-terrorism is quite a new term. used to describe the convergence of terrorism and cyberspace. It is generally understood to mean attacks and threats of attack against computers, networks and the information stored therein. when done to intimidate or coerce a government or people: in furtherance of political or social objectives.

<sup>6</sup> For instance, hacking of a computer system and then deleting the useful and valuable business information of the rival competitor is a part and parcel of ‘cyber or digitalizer] terrorism.

element of the problem is that terrorist may come to realize that removing one official from office only causes another to take the officials place, which may not cause the result the terrorist wished to achieve. By using the internet the terrorist can affect much wider damage<sup>7</sup> or change<sup>8</sup> to a country than one could by killing some people. From disabling countries military defenses to shutting off the power in a large area, the terrorist can affect more people at less risk to him or herself, than through other means.

The laws of India have to take care of the problems originating at the international level because the Internet, through which these terrorist activities are carried out, recognizes no boundaries. Thus,

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<sup>7</sup> For Instance a Cyber Terrorist will disrupt the banks. the international financial transactions. the stock exchanges. The key: the people of a country will lose all confidence in the economic system. Would a Cyber Terrorist attempt to gain entry to the Federal Reserve building or equivalent?) Unlikely. since arrest would be immediate. Furthermore. it large truck pulling alongside the building would be noticed. However. in the case of the Cyber Terrorist. the perpetrator is sitting on another continent while a nation's economic systems grind to a halt. Destabilization will be achieved.

<sup>8</sup> A Cyber Terrorist will remotely access the processing control systems of a cereal manufacturer. change the levels of iron supplement, and sicken and kill the children of a nation enjoying their food. That Cyber Terrorist will then perf 01'111 similar remote alterations at a processor of infant formula. The key: the Cyber Terrorist does not have to be at the factory to execute these acts.

A Cyber Terrorist will place a number of computerized bombs around a city. all simultaneously transmitting unique numeric patterns. each bomb receiving each other's pattern. If bomb one stops transmitting, all the bombs detonate simultaneous- .. The keys: 1) the Cyber Terrorist does not have to be strapped to any of these bombs; 2) no large truck is required; 3) the number of bombs and urban dispersion are extensive; 4) the encrypted patterns cannot be predicted and matched through alternate transmission; and 5) the number of bombs prevents disarming them all simultaneously. The bombs will detonate.

A Cyber Terrorist will attack the next generation of air traffic control systems, and collide two large civilian aircraft. This is a realistic scenario. since the Cyber Terrorist will also crack the aircraft's in-cockpit sensors. Much of the same can be done to the rail lines. A Cyber Terrorist will remotely alter the formulas of medication at pharmaceutical manufacturers. The potential loss of life is unfathomable.

The Cyber Terrorist may then decide to remotely change the pressure in the gas lines. causing a valve failure. and a block of a sleepy suburb detonates and burns. Likewise. the electrical grid is becoming steadily more vulnerable.



a cyber terrorist can collapse the economic structure of a country. India may not have any reciprocal arrangements, including an “extradition treaty”. The only safeguard in such a situation is to use the latest technology to counter these problems. Thus, a good combination of the latest security technology and a law dealing with cyber-Terrorism/digitalized terrorism is the need of the hour.<sup>9</sup>

The threat posed by cyber-Terrorism/digitalized terrorism has grabbed the attention of the mass media, the security community, and the information technology (IT) industry. Despite all the gloomy predictions of a cyber-generated doomsday, no single instance of real cyber-Terrorism/digitalized terrorism has been recorded<sup>10</sup> most critical infrastructure in Western societies is networked through computers, the potential threat from cyber-Terrorism/digitalized terrorism, is, to be sure, very alarming. Hackers<sup>11</sup>, although not motivated by the same goals that inspire terrorists, have demonstrated that individuals can gain access to sensitive information and to the operation of crucial services.<sup>12</sup>

<sup>9</sup> Available at <http://www.legalserviceindia.com/articleI169•Digitaliz.:clterrorism.html>. accessed on 24/10/09

<sup>10</sup> Available at <http://www.usip.orQ/pubs/!|lecialr£poi.ls/sr 112.|ldt>: accessed on 24/10/09

<sup>11</sup>Hacker (computing). a contentious term used for several types of person:

- Hacker (computer security) or cracker. who accesses a computer system by circumventing its security system
- Hacker (programmer subculture). who shares an anti-authoritarian approach to software development now associated with with the free software movement
- Hacker (hobbyist). who makes innovative customizations or combinations of retail electronic and computer equipment

Available at <http://en.wikipedia.org/wiki/Hacker> accessed on 10/11/09 While Hacking-The concept of hacking as a methodology to achieve some particular goal has the allusion of working at something by experimentation or empirical means. learning about the process under review or development by ad hoc mechanisms. Hacking, Prepared for the Macmillan Encyclopedia of Computers . J.A.N. Lee 111.1991 January 23.Final Draft (available at <http://courses.cs.vt.cdu/cs3604/lib/Hacking/MacMillan.Hackin!'.html>accessed on 10/11/09

<sup>12</sup> Available at <http://www.usip.org/pubs/specialreports/sr111.pdf>. accessed on 24/10/09

## The Phenomenon of Digitalized Terrorism

To qualify as digitalized terrorism, an attack<sup>13</sup> should result in violence against persons or property, or at least cause enough harm to generate fear. It is very difficult to exhaustively specify the structure of digitalized terrorism. The nature of digitalized terrorism requires it to remain inclusive and open ended in nature, so that new variations and forms of it can be accommodated in the future.

The term is considered to cover many cases of computer and Internet abuse, like hacking or the dissemination of computer viruses, and generally almost any incident of an on-line based attack whose only result is nuisance and, sometimes, economic loss<sup>14</sup>. It should be clarified, however, that the usual scope of these attacks is more for the perpetrators to test their abilities and prove to themselves and their targets that they can do it than to cause damage and inflict fear in furtherance of an ideology. The criteria for an attack to qualify as digitalized terrorism, apart from the use of information technology, are also the identity of the persons who launch it, the scope for which they do it and the result. It would be quite authoritative to consider all these bothersome attacks as digitalized terrorism, because this would automatically vest them with all the special features that the term entails, and that is certainly not the case. Terrorists may resort to such actions in an effort to influence public opinion and make their ideas

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<sup>13</sup> Attacks that disrupt nonessential services are mainly a costly nuisance would not constitute digitalized terrorism. For example. Accessing remotely an air or road traffic control system and causing an accident resulting in loss of life or at least serious damage and spread of panic would constitute digitalized terrorism. while unauthorized penetration in a system aiming to distract information or simply disturb its users would not.

<sup>14</sup> It is not implied here that financial losses are not important. These are important but not more than precious human life) however, they do not usually constitute the sole target of a terrorist action as they do not inflict the same fear as material damage, even more, human injury. Terrorists may of course resort to such activity in order to annoy their target and maybe steal money. but this is not a pure form of digitalized terrorism. It is rather a simple incident of criminal activity on the internet

and beliefs widely known, or simply to annoy their opponents and make their existence known. That the use of information technology works in the same context as using the Internet to collect information about targets or to communicate and coordinate the action with fellow conspirators or recruit supporters do not constitute a complete terrorist action to qualify as digitalized terrorism. They are only an indication that, like with any other advance in technology, the information technology is simply used to further unlawful purposes<sup>15</sup>. Digitalized terrorism then is neither a term encompassing all actual or possible uses of the information technology by terrorists, nor any disturbing abuse of computers and the Internet. It is the premeditated, ideologically motivated attack against information, computer systems, computer programs, and data which result in violence and serious damage against non-combatant targets, perpetrated by persons acting in the name of an ideology with the intention to spread fear and impose their ideology on the public. The pure form of cyber-Terrorism in the digitalized terrorism is the use of high technology tools against high technology targets<sup>16</sup>.

### Use of Information Technology in Cyber Attacks

Information technology can be useful for terrorist groups in two ways:

- 1) All, computers and the internet can be used as a useful tool to enhance traditional activity.
- 2) Second, information infrastructure can constitute a new attractive target for terrorist actions.

Although these are two separate issues but they have a strong

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<sup>15</sup>Dorothy E. Denning, Activism, Hacktivism, and Cyberterrorism: The Internet as a tool for influencing foreign policy. Internet and International Systems: Information Technology and American Foreign Policy Decision making. Workshop. Available at <[http://www.nautilus.org/info-DIGITALIZED\\_TERRORISM:\\_A\\_CALL\\_FOR\\_GOVERNMENTAL\\_ACTION/](http://www.nautilus.org/info-DIGITALIZED_TERRORISM:_A_CALL_FOR_GOVERNMENTAL_ACTION/)> Page 10 of 11 Available at [http://www.bilela.ac.uk/Ol\\_papers/mitt\\_iaga.html](http://www.bilela.ac.uk/Ol_papers/mitt_iaga.html) accessed on 23/10/09

<sup>16</sup> M. Devost. B.K. Houghton and Neal A. Pollard. Information Terrorism: (011 you trust your toaster? Available at <<http://www.terrorislll.colll/docullents/sulltzu.pdf>>. accessed on 23/10/09

interdependence. The terrorist groups are using these two ways to enrich their activity and to cause more harm with massive fear in heart and mind of natives. The fact that terrorists may use information technology as a useful tool does not automatically mean that information infrastructure will constitute their next target, extended use and familiarization with technology, however, IS a necessary step before deciding to turn against such targets, As they learn to use information technology for decision-making and other organizational purposes, they will be more likely to use it as an offensive weapon to destroy or disrupt.

### **The Internet as a Tool**

The internet can be used by terrorists as a tool in a range of ways:

- (I) They use it as a best communication medium, as electronic mail is one of the quickest, cheapest and the most effective ways of contact between any parts throughout the world.
- (II) Technology allows anonymous and secure communications & quick transfer of data, so possibility is this, that terrorists can use the internet, to exchange useful information on possible targets, like maps or instructions, and co-ordinate their action overcoming the obstacle of crossing national borders.
- (III) On Internet general information for potential targets or weapons are scattered. It can be a useful resource on its own.
- (IV) Anyone can maintain web pages to “advertise” their ideology, disseminate propaganda and recruit supporters and same is applicable to terrorist groups also. It is the first time that they can easily reach the public directly and make their existence known in an international scale<sup>17</sup>.
- (V) Terrorists are also said to use the Internet to obtain funds
- (VI) Computers can be as useful for terrorists as they are for law

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<sup>17</sup> Tom Regan. When Terrorists Turn to the Internet Infowar.com. at<[http://www.infowar.colll/class\\_3/99/class3\\_070499aj.shtml](http://www.infowar.colll/class_3/99/class3_070499aj.shtml)> accessed on 19/10/09 7/4/1999

abiding individuals as storage media or as multipurpose “machines.

- (VII) These groups are also said to use strong encryption for secure communications and exchange of vital information.

### Information Infrastructure as a Target

The second way in which Information Technology can be useful for the terrorists is by constituting their target. The terrorists use information systems to facilitate traditional forms of subversive action as an internal communication or as tools for propaganda, misinformation, recruitment and financing. The main goals of cyber terrorist attacks are to create fear and panic among civilians or disrupting or destroying public and private assets<sup>18</sup>. The growing dependence of our societies on information technology means that well organized attacks to vital networks can cause incalculable damage to public or private organizations<sup>19</sup>, and, depending on how crucial is the system, entail serious injury or damage and inflict fear to civilian population. As a result of the Internet explosion, the tools of Internet can be used as a TV or radio station, or as a support for newspaper or journal publishing without control from public authorities. In addition, chat rooms, bulletin boards or blogs are important means of communication because there is no control on the information flows<sup>20</sup>. It is true that dependence on information technology creates a new form of vulnerability that did not exist before, and it gives terrorists the chance to approach targets that would otherwise only be a wild dream. Like the manipulation of a national defence system or an air traffic control system. Astoundingly, vulnerability varies from country to country but it is analogous to technological

<sup>18</sup> Dumitru OPREA, PhD “Alexandru Ioan Cuza” University of Iasi. The Information System and the global terrorism. available at [ssm.com](http://ssm.com), accessed on 20/1 0/09

<sup>19</sup> Marcus Maher, International Protection of US Law Enforcement Interests in Cryptography, *S Richmond Journal of Law and Technology* 13, (Spring 1999). p. 17, at <http://www.richmond.edu/joltlvSi3/maher.html> accessed on 19/10/09

<sup>20</sup> Supra note 17

development. The more technologically developed a country is, the more vulnerable it becomes to the attacks against its infrastructure<sup>21</sup>. The most powerful state becomes the most vulnerable in the information technology attacks. As for developing states and the third world, information technology is gradually becoming all the more important, but not yet in a degree of dependence.

So the problem has a different perspective therein. There are reasons to believe that terrorist groups have the ability and the means to make extended use of technology, either as a tool or as a target.

One of the most essential features of terrorism is its strong dependence on ideology; motivation is usually strong political or religious beliefs. This entails two things: membership in terrorist groups can be, first of all, independent of the social or economic status, and, secondly, irrelevant to the educational or intellectual background and potential. It is very likely that terrorist groups will make increasing use of information technology given the fact that some of their members are usually well-educated individuals comfortable with the use of technology. Additionally, they have ensured financial recourses, which mean they have the means to acquire technology and “employ”, if necessary, the appropriate people to use it. The use is likely to rise as terrorist groups recruit younger members that are more familiar with technology.

Furthermore, they are known to keep track of the technological developments because the success of their actions partly depends on their ability to keep one step ahead of the authorities and of counterterrorist technology. Probably they would use any means available to enhance their activity.

But the transition from traditional terrorism to the use of information

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<sup>21</sup> Marcus Maher. International Protection of US Law Enforcement Interests in Cryptography. *S Richmond Journal of Law and Technology* 13. (Spring 1999). p. 17, at <<http://www.ri.columbia.edu/jvl/vs13/maher.html>> accessed on 19/10/09

technology, at least as a lethal weapon, is also dependent on two other factors<sup>22</sup>.

- (I) First, they must understand and trust the use of the weapon. Terrorists seem to trust more easily weapons that they've built themselves or that at least have been tried by others, they usually do not seem very willing to experiment.
- (II) Second, it is also a matter of mentality; terrorists have to feel that a weapon is right for them before they use it, that it suits their ideology. A considerable number of terrorist groups seem to still like the feel of physical weapons. These are not, of course, the only decisive factors for the use of information technology and they certainly have nothing to do with using technology as a helpful tool for everyday activities. It is, however, important to keep in mind the special characteristics that differentiate terrorism from traditional crime

An overall assessment suggests that terrorists are technologically innovative but with certain limits. Although radical in their politics, the vast majority of terrorist organizations appear to be conservative in their operations. It is not surprising that bombing is one of their favorites: it provides easy and often risk-free means of drawing attention; surreptitiously plant it, and be miles away when it explodes. To manufacture a crude bomb is not very skilled work, consequently, although it is almost certain that terrorists will make extended use of information technology as a tool, it is still debatable if they will use it as a weapon aiming at information infrastructure as a new target.

All these are possible due to the Internet services attributes like encryption, speech compression, anonymous network accounts, unknowing about content of the sites by the ISPs (Internet Service Providers). The most dangerous cyber terrorist attacks are those that affect the national infrastructures or businesses because the information systems have a vital role to all of them.

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<sup>22</sup> John Borland. Analysing the Threat of Cyberterrorism, (interview with W. Church. rounder of the Centre for Infrastrucrurul Warfare Studies) at <[http://ll'wIV.iIll\(\)ll''lr.c\(ln/class\\_3!c:as,\\_~ I 0289Xbj.,hlllll'c•](http://ll'wIV.iIll()ll''lr.c(ln/class_3!c:as,_~ I 0289Xbj.,hlllll'c•). accessed 011 i 'il I 0/09.

## Ways of Terrorists Attacks

The terrorist attacks that involve information system infrastructures can work in different ways, as follows<sup>23</sup>.

- **Service disruption:** Distributed denial-of-service (DDoS)<sup>24</sup> attacks target web sites and servers of public agencies, telephone services, transportation communication systems, utilities and the emergency-response system. This type of attacks degrades, disrupts, damages or destroys information resources so that many of activities are disrupted. These attacks are frequently in convergence with physical ones so that important assets, including information system infrastructures,

<sup>23</sup> Denning D.E.. op. cit.. pp. 32-37; Thomas T.L. . .41 Qaeda and the Internet: The Danger of "Cyber planning". "PARAMETERS". US Army War College Quarterly. Spring 2003. pp. 112-123; I-Iennessy J.L.. Patterson D.A.. Lin I-I.S., Editors. op. cit .. 15-27; Fischer E.A .. Creating a National Framework/or Cyber security: All Analysis of Issues and Options. CRS Report for Congress. February 22. 1005. [http://www.acm.org/usacm/PDF/CRS\\_cybersec.pdf](http://www.acm.org/usacm/PDF/CRS_cybersec.pdf). p. CRS-7 . see Dumitru OPREA. PhD "Alexandru Ioan Cuzu" Un i vcrsity or I asi. The In formation System and the global terrorism. available at ssm.com) accessed on 15/10/09.

<sup>24</sup> As per the provision of Section 43 or IT Act. 2(JOO "If any person without permission of the owner or any other person who is incharge of a computer, computer system or computer network -

- (a) Introduces or causes to be introduced any computer contaminant or computer virus into any computer. computer system or computer network:
- (b) Disrupts or causes disruption of any computer. comouter system or computer network:
- (c) Denies or causes the denial of access to any person aurtherised to access any computer, computer system 01' computer n.xwork by any means; he shall be liable to pay damages by way of compensation not exceeding one crore rupees to the person so affected here according to Explanation (i) to Section 43 of IT Act. 2000 The expression "Computer Contaminant" means any set of" computer instructions that are designed -
  - (a) To modify, destroy. record, transmit data or programme residing within a computer. computer system or computer network; or
  - (b) By any means to usurp the normal operation or the computer, computer system, or computer network. or Thus, distribute denial of services by the cyber terrorists will be tackled by invoking the provisions of sections 43. 65 and 66 collectively.



are hardly recovered and may disturb many critical services like medical services, rescue services etc. This is made possible by first infecting several unprotected computers by way of virus attacks and then taking control of them. Once control is obtained, they can be manipulated from any locality by the terrorists. These infected computers are then made to send information or demand in such a large number that the server of the victim collapses. Further, due to this unnecessary Internet traffic the legitimate traffic is prohibited from reaching the Government or its agencies computers. This results in immense pecuniary and strategic loss to the government and its agencies. It must be noted that thousands of compromised computers can be used to simultaneously attack a single host, thus making its electronic existence invisible to the genuine and legitimate netizens and end users.

- **Psychological manipulation:** E-mails, news or sites containing false information are used to spread terror among the population, to mobilize a group, or to diminish the credibility of public and private bodies (after the 9/11 attacks, al Qaeda ran websites to discuss the legality of the attacks. In addition, al Qaeda has several sites that offer software and programming instructions for the digital switches that run power, water, transport and communications networks, Such web sites are alneda.com, jihad.com, drasat.com, aloswa.org with feature quotes from bin Laden tape, religious legal rulings to cover his actions<sup>25</sup>.
- **Capture and control:** Gathering of information on potential targets by stealing data, maps, diagrams and other crucial data on important facilities or network. The Defense Department (USA) summary of the investigation said the bureau found various casings of sites nationwide. Routed through telecommunications switches in Saudi Arabia, Indonesia and

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<sup>25</sup> Thomas T.L, op. cit., pp. 114-115. see Durnitru "Alexandru Ioan CULa" University of Iasi. The Information System and the global terrorism. available at [srn.com](http://srn.com). accessed on 2311 O/Ot)

Pakistan, the visitors studied emergency telephone systems, electrical generation and transmission, water storage and distribution, nuclear power plants and gas facilities<sup>26</sup>.

## Assessing the Threat

There are three potential acts in the cyber-Terrorism/digitalized terrorism, at the point of convergence:

- Destruction;
- Alteration; and
- Acquisition and retransmission

These three types of acts are the most heinous at the point where the physical and virtual worlds converge. Attacking vital information infrastructure could be very attractive for terrorists for several reasons. Several experts have stated that digitalized terrorism does not cause the same type of threat as nuclear, biological, or chemical threats. Many experts also believe that it would be difficult to use attacks against computers to inflict death on a large scale, and have stated that conventional physical threats present a much more serious concern for nation's security<sup>27</sup>. The vulnerabilities are increasing with spread of Internet which can support new ways, may be more dangerous, of terrorist attacks due to the numerous facilities they control.

The dependence on information infrastructure gives an unprecedented opportunity for terrorists to aim at targets that would otherwise be extremely difficult to handle, and certainly impossible to be remotely disturbed, like air or road traffic control systems or energy distribution networks. Additionally, a successful attack resulting in enough damage to generate fear is certain to gain extended media coverage, which is a major priority for the terrorist

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<sup>26</sup> Gellman B., FBI fears at Qaeda cyber attacks Analysts monitoring hacker activity. "San Francisco Chronicle", June 28, 2002, p. A-1. see Dumitru OPREA, PhD "Alexandru Ioan Cuza" University of Iasi, The Information System and the global terrorism, available at [ssrn.com](http://ssrn.com)) accessed on 15/11/09

<sup>27</sup> Denning D.E., op. cit., pp. 72-73. quoted by see Dumitru OPREA, PhD "Alexandru Ioan Cuza" University of Iasi, The Information System and the global terrorism, available at [ssrn.com](http://ssrn.com)) accessed on 15/10/09

actions as it promotes public intimidation. Even though most hacking attacks are kept secret from the public to avoid spread of panic and loss of confidence on the compromised systems, a successful cyber-terrorist attack could not be easily kept away from publicity. Finally, information technology can work as a force multiplier because it allows attacking even the most crucial systems, for example defense and military networks that are certainly very attractive targets for terrorists but were almost impossible to influence before there are also drawbacks for terrorists in exploiting information infrastructure. Even though vulnerable, systems are usually complex. This means that it might be difficult to control an attack and achieve a desirable level of damage or harm. Unless people are injured, there is less emotional appeal and a terrorist attack is less successful. Apart from that, it is probable that terrorists could be disinclined to try new methods and use new tools, unless they consider their old ones inadequate. Vital systems may depend on information technology, but there is still enough human control to prevent malfunction and cope with emergent and unexpected incidents<sup>28</sup>

Further, the actual use of information technology as a helpful tool by terrorists, one can draw an initial assumption that terrorist groups are indeed using information technology, but the situation is not much different than with the use of other forms of technology.

As for the general use of information technology by terrorists, it has already been said that terrorists do use information technology as a communications medium, as a means to recruit supporters, collect information, disseminate propaganda and raise funds to support their activity. Furthermore, we still do not know the level of their ability to use information technology. It is highly probable that even if a successful attack to a vital system not aiming to cause great damage but only to warn for future actions, as for example a military

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<sup>28</sup> Dorothy E. Denning, *Activism, Hacktivism, and Cyberterrorism: The Internet as a 1001 for influencing foreign policy*. Internet and International Systems: Information Technology and American Foreign Policy Decision making Workshop, at <<http://www.nautilus.org/inlo>> • DIGITALIZED TERRORISM: A CALL FOR GOVERNMENTAL ACTION Available at <http://www.bileta.ac.uk/OI/papers/ill> ill iaga.luml at p. 15. accessed on 2:1J 0/09 c9 Tania Hershman, *Israel's Seminar 011 Cyberwar*. 10/0 11200 I Info Set' News at

defense system, had already happened, it would preferably have been kept secret so as to avoid embarrassment and loss of trust. As for pure cyber-terrorist attacks, up to present there have been many computer network attacks that meet the criteria for cyber-Terrorism. Most of the attacks that can be attributed to terrorist groups were launched merely to annoy or intimidate their targets, no great damages have occurred and no lives have been lost. In 1998, ethnic Tamil guerrillas swamped Sri-Lankan embassies with email bombing. This incident, although characterized by US intelligence authorities as the first cyber-terrorist attack, did not result in any big damage. Since then, such techniques have been used during the Kosovo conflict in 1999, and they are a usual incident between parties in many conflicts around the world, such as Israel and Palestine, China and Taiwan, India and Pakistan<sup>29</sup>.

These incidents, however, although usually perpetrated by small groups that could be characterized as terrorist, are more a phenomenon of cyber-war than pure cyber-terrorist attacks. As per the report of the National Commission on Terrorism<sup>30</sup> on the changing threat of international terrorism, concluded that although the terrorist's toolbox has changed with the advent of the information age, the objectives of the world's terrorist organizations remain the same. The report stated those terrorists are adopting information technology as an indispensable command-and-control tool, but there is still no indication of whether information infrastructure will constitute their new target<sup>31</sup> It is difficult to assess potential harm because we do not know how vital systems would react and we cannot foresee all possible forms of attack. Whatever the measures taken, a risk still remains.

<sup>29</sup> Tania Hershman, Israel's Seminar 011 Cyberwar. 10/0 11200 I Info Set' News at <<http://www.securityfocus.com/amesj/content=/templates/archive.pike%3Flist%3D12%26mid%3D155550>>. accesse.J on 23/10/09

<sup>30</sup> Report of the National Commission on Terrorism. Countering the Changing Threat 0/ International Terrorism. available at <<http://wlvw.fas.org/irp/threat/coll111ission.html>> .

<sup>31</sup> Dan Verton, Terrorists use new tools. old tactics, 26/06/2000 Federal Computer Week. available at <<http://www.securityfocus.com/templates/headline.html?id=7408>>. accessed 011 23/ 10/09

Terrorists will always be a little ahead of counter-terrorism technology curve, because they spot the vulnerabilities and launch their attacks, always well organized and planned, against them<sup>32</sup>.

Terrorism has traditionally provoked such intense concerns that there has always been a temptation to be careless in choosing the weapons to fight it. The fear that it inflicts lies in undermining individual rights and liberties, that otherwise wouldn't stand a chance of being accepted by the public<sup>33</sup>. Therefore, it is important to assess the real threat posed by terrorist groups using information technology; keeping in mind that digitalized terrorism is not a term encompassing any use of information technology by terrorists but a real threat to the humanity.

## Conclusion

Certainly computer and Internet are becoming an essential part of our daily life. Tremendous role of computers also stimulate the criminals and terrorists to make it their preferred tool for attacking their targets. Information technology is boundaryless so there are no physical barriers or check points to cross. Cyber attack is very difficult to be traced and they can hide their conspirators and location. They can do their act remotely from anywhere in the world. Unfortunately at a time they can target number of innocent people without moving a bit. The role of Interpol, which is working with 178 member countries to fight against the digitalized terrorism, is good. For this Interpol is helping member countries by training the personnel of all the member countries.

The judiciary can play its role by adopting a stringent approach towards the menace of digitalized terrorism but the jurisdictional issue must, however, be tackled first because before invoking its

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<sup>32</sup> M. Devest. B.K. Houghton and Neal A. Pollard. Information Terrorism: Can you trust your toaster", available at <<http://www.terrorislll.com/docuillents/suntzu.pdf>> accessed on 23/10/109

<sup>33</sup> Testimony of David B. Kopel. Hearings on Wiretapping and other terrorism Proposals. Cato Institute - Committee on the Judiciary US Senate, 24 May 1995, at<<http://www1.cato.org/lt:stil11ony!ct5-24-5.html>> ,

judicial powers the courts are required to satisfy themselves that they possess the requisite jurisdiction to deal with the situation. Although by virtue of section 1 (2) read with section 75 of the Information Technology Act, 2000 the courts in India have “jurisdiction” to deal with the digitalized terrorism.

The menace of digitalized terrorism is not the sole responsibility of State and its instrumentalities. In order to combat this type of terrorism lots of efforts should be initiated at the personal, country and global level. The visionary citizen is the need of hour, in fact they could be rather are the most important and effective mechanism for eradication and elimination of this menace. Therefore, it is recommended to encourage them to come forward for the support in the fight against cyber-terrorism/digitalized terrorism. For this the government must provide them the security in terms of person and property. The courts should be empowered to maintain their anonymity if they initiate any *suo moto* action to fight the digitalized terrorism.

Since the Internet “is a cooperative venture not owned by a single entity or government, there are no centralized rules or laws governing its use?” The absence of geographical boundaries may give rise to a situation where the act legal in one country may violate the laws of another country. This process further makes the situation complicated due to the absence of a uniform and harmonized law governing the jurisdictional aspects of disputes arising out of the use of Internet. Therefore, a global cyber law is needed in the era of globalization. Further, it is important to assess the real threat posed by the terrorist groups using information technology: keeping in mind that the cyber-terrorism/digitalized terrorism is not a merely term encompassing any use of information technology by the terrorists. ■



# “Safe City – Surat”- Suraksha Setu

Rakesh Asthana\*, IPS

## Keywords

Terror Attacks by IM, Ahmedabad, Surat, CCTV Surveillance, Project, Awareness, Safe City, Suraksha Setu Project.

## Abstract

*The project is designed for surveillance, crime prevention and detection, post incident forensic examination, traffic management and enforcement, for providing disaster management support and pollution control measures.*

July 26-27, 2008, two major cities of Gujarat, namely Ahmedabad and Surat, were subjected to terror attacks by Indian Mujahideen terror group with serial bomb blasts. While the serial blasts caused large scale devastation and damage to properties, and loss of lives in Ahmedabad city, Surat was lucky to escape damage and loss of lives, because the bombs which were planted in 24 locations did not explode due to technical snags. Out of these 24 locations, bombs were planted in 19 places situated in areas where mostly the Diamond units are located, which shows that the Diamond industry was mainly targeted. In July 2011, serial blasts took place in Mumbai in Zaveri Bazaar area, wherein mainly the Diamond traders/businessmen do their business. It was apparent that Gujarati Diamond merchants were the targets to create a sense of terror in their minds, and, also to convey that though they failed in Surat

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Author Intro.:

\* Commissioner of Police, Surat, Gujarat.

in 2008, they can still cause damage. It is a fact that failure at Surat in 2008 was a big credibility crisis for IM group, and they are itching to prove their credentials here. This had prompted me to visit Varachha, and Mahidarpura areas of Surat city, wherein, the diamond business, mainly cutting, polishing and trading in rough diamonds is concentrated, and where large number of people gather daily for aforesaid works. In case of any terror attack, they can be sitting ducks. Visit to these areas not only enabled me to have first hand information about the topography of the area, but also gave me an opportunity to have interaction with the mandarins of the Diamond industry, and other stake holders. During this brief chat with them regarding their security concern, was floated the idea of covering the entire city under CCTV surveillance in order to create a deterrent for the terrorists for any such future attacks, as Surat is quiet susceptible to it, and also to infuse a sense of security in the minds of common people. This idea was lapped up by them gladly, and they provided a great platform for motivation to us by way of showing their warm support, which initiated the journey of “Safe City –Surat” project for covering the entire city with CCTV cameras. This was primarily for the surveillance purposes, but later the components of Traffic Management and Disaster Management were also added to it. The Govt. of Gujarat approved it as a pilot project, and has given a go-ahead for implementing it on Public Private Partnership (PPP) model, wherein the Surat Municipal Corporation has also become a partner.

## Unique Challenges

Surat city has grown rapidly in the last decade and has emerged as the second biggest city in the state of Gujarat, and the 9th biggest City in India. It is also one of the fastest growing city in the world. The City is spread over an area of 326 sq kms, and is having a population of 5.2 million. The city is well known for its thriving Diamond, Textile, and Petro Chemical industry, which also employs large number of migrant population. Surat is the nerve centre of the business activities in South and Central Gujarat. The city throws unique challenges to the law enforcement agencies in the following manner:



**(A) Demographics:** The city with a busy port at Hazira-Magdalla, thriving textile industry, vibrant diamond industry, Asia's biggest textile market on the Ring Road, and Petro-chemical industry at Hazira, attracts huge work force from Saurashtra region of Gujarat, and from other States. A whopping 47.38% of the total population is from outside Surat, and 46.56% of the population is from outside Gujarat. The presence of huge low income, migrant population and labour class has led to the growth of slums and rise in law and order, and traffic related issues.

**(B) High Volume of Vehicular Traffic:** The city has 2.81 million registered motor vehicles and a large number of vehicles visit/pass through the city for various economic activities. The issues such as poor urban planning, lack of public transport system, dependence of the general population on auto-rickshaws, and motor cycles, inadequate man power available with the law enforcement agency has made the task of traffic management and enforcement difficult.

**(C) Proximity with Mumbai:** The city is 285 kms away from Mumbai. National Highway No.8, Hazira-Magdalla Port, Western Railway Network, and Surat Airport provide excellent link between the two cities. A large number of businessmen from Surat have their investments and establishments in Mumbai. The real estate market in the city has been soaring as it is a preferred urban destination in South Gujarat. Therefore, the underworld and the criminal elements from Mumbai have been trying to fiddle with the real estate, textile and diamond industries in Surat City.

**(D) Threats of Terrorism:** The city has pockets of mixed population and history of communal clashes. The thriving economy, presence of migrant population, long coast on the west, dotted with landing points and the proximity with Mumbai, expose the city to the threats of terrorism. There were successful terror attacks in the year 1993, and a large number of bombs ridden with explosives were planted in Varachha-Kapodra areas targeting diamond industry in the year 2008, and unsuccessful attempts were made for causing explosions. These incidents had created fear in the minds of corporates, businessmen and ordinary citizens of the city.

**(E) Rising Crime & Poor Police-People Ratio:** The rising population, presence of migrants, growth of slums, increasing socio-economic inequalities, unemployment, lure of quick bucks among youth etc. is leading to rise in crime. The incidents of theft/burglary/robbery, murder, rape, kidnapping, drug trafficking, extortion, human trafficking, crime against children and financial crimes make the citizens of the city feel insecure. The presence of huge migrant population makes it difficult for the law enforcement agencies to prevent and detect such crimes. The police-people ratio is a measure of public safety, and United Nations has prescribed 222 policemen per 100,000 population as the minimum scale. However, the police-people ratio in Surat City is 73 per 100,000 population, as against the national average of 137 per 100,000 population. The rising crime, and rising people's expectations, put serious pressure on the limited resources of the law enforcement agency. Only alternative to this, is the use of technology in policing, in a big way.

## Awareness

A traffic awareness program called, 'I-follow' was launched in August, 2011, with the help of youngsters, college students, and NGOs like Drashtikon-Surat Photography Artisans, Surat Traffic Education Trust, Youngistan, and FM partner Radio Mirchi 98.3 FM Surat. I-follow, with the motto of safety-discipline-awareness, had launched an extensive campaign to reach the public through hoardings, banners, posters, pamphlets, distribution of hand bands, painting competition for school/college students, photography competition, street play, seminars and workshops. 126 programs were organized in which over 91,000 people from different sections of the society participated. The idea of closed circuit television (CCTV) camera based surveillance system for better enforcement and traffic management was discussed during I-follow campaigns and the demand for such a system started coming from representatives of industries, eminent citizens and various other stakeholders.

## Project

It was visualised that in order to cover the entire city, we shall have minimum 500 locations, with 5000 cameras. It was also visualized

that this project shall be completed in a phased manner, so that the basic purpose of the project is achieved effectively, and lessons learnt during the initial phase, can be implemented in subsequent phases with necessary corrections wherever required. Entire project was divided into five phases, and all the eventualities/implications have been visualised and planned.

Since, the project was to be implemented on PPP model, (Public Private Partnership) it has been firmly resolved by the Police leadership, to employ the best possible and latest technology available in the world at a very reasonable cost. It was also resolved that, wherever possible, we should cut the cost by deploying various models for support. As the project has been conceived and designed for the benefit of the people of Surat, it was thought that the request for support to the local people shall be made by invoking the fact that whatever support/help is being given by the "Surtis", it is for their own city - Surat. In hindsight, it is an admitted fact that due to this appeal, we could cut the costs of the project in a big way. To give an example, for this project the network provider (Optic Fibre Network) is a local entrepreneur, having an existing cable network of approximately 320 Sq. Kms, who had readily agreed to be a partner in the Project, by way of providing dedicated black fibre at a nominal cost of Rs.2 Crores for 5 years, alongwith assured maintenance 24x7 through his paid staff, which is nearly 250 strong. As compared to this, we received offers to the tune of approximately Rs.15 Crores per year, from reputed companies like Tata, Reliance, BSNL, etc. It will not be out of place to mention here that the quality of visuals on account of cost cutting was never compromised.

Since huge amount of people's money has to be involved in this Project, it was decided to get this Project implemented through Surat Traffic Education Trust, so that the transparency is ensured which in turn shall generate public's confidence in the venture, which has been conceived, planned, and implemented by the Surat City Police. This decision has so far worked wonders, and we have received suo-motu and overwhelming public support for the project.

Surat Traffic Education Trust was formed in the year 2005 at the initiative of the then Police Commissioner, with the active help of leading citizenry of Surat. In this Trust, Police Commissioner is the ex-officio Chairman, and other officers, like Joint Commissioner of Police, Addl. Commissioners of Police, and Deputy Commissioners of Police, are ex-officio member trustees. It was a small beginning in the year 2005 with 15 trustees, and with the purpose to recruit personnel from the public for helping traffic police in traffic regulation. When this Project of CCTV Camera based surveillance and traffic management was conceived, and it was decided to implement this Project through the Traffic Education Trust, members of trustees from Public, gradually increased, and stands to 45 now.

### **Police-Public Partnership & Safe City Surat Project**

A meeting of the Traffic Education Trust, Surat City was held on 11.10.2011, in which the broad framework of the Safe City Surat Project was discussed. The members had enthusiastically welcomed the idea and had given a go ahead for the project. Police officers of the city took lead, and a meeting, attended by various stakeholders, was held on 20th October, 2011 wherein various stakeholders extended their support for implementation of the CCTV camera based surveillance and traffic management system. The idea of Safe City Surat Project took a formal shape in the said meeting. A public contact program was launched to popularize the idea and more than 45-meetings were held by the senior police officers from Sept. 2011 to March, 2012 with the representatives of diamond industry, textile industry, industries based in Hazira Industrial Area, transport association, jewellers, real estate groups etc. The captains of industry, business houses, citizen groups and ordinary people of the city have whole heartedly supported the idea and have offered to provide financial support for implementation the project.

### **Implementation of the Project**

The forum of Traffic Education Trust was used as “Special Purpose Vehicle” (SPV) for the implementation of the project in Public-Private-People-Partnership (4P) model. A technical committee comprising of the Head, Department of Civil Engg., SVNIT, Surat and

4-other eminent citizens with technical back ground was constituted for the finalization of technical specifications and overseeing the implementation of the project. The technical committee played the role of the consultant in the implementation of the project and no consultancy charges were incurred. Five sub-groups comprising of Police Officers and Members of Traffic Education Trust were constituted for holding a series of meetings with stakeholders and mobilization of funds. The sub-groups had mobilized the funds during meetings held with different stakeholders and citizen groups. We could mobilize nearly Rs.12 Crores for the first phase, through major stakeholders like Diamond industry, Textile industry, Construction industry, Petro-chemical industry and Common people. It is worth while mentioning here that the Surat Municipal Corporation also contributed in a big way in this funding exercise and has rendered whole hearted support in its implementation as well, by way of giving various permissions expeditiously. A sum of nearly Rs.10.5 Crores was spent in the first phase of the project.

104-cameras were to be installed in 23-strategic locations and a Command & Control Center with Video Wall, video analytics and Data Center was to be set up at Police Bhavan as part of Phase-I. Shri. Sanjay Srivastava, IPS, the then Jt. Commissioner of Police (Sector-II), Surat City was initially appointed as the Nodal Officer for the implementation of the project. The technical committee had finalized the technical specifications and tender was issued on 19.03.2012. RFP was uploaded to 21 prospective vendors, which were both national and multi-national concerns. Bids were submitted by 11 companies. A transparent procedure as prescribed by the World Bank was adopted for awarding works under the Public-Private-Partnership (PPP) model was followed. The bidders were to submit technical bid and commercial bid separately. A pre-bid meeting was held on 29.04.2012. The technical committee adopted the practice wherein 70% weightage to Technical bid, and 30% to the commercial bid, is given. For technical evaluation, the committee decided fourteen (14) criterion for comparing the Proof of Concept (POC) presented by the bidders. All the bidders were given level playing field for presenting their solution. Minimum qualification was 70% marks. The company offering the best

technology (T-1), available for the lowest price (L-1), was selected for awarding the contract. M/s. Innovative Telecom & Software Private Limited, Surat which has tie-up with M/s. Verint Systems Limited, Israel, and M/s. IBM, and M/s. Delta was awarded the contract for the installation of cameras and setting up of Command & Control Center on 28.08.2012. M/s. RK Infratel Limited, Surat was awarded the work related to networking of cameras. The companies had commenced their work from 30.08.2012 and had completed the same by 06.12.2012, in a record time of less than 4-months. The project was dedicated to the people of Surat City on 18.01.2013 by Shri NarendraModi, Hon. Chief Minister of Gujarat.

### Key Features

The project is designed for surveillance, crime prevention and detection, post incident forensic examination, traffic management and enforcement, for providing disaster management support and pollution control measures (Pollution Sensors).

- **Cameras:** There are 104 IP cameras including 9 PTZ cameras (360 view) and 95 fixed cameras (Day & Night Vision) installed at 23 strategic locations, with local power backup. These cameras are connected to the Command and Control Center through the dedicated 200 km long underground dark optical fiber network.
- **Command & Control Centre:** A state of the art, fully air conditioned hall with 280 ft. Video Wall with 9x2 LED Projection Cubes of 67 inches, with 1024x768 resolutions. The Video Wall has the capacity to view 256 cameras at a time. It has 16-workstations, Emergency War Room, Video Management & Incident Management System, camera tampering and health sensors. The data center is equipped with IBM Servers with a storage capacity of 210 TB for 30-days. The police wireless communication room and Dial-100 system has been integrated with the Command & Control Center.
- **Enforcement Automation Centre:** It has access to RTO database for issuing e-challans with photograph of the traffic offenders. Surat City Police has entered in to a Memorandum

of Understanding (MoU) with Dena Bank declaring its branches and ATMs in Surat City and neighbouring Districts as collection centers for the collection of fines from the traffic offenders. Total 1,11,866 e-challans have been issued since April 2013, and approximately Rs.30 lacs have been collected as fine in last seven months.

- **Safety and Security:** The Data Centre is equipped with rodent repellent, fire alarms, water leak sensors, FM 200 fire suppression system and access control system. The Command & Control Center is erected on the first floor keeping floods into consideration, with emergency exit, and weather proof IP66 housing. It is also equipped with traceable camera tampering, redundant UPS, camera recoding export protection, redundant PAC, redundant UPS and anti-static false floor
- **Other Utilities:** The video wall is 2D map integrated and IP cameras are integrated with the 2D map. The camera can be popped up by just a click on the map. The system enables installation of GPS in police control room (PCR) vans for vehicle tracking for coordinating police responses to Dial-100 calls. The system can also facilitate Integrated Traffic Management System (ITMS) for finding smart solutions to traffic problem in the city. The system can provide disaster management support in case of natural calamities like floods, earth quake, industrial accidents etc. The rescue and evacuation plan can be prepared using video feed. The software has the capabilities for post incident forensic examination, automatic number plate recognition (ANPR), face recognition system, frame by frame playback of video, abandoned object identification, head counting, loitering identification, intrusion detection and pollution sensors.

It is a project promoted and funded by the citizens of Surat City and the process of expansion is underway. The work for the expansion of the project as part of Phase-2 has commenced for the installation of 1525 cameras in 250 locations. The project will ultimately have 5104 cameras in 1073 locations at the end of Phase-5 virtually bringing the entire city under CCTV surveillance.

## Purpose & Priorities of the Initiative

Mission of the Safe City, Surat Project can be enumerated as :

- Safe and Secure environment:
- Good Governance
- Effective Policing

Objectives of the Project is to develop an organised network of cameras to maximize surveillance, and visibility in strategic, and crime prone areas to facilitate prevention, detection, and investigation of incidents of crime. In order to reduce the opportunities to commit crime and terror attacks by employing access control systems and cameras for denying access to potential targets and deter incidents of crime and terror attacks.

To manage traffic by monitoring the volume of traffic and enforce traffic rules through non-intrusive methods. This will also enable the Police to manage and monitor the movement of VIPs/VVIPs, and large public gatherings and processions, like Ganesh Immersion Processions, Taziya Processions, etc.

To develop post-incident forensic examination tool for crime detection and investigation.

To help in co-ordinating the efforts of various agencies for rescue, relief, and rehabilitation during natural calamities, and other man made disasters. It should be developed as an effective Disaster Management tool.

In the entire scheme of things, the deliverables are - dedicated OFC network, IP Network, and an ultra-modern, state of art, Command and Control Centre.

## Technology Brand Scope

The project has four vital components :

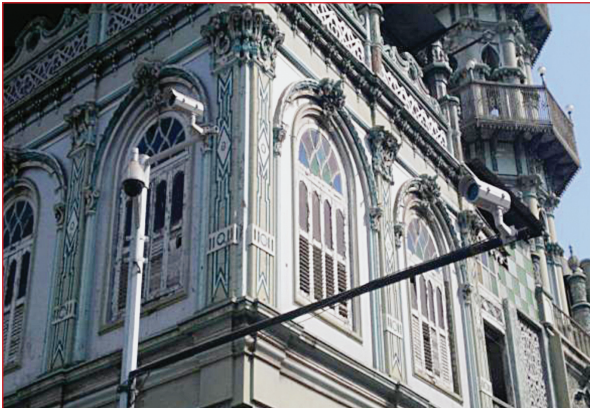
- (a) **Cameras**
- (b) **Storage**



(c) **Video wall**

(d) **Networking**

a) Cameras are from M/s. Verint, Israel, which are high



resolution, fixed length and PTZ cameras. It has softwares namely, **NEXTIVA PSIM** (Physical Security Incidence Management System), and **NEXTIVA VMS** (Video and Analytics Management System).

- b) Storage has been from IBM Blade Centre H - with IBM Blade Servers. It has a storage capacity of 210 TB with a facility of 30 days storage. The data centre is fitted with world class Precision Air Conditioners.
- c) Video wall is from M/s. Delta which is 280 Sq, ft having 18 cubes (9 x 2) with latest LED projection. Following table will show the comparative advantages of the Video wall installed in the Command and Control Centre.

Parameters	LCD Panels	DLP Cubes with UHP Lamp Light Source	DLP Cubes WITH led Light Source
Size	46"/55" Super Narrow Bezzel (5.3-6.7 mm seam gap)	50"/67" diagonal size	50"/67" diagonal size
Usage	not suitable for 24x7 application	Ideal for 24x7 application - 365 days	Ideal for 24x7 application - 365 days
Light Source	LED	UHP lamps	LED lamps
Lamp Life	NA	10000 hrs typical life	More then 55000 hrs typical life
Resolution	FULL HD -1920x1080	1024x768 / 1400x1050	1400x1050 / FULL HD 1920x1080
Technology	LCD	DLP	DLP
Intercreen Gap	5.3-6.7 mm	Less than 0.5 mm, adjustable up to 0.2 mm	Less than 0.5 mm, adjustable up to 0.2 mm
Application	Mainly used for Video and Signage application	Mainly used for 24x7 Control Room Application	Mainly used for 24x7 Control Room Application

Burn IN Spots	Prone to Burn in sports/hot spots with continuous graphic display	No Burn In or Hot spots with continuous display	No Burn In or Hot spots with continuous display
Green Technology	No	No	Yes



- d) Networking has been provided by a local firm, M/s. R.K. Infratel, which is having more than 320 Sq. Kms. of cable network in the city. Network has been designed after conducting a thorough physical survey to identify the cross junction and understand criticality. Network design is scalable to (n) no. of cameras. It has redundant and raw bandwidth, and it has three way redundant ring network in mesh topology. So far, in last 11 months of operations, there has been zero down time. The rigidity of zero down time was maintained during recent floods also. It is a non-pilferable and non-compromised exclusive network. It has unlimited bandwidth and is dedicated fiber for Police without any sharing. It is scalable to 720 + Km with various PoPs at strategic locations.

### **Skill Development**

Training has been imparted by the Deptt. of Computer Science, Veer Narmad South Gujarat University, Surat free of cost. Exhaustive hands on training has been given to over 150 police officers in simulated environment. We have developed a pool of trained manpower, who are managing the Command and Control Centre by rotation. The company, which has been awarded the contract, is also bound by the terms and conditions of the contract to train police personnel and assist them during next five years on continuous basis. In-house Standard Operating Procedures (SOPs) and training manuals have also been developed.

### **Strategies adopted for bringing about the transformation and positive impact:**

- The awareness campaign under the I-follow program was used for building public opinion in favour of installing surveillance and traffic management system through a network of closed circuit television (CCTV) cameras
- The people support and goodwill was channelized through the forum of Traffic Education Trust and good counsel of eminent citizens of the city was used to strengthen the police-public partnership.

- The technical expertise and professional competence of academics and professionals with technical background was used in the planning and execution. No consultant was hired for the implementation of the project thereby saving consultancy charges.
- It was decided to go for CCTV based surveillance system covering vital installations, entry-exit points, markets, public places, busy traffic junctions and crime prone areas in first phase so as to win the confidence of the people.
- The active participation of local corporates, business houses, eminent citizens and service organizations was ensured through community policing approach.
- More than 45-meetings were held by senior police officers to reach out to the stake holders and educate them about the positive impact of closed circuit television (CCTV) camera based surveillance system on policing.
- Surat Night Half Marathon, an international event was organized on 23rd February, 2012 in which athletes from different parts of the world participated. The event was used to motivate people and popularize (CCTV) camera based surveillance system for traffic management.
- The episodes of prevention and detection of incidents of crimes by police based on video footages collected from the places of occurrence were given publicity in print and electronic media for educating the people regarding the benefits of camera based surveillance system on policing.
- A non-intrusive and transparent e-challan system was introduced for enforcement of traffic rules. The people were given the option of payment of fine through the network of branches and ATMs of Dena Bank in Surat City and neighbouring towns/cities totally free of service charges.

**Role of various stakeholders – most importantly, role and details of involvement of the nominee(s) in the initiative:**

**Corporates & Business Houses:** They had joined hands with



the police leadership and had participated at various stages of planning, design & implementation. They had mobilized finances and had extended co-operation by providing human and material resources for the project.

**Citizen Groups:** A number of charitable organizations, professionals and Non Governmental Organizations created goodwill in favour of police and helped in popularizing CCTV camera based surveillance and traffic management system.

**Housing Co-operative Societies:** They had appreciated the positives of CCTV camera based surveillance and traffic management system. The residents of various localities and citizen groups had come forward for meeting the expenses of network expansion for securing their localities.

**Traffic Education Trust:** It had played key role in planning, mobilization of funds and implementation of the project. The members had provided technical & institutional support by way of documentation, account keeping, auditing etc. for the implementation of the project. I-follow movement had helped mobilizing people and galvanizing public opinion in favour of camera based surveillance and traffic management system.

**Highlights/positive features of the initiative under each of the following important dimensions:**

**Transparency and stakeholder participation:**

- The contract was awarded through a transparent tendering process in which as many as 12-bidders participated. The procedure prescribed by the World Bank was adopted for awarding works under the PPP model was followed. The company offering best technology (T-1) available for lowest price (L-1) was selected for awarding the contract.
- The entire project was implemented in public-private-people-partnership (4P) model. It is a project driven by the public, and the city police only provided leadership for the implementation of the project.

- The project was implemented with public funding, having duly approved by the Govt. of Gujarat. The Surat Municipal Corporation has become a partner in the project and has contributed handsomely to the project. The corporates, business houses and citizens of the City actively participated at various stages of design and implementation.
- The people were kept informed about the progress made in the project through M/s. Traffic Education Trust, Surat by holding periodic meetings. They were also appraised about the developments by facilitating site visits to get firsthand information about the quality of the work and material used.
- M/s. Innovative Telecom & Software Pvt. Ltd., Surat, which had executed the project being local corporate had made available best technology and material for the lowest possible price.
- Similarly, M/s. RK Infrastructure Pvt. Ltd., Surat which already had 200 km long optical fiber network connecting the cameras with the Command & Control Center has offered to maintain the network for a period of 1-year from the date of implementation free of charge.

**Increased efficiency of outputs/processes and effectiveness of outcomes:**

- The CCTV camera network facilitate efficient surveillance of entry-exit points, public areas, vital installation and important traffic junctions.
- Substantial number of cases of hit and run, vehicle theft, bag lifting, chain snatching, crimes against auto rickshaw commuters, etc. have been detected based on the video footages. They also serve as excellent piece of evidence in the court of law. Areas, where cameras have been installed, crime has gone down by 23% in last 10 months (Jan-Oct 2013).
- Enforcement Automation Center has been established, and e-challans along with photograph of the violating vehicle are

being issued since April 2013. e-challan system is a transparent, people friendly and non-intrusive traffic enforcement system which takes away police intervention on the street with the people violating traffic rules thereby minimizing the chances of corruption and abuse of power. 1,11,866 e-challans have been issued and Rs. Thirty lacs approx. fine collected during the last seven months period (April 2013 to Oct. 2013).

- The management of public processions, monitoring of VVIP movements and management of traffic during peak hours has been made effective through camera based surveillance system.
- Dial-100 System (A toll free number to reach the Police Control Room) and Woman Helpline-1091(A toll free number for the women in distress to reach Police Control Room) have been integrated with the Command & Control Centre.
- The movement and responses of Police Control Room Vans (PCR Vans) is being coordinated from Command & Control Center through streamlined wireless communication system. It has improved police response time thereby winning the public confidence.
- The presence of surveillance cameras in different locations and issuing of e-challan has improved public behavior on street and has created deterrence to the criminal activity.
- The initiative has given a big boost to the community policing initiative under the Suraksha Setu and has contributed significantly for improving police image.

Public participation in policing efforts makes Police very effective and goes a long way in improving its image. CCTV based Surveillance System, traffic management, and disaster management in Surat city is an excellent example of community participation in policing efforts. This experiment can be replicated in other cities through mass campaign for mobilization of stake holder support.





# Image Crisis of Indian Police

Umesh Sharraf\*

## Keywords

Image, Indian Police, Crisis, Law and Order, New-age Policeman.

## Abstract

*We need a new-age policeman who is more professional, better-motivated, suitably empowered, well-trained and one who places greater emphasis on technology for investigation...(Hon'ble Prime Minister Sri Manmohan Singh addressing the DGPs' conference on 15th September 2009)*

*Everything has been said already, but as no one listens, we must always begin again. (Andre Gide)*

## The Problem

Police Reforms is a subject that turns up every time the country comes across a new failure in policing—perceived or real. There are many things that are not in control of a police force but it is pointless waiting for everything to fall in place before we stir ourselves to do our bit to improve our own image. In this essay I will endeavour to discuss what we as a subsystem can do within us to ameliorate the lot of the ailing police image.

By its very nature, any Government is apparently inefficient. There are a number of reasons for this inefficiency. The first was

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Author Intro.:

\* I.P.S. ADG, Hyderabad, AP

identified by Drucker as mismanagement by budget'. The larger the staff and budget, the greater the regard the department is accorded to. Budget size has no relationship to the quality of the service rendered; therefore, the department has little incentive to be efficient. When departments fail to spend their allotted budget within the fiscal year, they are often "rewarded" by having their next year's budget reduced by the amount they left unspent. This is hardly an incentive for efficiency. The more important reason for public service inefficiency is the nature of the work. Service is a more difficult commodity to measure than a manufactured product. This service is often delivered only on request of the client, a factor over which the department has little control. If it is difficult to measure quantity of service, measuring quality of service is nearly impossible. Police suffers from these factors plus others unique to the field. First, Police provides so many services that some people have difficulty even determining all that we do. While some functions are obvious, such as criminal investigation and traffic enforcement, other duties, such as civil and business disputes, are vaguer in nature and thus difficult to define and measure. Second, Police has no input into the lawmaking process and little control over the causal factors of the criminal activity. Officers are often asked to enforce unrealistic laws, coupled with a distrust of the police built into the procedural law, that reflect society's effort to solve problems created by social conditions over which they have no control. It should come as no great surprise to learn that Police in India is considered neither efficient nor effective. The surprise is that it more often than not works as well as it does. This fact is a tribute to the dedication and hard work of police personnel. One of the themes in the 39th All Indian Police Science Congress held in January 2009 was Key Performance Indicators for Police'. I had presented a paper on this theme in the Congress. It did not appear that the deliberations in the Congress were leading anywhere towards formulation of policy. This failure to translate thought and ideas into lasting action and change has been our failing.

### **Leadership Fault Lines**

The police are the most visible entity of the criminal justice system.

This visibility is by design since the police are one of the few public service organizations that respond to the emergency calls for service. High visibility allows for rapid recognition of police officers by innocent citizens as well as criminals. There are positive aspects to this visibility. The readily identifiable uniform allows the officer to assume command of a situation quickly. There are also negative aspects to high visibility. Any member of a highly visible minority can attest to the problem of stereotyping. The police qualify as a minority in the sense that the actions of a few are generalized to the whole. Policemen are rarely seen as individuals but as symbols of authority. The world of the policeman is like life in a fish bowl: always under scrutiny and observation. In a sense, the police officer's security is traded for that of the citizens. People may feel better seeing the uniform, but the person wearing it is always playing to an attentive audience.

Generally speaking, we in the police leadership have failed the public and the police personnel in three ways: the inability to identify the police mission, improper training, and inadequate policies. Police has accumulated new and varied responsibilities at an alarming rate. Many of these duties are unanticipated and at variance with the traditional police function. We have not taken a stand on some issues regarding what are the police responsibilities. We have taken on each new duty, without a sound of protest. People have added each new responsibility to the police while forgetting that the public also shares social responsibilities. As a result, Police find themselves doing far more for society than society has a right to expect-and far more than the police have the resources to accomplish.

The order maintenance function is the area to which we devote most of our time. The problem with this function is the lack of legal authority given to the police to fulfil these obligations adequately. The legal system is reactive; it is geared to responding in the aftermath of the matter or fact or eventuality. Order maintenance is more often than not proactive, requiring action to prevent a criminal act. As a result, many things done by the police in the name of public order are illegal. Law enforcement problems usually need an immediate solution. The legal structure is not equipped to act in a timely

manner. Police solutions, therefore, are often creative and frequently of the dubious legality. Sometimes these solutions seem to work out. When they do not, police officers find themselves entangled in legal difficulties and public opprobrium. The Constitution was designed to protect the people from an overzealous government. This translates into protection from police abuse. Our courts, especially at the appellate level, devote a significant portion of time and effort to police supervision. There is an unstated assumption that the courts are responsible for the maintenance of the Constitution and are, therefore, the primary control point in the criminal justice system. While this is theoretically true, it obscures the fact that it is the police who have the most dramatic impact upon the implementation of the principles of the Constitution. If the police choose to disregard these principles in one-on-one confrontations with the public, there is little either the individual or the court can do. The stronger the belief in the Constitution held by the police, the greater the likelihood constitutional rights will be honoured. If law enforcement officers believe that the Constitution is a mere rule book whose only purpose is to thwart police effectiveness, it is likely to be ignored. The police also find themselves being both an adversary and a defender of a free press. They are adversaries when the press wishes to print something perceived by the police as critical of their actions. Simultaneously, they are defenders of the press by virtue of their responsibility for protecting the rights embodied in the Constitution. Unfortunately, many police officers have adopted a mostly adversarial relationship with the media without realizing that, ultimately, the press ensures our freedom and a free press is democracy's greatest ally.

### **What and How to Do it Better?**

We live in a high-speed, upward mobile society now. Much more than most of the people realize, society depends on the police to monitor and stabilize the constant flow of traffic. In other countries mass transportation systems reduce the police responsibility for traffic. In India the police have to accept a major portion of the responsibility for supervising the flow of traffic without having any authority in the engineering aspect

of traffic management. Even though more people are killed annually on the roads than are murdered, many officers do not believe traffic enforcement is the core police work. Also, traffic policemen have almost always negative interaction with the public. Few people enjoy being stopped by a police officer for a traffic violation. Projecting a better image is possible by ensuring impartial, firm and purposive traffic enforcement and awareness. The problem identification aspect of the police mission takes on a variety of forms. The police are the only public service agency that routinely patrols the entire geographical boundaries. They are the most likely to observe potential problems as these trouble spots crop up. Many governmental services are subject to failure within a given area. All these problems are likely to be observed by the police officer responsible for that geographic area. Since the officer is in position to observe the malfunction, usually before the appropriate agency does, it is only natural that the police should have the responsibility and authority for notifying the appropriate agency so that action can be taken to remedy the situation timely and in proper manner.

The law enforcement mission is considered as the “real police work”. A complication to understanding the law enforcement function is generated by the mass media. Too many movies and television serials focus exclusively on the law enforcement function. This tends to warp the public’s perception of what the police should and can do. In truth, the police solve a crime when someone tells them a crime has been committed and when someone tells them who did it. Effective law enforcement is a product of citizen participation in the criminal justice process. In spite of the emphasis placed on this function by both the officers and the public, police are presently not very effective at law enforcement, especially as they fail to gain the respect and confidence of the public they serve. The image of the great detective, apprehending the criminal through the use of deductive and inductive reasoning, holds a powerful mystique. The truth, however, is far from the image presented in the works of fiction. Criminal investigation is a major portion of the law enforcement function. The primary focus of criminal investigation is the accumulation of physical evidence and statements from the

witnesses. Few cases are solved through intense mental reasoning; most are solved when a witness comes forward to testify. There are scientific tools at the disposal of investigators that are useful in placing a suspect at or near the scene of a crime. It is rare, however, when a case is solved by scientifically applied techniques alone. Effective criminal investigation has always been a product of developing informants and uncovering the witnesses. In our country where the most citizens exhibit, in the parlance of Game theory, the defecting mode of behavior (Raghunathan, 2006), this requires even greater skills of managing public interface.

### **‘Nudge and Wink’**

Concurrent with the law enforcement mission is the responsibility for the recovery of property, either lost or stolen. Most property recovered by the police is later used in a criminal prosecution. There is perhaps no other activity of routine policing which results in greater violation of Human Rights and Constitutional provisions than the efforts made by the police to recover property. A vast majority of deaths in police custody take place due to physical and mental torture inflicted on suspects in order to make them reveal the whereabouts of the stolen property. I call the style adopted by most of us while dealing with this work as nudge and wink. While paying lip service to the Constitution in every public forum, in our interaction with our junior officers, we invariably assess them on the percentage of recovery’ and turn the proverbial Nelson’s eye to the goings on in the Police Stations. Citing public expectation, we conveniently allow ourselves to be photographed with the arrested criminals and recovered property’ but join the public in condemning the subordinate policemen when things go wrong.

Perhaps, the one immediate step that would go a long way in improving the police image would be an unequivocal statement of the Department and convincing the people that recovery of stolen property would not be a major part of the police function, but only incidental to it. Since it is impractical to have the ambulances and fire-brigades patrolling the area for rapid response to the emergencies, the necessity exists for the police

to fulfil the function of delivery of emergency services. First aid has not been taken seriously as a police function. The provision of emergency services may be second only to order maintenance in importance. When a police officer is given an emergency call, it is usually a situation concerning a threat of harm to an individual or group. The emphasis is on helping the person in need. The community's need for a highly trained, rapid-response emergency team justifies, as no other police mission does, the existence of the police. Training policemen to enable them to give high quality first aid and equipping police vehicles with the required resources would go a long way in this regard. Crime prevention has been a recognized police function since the formation of the modern police. However, formal crime prevention techniques have not been utilized by the police. Police officers have believed that beats and police patrols would act as a deterrent by providing the image of a constant police presence. However, most police formations serve beats and patrols in a very casual and superficial manner. Despite evidence that patrols do not really prevent crime, the public perception of security and effective policing does flow from a visible presence of the police. It is therefore necessary to keep dedicated police teams directly under police control rooms for beats and patrols so that they are not diverted' for more urgent' policing functions.

### **Self Image vs Public Image**

Police personnel must have integrity. From the top of the organization to the bottom, there is no room for those who lack it. Unfortunately, a number of forces combine to erode the integrity of every police officer in the country, if not the world. These forces centre on self-image and its relationship with a public simultaneously wanting a high-integrity police force free of political input and individual police officers occasionally open to bribes or personal favouritism. The first assault on a new officer's self-image is the indoctrination into the police subculture. The new recruit is brainwashed into accepting the values of the organization. To a great extent, self-image contributes to the individual's integrity. Cynicism eats away self-image and, ultimately, integrity. As the self-image of the police

is tied to society's image of the police organization, integrity among the officers often rises and falls with the image of the force. When the department's image falls far enough, the officers may wish to disassociate themselves from its image. Self-image may then be sacrificed for self-gratification as one by one each officer makes organizational goals subservient to personal desires. Lying, stealing, brutality, bribery, extortion, and sexual misconduct are products of cynicism and low self-esteem.

The major concern of the police leaders should be the behaviour-attitude relationship. The implied cure for attitude problem' is an attitude adjustment'. Very often, attempts to correct an attitude problem fail because the problem is not one of attitude but of behaviour. Most of the time behaviour comes first, and attitude is simply a justification for the actions of the person. The key to effective performance lies in maintaining standards of good behaviour. For the most part, people enter police service with the desire to obtain job security. All available evidence indicates that corruption occurs because the community encourages it and the department allows it. Nothing destroys public confidence in police faster than allegations of bribery and cover-up. One of the better methods of minimizing corruption is by maintaining an open department. Corruption grows only when protected with a cloak of secrecy. The news media are a fit institution for keeping government agencies, including police, honest. In my career I have found two theories of corruption. The prevalent view sees the policeman as cut from the same cloth as that of the society and expects him to be no better than what the dominant mores dictate. The minority believes that the law enforcer has to carry the burden of a superior standard of personal and professional behaviour than those he is required to police.

### **Theory Y Managers**

We need to recollect that till Peel moulded the English police in the latter world view, the English policeman did not enjoy the friendly image of the Bobby which he later did. Plato had clarified the opposing philosophies of justice. He placed the idea on a continuum. On one end he placed the idea that might makes right; the strong are meant to rule over the weak. At the other end he placed the



idea of natural law; all persons must live under and obey the law. No person or government may be above the law, and the function of government is to ensure the certainty and quality of the law. All other philosophical concepts fall between these ideas. The philosophies of police officers also fall on this continuum. Many officers are contemptuous of junior policemen. They take the authoritarian approach to leadership and believe they rule by right.

McGregor called them theory X managers. Theory Y managers, in contrast, fall at the opposite end of the justice continuum. These managers believe in the worth of people as individuals, and their philosophies are in harmony with the principles embodied in the Constitution. Most police officers fall closer to the might-makes-right end of the spectrum. In Andhra Pradesh, it required repeated specific orders of the DGP for senior officers to offer a chair to their juniors. Even after several years of these orders having been in force I have found that several policemen hesitate to sit in the presence of senior police officers. A police sub-culture that so de-humanizes its cutting edge staff, can hardly expect the same staff not to pass on the same to the public that comes in contact with it.

### **Quo Vadis -Where do we go from here?**

Fairness must be practiced constantly in dealings with the public. The necessity of treating citizens with respect and dignity cannot be overemphasized. By their very nature the police come into conflict with the public. How the police handles the conflict will determine, to a great extent, how the public perceives the police. Citizen allegations against police officers provide some of the most sensitive problems confronted by the department. It is our bounden duty to set up mechanisms in place to receive public grievances openly and fairly, and deal with them in a transparent manner. Superior police officers usually do not make arrests, issue traffic challans, investigate criminal cases, search for missing persons, issue F.I.R.s, or patrol the streets. The only contribution made to these efforts by us is through resource and personnel allocation, policymaking, and encouragement. The officers at the lower end of the spectrum get the job done; those at the upper end act as cheerleaders and spectators. Anything we can do to make the job easier for the

junior officers and makes them feel better about themselves and the department should be done. Anything that detracts from their effectiveness should be eliminated. Anything that causes them to lose self-esteem or respect for the department should be changed. The officers are the department, not senior officers.

Organizations are made up of human beings. Technology is good, modern equipment is helpful, but good people are essential for a good public image. To mould people into good police officers, training plays a vital role. Professional athletics offers a good example of the good-training rule. To excel at anything requires hours of training. This includes police work. Judgment, while necessary, cannot be the sole source of knowledge for the police officers. Judgment will tell us it is necessary to restart a person's breath when it stops, but only training will tell us as how to do it. Training, education, and practice are the tools used to transform good people into good employees. Most of the in-service police training is either desultory or distributed as patronage. Manning police training institutions with the best officers may appear to be a waste from the view point of immediacy, but the easier present alternative of dumping unwanted personnel to act as trainers is akin to our handing over our children to the delinquents and deviants for education and expecting them to turn out as model sons and daughters! ■

## **In conclusion**

Policies are the conscience of an organization. These represent the department's value structure; they are to the organization what the Ten Commandments are to Christianity. The police chiefs in all police units, may they be districts, commissionerates or states; need to state their policies in crisp, concise and unambiguous terms so that all their personnel know what is exactly expected of them and perform accordingly, resulting in a self fulfilling prophecy. Just acting for a popular' image is chasing a chimera for the police force at this stage of our polity and often results in temporary gains which are frittered away with every police lapse and what the police leaders must strive for is an image of professionalism, effectiveness and impartiality. Rest will follow.

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# Public Perception About Indian Police: An Empirical Analysis

Bushara Bano\* & Dr. Parvaiz Talib\*\*

## Keywords

Police Image, Public Perception, Community Policing.

## Abstract

*Police is the creation of the society. It has existed in some form or the other whenever and wherever society existed. Police role may be defined as something that is done by a person in a particular position, or as the pattern of actions expected in a particular social situation. A favorable (positive) public image of the police is important for obtaining co-operation and support from citizens - especially within the framework of a community policing management style. Police image is the public's reaction to the police, which reflects the degree of public confidence in and respect for policing. It means that a favourable (positive) image of the police would contribute towards the voluntary compliance with the formal regulations of the country. On the other hand, an unfavorable (negative) image might cause the public not to conform as expected. In extreme cases, people may even take the law into their own hands. In spite of such a vital need of favorable image of police, the Indian police are not viewed up to mark on this account.*

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Author Intro.:

\* Research Scholar, Dept of Business Administration, Aligarh Muslim University, Aligarh.

\*\* Professor, Dept of Business Administration, Aligarh Muslim University, Aligarh.  
E-mail: syedabushara@gmail.com

## Objectives

The present study aims to investigate the image of police personnel in the eyes of general public. The study also examines the expectations of people from the police.

## Methodology

The study incorporates both primary and secondary data. One tailor-made questionnaire is used to collect the perception of public towards the police. The questionnaire has been distributed to 100 people on the basis of convenience sampling. Factor analysis has been used to refine the scale. Descriptive analysis has been used to acknowledge the results. The socio-demographical factors used for statistical analysis are age, gender and profession.

## Result

The study results in negative public image of police personnel among public. They are found to be brutal, argumentative, arrogant, insensitive, abusers, skeptical, corrupt, greedy, selfish, isolated, and cunning. People want a friendly, community oriented, democratic, active, incorrupt and prompt responsive police.

## Managerial Implications

The study suggests that public need a better image of police. The study will help police department and even individual police officers to avoid certain behaviors and adopt certain strategies to improve their images in the view of public.

## Paper Type: Research paper

### 1. Introduction

Police is the principal law enforcement agency in the state (Srivastava, 1999). Ghosh in Encyclopedia of police in India defines the term 'Police'. It broadly connotes the purposeful maintenance of public order and protection of persons and property, from the hazards of the public accidents and the

commission of unlawful acts. Undoubtedly, the role of police in India is extremely significant in view of the democratic polity and multi-cultural, multi-ethnic and large-size diverse population of the country. Through their ubiquitous visible presence and actions, police personnel affect everyone and everything in the society. By a near monopoly of legal force they alone provide for the security of people and enforcement of laws of the country. The officers also determine the manner in which democratic decisions are implemented in the country. In view of the growing violence, extensive social conflicts and serious threats of terrorist activities, the role of police is an important factor in the stability of the country. The assurances of equality and dignity to the numerable minorities and weaker sections of the society are also dependent upon the performance of the police. Clearly, the police are a crucial factor in the existence and development of country.

Whereas some people seem to have a favorable view of the police most of the time, many people frankly prefer to avoid contact with them if at all possible. The outright hostility of the public towards the police is a well-established reality. There seem to be something peculiar about the police relationship with the community that makes it the object of special study by scholars interested in such social processes as human and intergroup relations, governmental operations, bureaucratic organizations, and the administration and management of public service agencies.

There is often a concern for the police-public relations, community policing, people-friendly police, and a lot of varieties on this theme. Various experiments are tried. The object has been to persuade the people, so that police becomes acceptable, popular, and effective. The attempts so far have been on the surface and peripheral at best, and ineffective at the worst, having no impact on the situation and the project. The common perception thus is that a common man has nothing to do with police and hence is not a subject matter of the concern. In other words, the common man who is not a victim of crime has no

place in the priorities of police. The focus on crime alone and the police being oblivious of the existence of the general people has distanced the organization from the people. The common man has also their own problems, partly concerned with aspects of crime, and largely those that have a connection with deviance from the norms or just common inconveniences that are beyond the domain of other departments but solvable by police. It is thus imperative that police must consider the perspectives of people. What are these? What are the concerns of people? What are their expectations from police? What are their priorities? What disturbs them the most? Can police help them within the framework of law, their mandate, and their objectives? It is therefore necessary to examine these questions for an appreciation of the role of police in society that goes beyond the dealing with crime, the basic function, others being no less important (Bawa, 2005).

Police-community relations are thereby a political phenomenon, and a good bit more. It is also a sociological phenomenon since it evokes complex organizations, roles and goals of community mental health. It is psychological and ethical, because it treats the nature of authority and the mainsprings of law. It is a social work to the extent that community organization and community action are components. Finally, it is inevitably economic since one of its essential requirements is the cost-effective service to the taxpayers. Thus it is necessary for the police to identify its image in the eyes of a common man.

### **1.1 Police Image**

Police image can be defined as the public's reaction to the police, which reflect the degree of public confidence in and respect for policing (Heerden, 1994). It may be said from the definition that the image of the police is determined by the relations established in the course of service delivery to the public. Thus, the police role is evaluated in terms of a particular set of expectations and direct knowledge of the way in which the role is performed (Manzi, 1999). Operationally, it means that a favorable image of the police and their actions would stimulate the voluntary compliance with the formal regulations of the country, while

an unfavorable image might cause the public not to conform as expected. An unfavorable image may have even further implications, such as, sometimes public takes law in their hands (Van Heerden, 1994). So, it is necessary to identify the image of the police as perceived by the common men and women.

## 2. Objectives of the Study

- To identify the perception of the general public for Indian police
- To determine the differences if any with regards to gender, age and occupation and contact with police as the strong determinants of attitude towards the police
- To identify the attributes that the general people want in Indian police
- To supply the findings to the police authorities with statistical information for more effective planning and aim realization

## 3. Methodology

Methodologies are techniques for finding out what has taken place. The research design used was the social survey method. Data was collected through close-ended tailor made questionnaire. The questionnaire was based on the prior studies done on the subject by Manzi, 1999 and Biswas & Gupta, 2006. Several other important and necessary questions have been included in the questionnaire after consulting with experts and general people. The number of questions in the questionnaire was 45. Likert type scale is used in the study as an ordinal measuring instrument to measure the attitude of the respondents on a variety of aspects pertaining to the role and the image of the police. Age, gender, education and occupation are three socio-demographical variables that were also used for the purpose of data collection. Data was collected from the general population including students and the employees. 150 respondents were personally administered in Aligarh city and 107 questionnaires were returned back completely filled. The data was tabulated and analyzed on SPSS 16.0.



**Table 1.1: Demographical profile of the respondents:**

Variable	Number of Respondents	Percentage
<b>Age</b>		
18-24	49	45.8
25-34	55	51.4
35-44	3	2.8
<b>Gender</b>		
Male	60	56.1
Female	47	43.9
<b>Education</b>		
Graduate	31	29.0
Post Graduate	58	54.2
Doctorate	18	16.8
<b>Occupation</b>		
Students/Scholars	80	74.8
Working	27	25.2

The table 1.1 depicts the demographical profile of the respondents. The table shows that most of the respondents were young. 49 (45.8%) belong to 18-24 years age group while more than half i.e. 55 (51.4%) of the respondents had age between 25 to 34 years. 60 (56.1%) respondents were male while remaining 47 (43.9%) were females. The respondents were qualified as well. None was done below graduation. Most of the respondents were post graduate and graduate. 18 (16.8%) of the sample size was doctorate. Thus, it can be said that responses will be highly reliable because many researchers had taken part in the study. As per as the occupation is

concerned, 80 (74.8%) of the respondents were either student or research scholars while remaining 27 (25.2%) were employees in different organizations.

#### 4. Hypothesis

Hypotheses are statements suggesting the relationship researchers believe will help explain some phenomenon. They generally deal only with a portion of reality (Hy et al., 1983). Apart from other objectives, the present study is designed to statistically test the following hypotheses:

**H01:** There is no significant gender difference in the attitudes of the respondents towards the police.

**H02:** There is no significant age difference in the attitudes of the respondents towards the police.

**H03:** There is no significant education difference in the attitudes of the respondents towards the police.

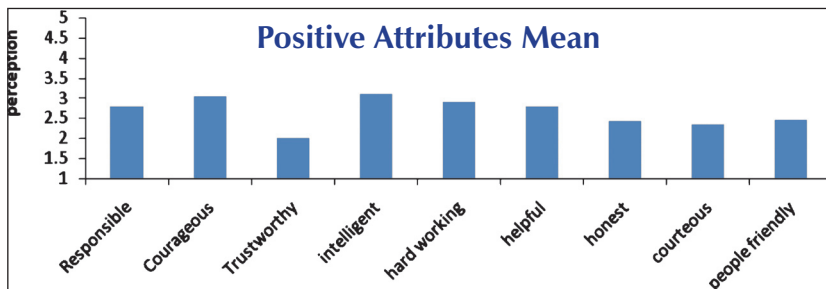
**H04:** There is no significant occupation difference in the attitudes of the respondents towards the police.

#### 5. Results and Discussions

As described earlier, in whole data collection, five point likert scales ranging from 1 to 5 have been used. The respondent is presented with a statement or statements in the questionnaire and is asked to indicate whether he or she “strongly agrees”, “agrees”, is “neither agrees nor disagrees”, “disagrees” or “strongly disagrees”.

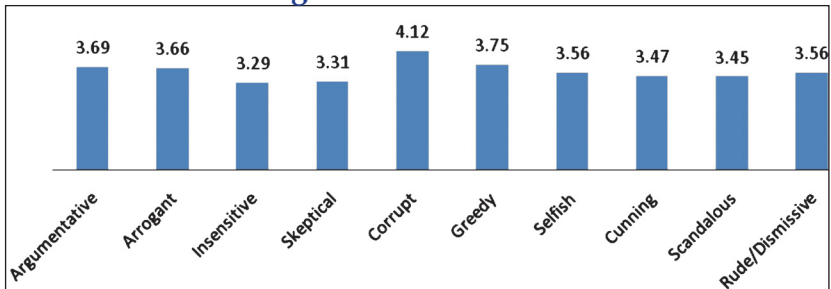
##### 5.1 Perception on Attributes

Chart 5.1.1



In the first question, respondents answered on five point likert scale (1-5) their perception of police on positive attributes. There were nine positive attributes analyzed. They had to give their answers from strongly disagree to strongly agree. The mean value of the chart 5.1.1 shows that people don't perceive police personnel satisfactory on any of the positive attributes. However, the lowest mean score have calculated on 'trustworthiness' followed by 'courteousness', 'honest' and 'people friendly'. It shows that people have no confidence in police. They don't think the police honest, responsible, people friendly, courteous and helpful. This shows that the condition is worst in the eyes of the public.

**Chart 5.1.2**  
**Negative Attributes Mean**



In the second question, respondents were asked their perception about negative attributes associated with Indian police personnel. The findings showed (chart 5.1.2) that they were agreed or strongly agreed on most of the negative attributes. The mean values as depicted shows that all the values are more than three i.e. the respondents answered in favorable continuum. The most positive response came on attribute 'corruption' having mean value of 4.12. It shows that general people perceive police mostly corrupt in all of the negative attributes. Other negative attributes which scored higher were greediness (3.75), argumentation (3.69), arrogance (3.66) and rudeness/ dismissiveness (3.56). Overall analysis of negative attributes proved that public perceive higher in negative attributes in comparison to positive attributes.

**Table 5.1.1: test of significant differences:**

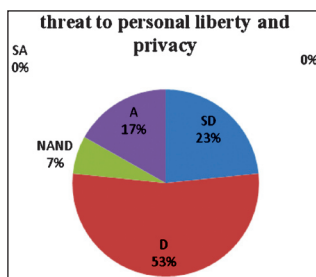
Positive attributes				Negative attributes			
Variable	t/f value	Sig. value	Remarks	Variable	t/f value	Sig. value	Remarks
Gender	.901	.370	Rejected	Gender	1.482	.141	Rejected
Occupation	.524	.601	Rejected	Occupation	1.975	.051	Rejected
Age	8.248	.000*	Not Rejected	Age	11.193	.000*	Not Rejected
Education	4.645	.012*	Not Rejected	Education	7.832	.001*	Not Rejected

The data was again subjected to statistical tests of t-test and ANOVA test. It was found (table 5.1.1) that as per as positive attributes and negative attributes are concerned, there is a significant difference in scores on the basis of age and education of the respondents. Gender and occupations are not important while counting the perception towards police. It means that male and female both perceive police in similar manner. Similarly, students and employees both have same opinion about police.

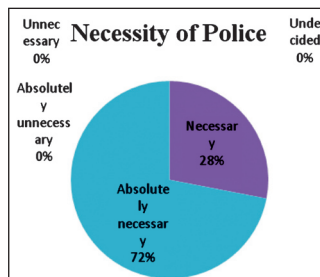
### 5.2 Acceptance of Police Roles

It is written for the policeman that if he is too involved with the society, he forfeits respect but if he is too detached, people resent him implied claim to moral superiority (Whitaker, 1979). But, when we see general people, they claimed that police service is important for their society.

**Chart 5.2.1**



**Chart 5.2.2**



The pie chart (5.2.1) is showing that not a single respondent have perceived that police service is unnecessary while Indian citizens confirmed the necessity of police. 77 (72%) of the respondents said that police service is absolutely necessary in our society. It shows that police role is generally accepted in the society. The public also do not feel more that their personal liberty and privacy is threatened with the working methods of the police. 76% respondents reported that they do not think so (chart 5.2.2).

The public also accepted the restriction they face on the privacy of the individuals by the police to ensure the liberty and safety of the society (chart 5.2.3). 60% of the respondents accepted the restrictions while 40% reported that police should design some other frameworks to combat crime instead of restricting them for security reasons.

Chart 5.2.1

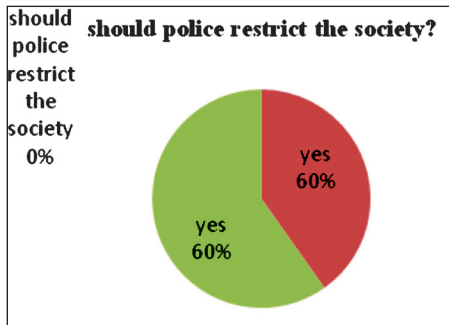
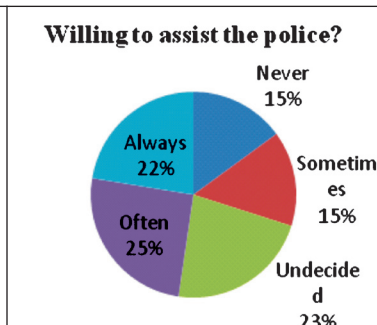


Chart 5.2.2



On the other hand, when it comes to assisting police to combat crime, several types of responses were reported (chart 5.2.4). 22% respondents reported that they will always help police and 25% said that they will assist police most often. But, 15% respondents reported that they will never assist police if required to combat crime. This shows that public is not willing to help police as it should be. The reason behind this may be the selfish image of police.

**Table 5.2.1: Perception of necessity and differences:**

Perception on terms	Variables	Mean value	SD	t/f value	Sig.	Remarks
Necessity of police	Gender					
	Male	4.65	.481	1.823	.071	Rejected
	Female	4.81	.398			
	Occupation					
	Students	4.81	.393	3.902	.000*	Not Rejected
	Employees	4.44	.506			
	Age					
	18-24	4.63	.487	7.351	.001*	Not Rejected
	25-34	4.84	.373			
	35-44	4.00	.000			
Education						
Graduate	4.61	.495	4.788	.010*	Not Rejected	
PG	4.69	.467				
Doctorate	5.00	.000				
Threat to personal liberty and privacy	Gender					
	Male	2.10	1.100	.816	.417	Rejected
	Female	2.26	.793			
	Occupation					
	Students	2.15	.956	.331	.741	Rejected
	Employees	2.22	1.050			
	Age					
	18-24	2.29	.935	.659	.520	Rejected
	25-34	2.07	1.034			
	35-44	2.00	.000			
Education						
Graduate	2.06	1.063	.792	.456	Rejected	
PG	2.28	1.022				
Doctorate	2.00	.594				
Should police restrict the society?	Gender					
	Male	1.70	.720	.847	.399	Rejected
Female	1.60	.496				
	Occupation					
	Students	1.76	.641	3.185	.002*	Not Rejected
Employees	1.33	.480				

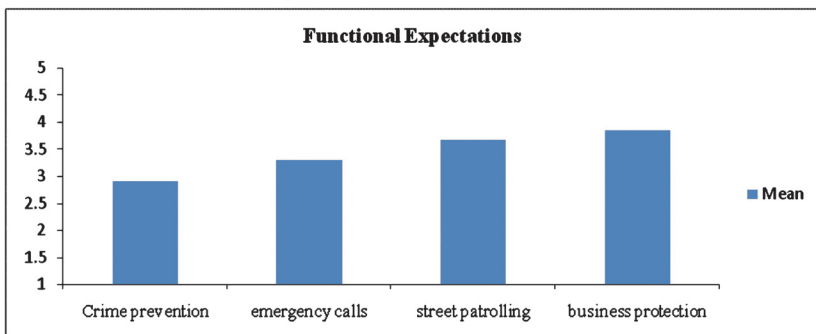
	Age					
	18-24	1.63	.487	35.703	.000*	Not Rejected
	25-34	1.55	.503			
	35-44	2.00	.000			
Willing to assist the police?	Education					
	Graduate	1.81	.402	3.113	.049	Rejected
	PG	1.52	.755			
	Doctorate	1.83	.383			
	Gender					
	Male	3.20	1.447	.448	.655	Rejected
	Female	3.32	1.253			
	Occupation					
	Students	3.04	1.345	2.909	.004*	Not Rejected
	Employees	3.89	1.219			
	Age					
	18-24	3.22	1.104	2.639	.076	Rejected
25-34	3.18	1.541				
35-44	5.00	.000				
Education						
Graduate	2.48	1.435	7.901	.001*	Not Rejected	
PG	3.59	1.140				
Doctorate	3.50	1.425				

The table 5.2.1 shows that there are significant differences on perception with respect to socio-demographical variables. It is reported that students accept police more than the employees which is bit surprising. Similarly, significant differences have been found on the basis of age ( $t=7.351$ ,  $p=.001$ ) and education ( $t=4.788$ ,  $p=.010$ ). No significant difference has been found on the factor of threat to society by the restriction of police on any of the variable. Significant differences have been found on occupation ( $t=3.185$ ,  $p=.002$ ) and age ( $t=35.703$ ,  $p=.000$ ) when it comes the question whether police restrict the society. Students accept the restriction more than the employees. Significant differences also have been found on will of assisting the police on occupation ( $t=2.909$ ,  $p=.004$ ) and education ( $t=7.901$ ,  $p=.001$ ) variables. Employees are more willing to assist the police when it is required than the students. Additionally, doctorates qualified are more willful

to assist the police.

### 5.3 Functional Expectations

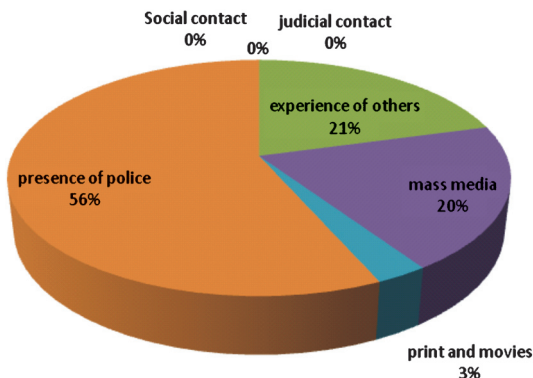
The chart 5.3.1 shows that people reported that police prevent crimes in their areas ( $m=2.91$ ) but not always. The sample reported that police responds to the emergency calls but always not promptly ( $m=3.3$ ). They were somewhat agree with the statement that street patrolling deters criminals ( $m=3.67$ ) and the respondents reported that business areas need more foot patrolling by the police ( $m=3.85$ ). Thus, on functional expectations, population expects more from police as they are doing.



### 5.4 Determinants of Perception

More than half of the respondents (56%) reported that presence of the police itself has contributed most in establishing their perception of the police. 21% reported that they have made

Chart 5.4.1:



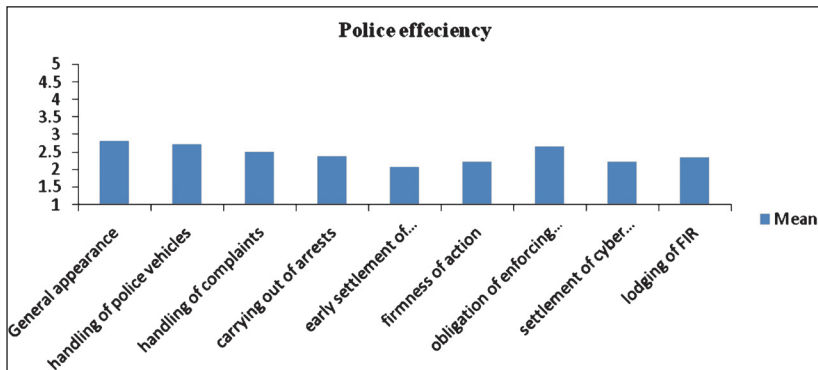


their perception due to feeling the experience of other peoples in their peer groups. 20% reported that the mass media is the most contributing factor in establishing their perception about Indian police (chart 5.4.1).

### 5.5 Efficiency of Police

The graph 5.5.1 clearly depicts that people are totally disagree with the efficiency of police. On an average, they feel that police are bad in general appearance (mean=2.81), handling of police vehicles (mean=2.72), handling of complaints (mean=2.51), carrying out of arrests (mean=2.37), worse in early settlement of criminal cases (mean=2.06), lodging of FIR (mean=2.34) etc. Thus, police have to make alteration at their planning stage to change their image in public.

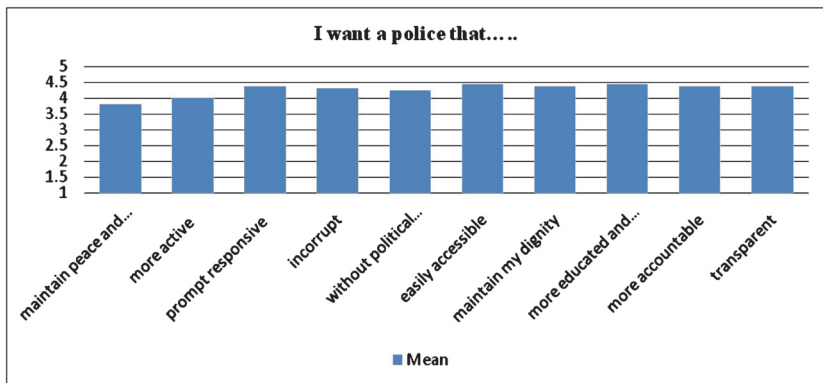
Chart 5.5.1



### 5.6 The Police that Citizen Want

If Indian police has to change their image, they should do something. A general person of the country want a police which maintain the peace and security of the general population as a whole (mean=3.82), a more active police (mean=4.03), a prompt responsive police (mean=4.37), an incorrupt police as they think that most of the police personnel are corrupt (mean=4.33), a police who is not suffering with the illness of politics (mean=4.26), an easily accessible police as they perceive that police is very partial to

Chart 5.6.1:



certain sectors of society (mean=4.45), a police which treat them in a dignified manner as they think that the behavior of police is unbearable that may be the reason they want to be away with the police (mean=4.37), a more educated and trained police as they perceive that less education is also the cause of rude and submissive behavior (mean=4.46), a police which is more accountable to the society and its peoples (mean=4.40) and a more transparent police as they think that less transparency is the root cause of the corruption (mean=4.40).

### 5.7 Overall Satisfaction Level

Finally, the respondents were asked whether they are satisfied with the working of Indian police or not. The respondents reported something which may be very hurting of the police department. All 107 respondents said that they are not satisfied with the working of Indian police professionals (chart 5.7.1). They should change their way of combating crime.

Chart 5.7.1:



## 6. Conclusion

The transparent conclusion of the study is that the general population of the country surveyed is not happy at all with the functions of the police. They reported that police is irresponsible, non-courageous, untrustworthy, unintelligent, less hard-working, unhelpful, dishonest, unfriendly with people, argumentative, arrogant, corrupt, greedy and higher in many other negative attributes. People are willing to help the police and they reported that they accept the restrictions that police impose for the safety and security. On the other hand, certain significant differences have been found in perception on the basis of age, gender, occupation and education. The study also found higher the education, higher the positive perception. The respondents also reported that they need an active, educated, prompt responsive, incorrupt, accountable and transparent police. On the basis of the findings of the research, the paper suggests the police department to consider the social aspect while performing their duties. The public expect plain speaking, transparent functioning, and openness of the working methods. They do not like coercive, unnecessary, and illegal use of force, intimidation, threat, fear, dressing down, or any type of collusion. Such a police force shall be popular, have an excellent image, and useful to the people. This will enhance the effectiveness of governance thus bringing a lot of incidental benefits. ■

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# First Information Report and Criminal Justice

Dr. Pradeep Singh\*

## Keywords

Crime, Criminality, Criminal Justice System, Cognizable Offence, First Information Report, First Informant, Evidentiary Value, Investigation, Prompt, Police Officer.

## Abstract

*Criminal Justice System has evolved to protect the society from crime and criminality. Criminal and potential criminals are posing greater challenge for societal existence in 21st century. Now the nature and modus operandi of crime have completely changed that needed to be immediately checked. Criminals and potential criminal may not commit crime only when they have the deterrence of imposition of sentence. Criminals do not read statute book before committing crime but calculate what happened when in past he or other criminal committed crime whether punishment was inflicted. For the infliction of punishment it is essential that case should be properly investigated and for initiation of investigation it is required that police officer must have received prompt information about commission of crime. Such information, known as First Information Report or FIR, is crucial for criminal justice system in tackling the problem of crime. In case of investigation FIR provides earliest clue for investigation and thereby determines the direction of investigation. Recording of FIR is mandatory for the police officer. Whole investigation particularly at initial stage is based on FIR and it provides important yardstick at prosecution stage to test the evidences.*

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Author Intro.:

\*Associate Professor, LL.M., Ph. D., Law School, Banaras Hindu University

Tel. No.: 9453312601 E-mail. singhpradeepk@hotmail.com

*In this paper legal provisions and judicial decisions relating to FIR are analyzed to find out importance of FIR and to suggest measures to strengthen criminal justice system.*

Crime and criminality create disastrous situation for the society and societal members, needed to be immediately tackled. To protect the society, it is required that criminal elements be identified and inflicted with appropriate punishment. For this purpose it is essential that evidences relating to crime commission should be properly collected, suspected person be identified, arrested and produced before the court. In this reference powers are given and responsibilities are imposed on police officers. Collection of evidences is called as investigation. Criminal justice requires that after commission of crime investigation should be started without any delay. Police officer has duty to make investigation in cognizable offenses, but for initiation of investigation it is necessary that police officer should get the information about commission of crime. In Criminal Procedure Code it has been ensured U/ss. 39 and 40 that any person knowing about commission of crime should inform the police officer but in reality such information is given only by victim or his relatives. Information given to police officer in case of cognizable offenses is very important because of this reason sec.154 of Cr.P.C. Provides detailed procedure of recording of information. Information about commission of cognizable offense given to police officer is known as FIRST INFORMATION and when it is recorded as per the procedure given u/s.154 of Cr.P.C., it becomes FIRST INFORMATION REPORT commonly called as FIR. This term has not been used in Cr.P.C. but in common parlances and also in court proceedings FIR term is used therefore it has legal recognition. First information report is very important as the whole investigation is based on it and during trial it provides crucial yardstick to test the genuineness of evidences adduced by parties to case particularly prosecution.

## **1. Procedure for Recording of FIR**

Any person, knowing about commission of cognizable offense, shall give such information to the officer in charge of police station. Police officer in charge of police station himself may record the

information or direct any other officer subordinate to him to record the information. Information may be given orally or in writing. It is more preferable that the information should be given in writing and if oral information is given then police officer shall reduce the information in writing – verbatim and information be read over to informant. Requirement for information in writing or reducing to writing and reading information to the informant, are to ensure that information must be in the same form and content as it was made because FIR is very important and crucial for investigation and trial. Information in writing or reduce to writing shall be signed by informant and then substance of information shall be entered in the book kept in police station. Now information recorded in such a way is known as FIR and one copy of FIR is given to informant:

“(1) every information relating to the commission of a cognizable offence, if given orally to an officer-in charge of a police station, shall be reduced to writing by him or under his direction, and be read over to the informant ; and every such information, whether given in writing or reduced to writing as aforesaid, shall be signed by the person giving it, and the substance thereof shall be entered in a book to be kept by such officer in such form as the State Government may prescribe in this behalf.”<sup>1</sup>

## 2. Recording of FIR is Mandatory

The principal object of first information report from point of view of informant is to set the criminal law in motion and from point of view of investigating authority to obtain earliest information about alleged crime commission so as to be able to take suitable steps to trace and to bring to book the guilty. FIR in criminal case is extremely vital and valuable piece of evidence during the trial .In case of investigation FIR provides earliest clue for investigation and thereby determines direction of investigation. Recording of FIR is mandatory for the police officer. When any information disclosing a cognizable offense is laid before police officer in charge of police station, he has no option but to register the FIR. Under Criminal Procedure Code mandatory duty is imposed on police officer to record the FIR, it is clear from the objectives of FIR:

- (I) First information report is lodged promptly therefore it is presumed that information is genuine and information is not doctored and tutored. If police officer will not record FIR, criminal court may be deprived from a very important piece of evidence.
- (II) Cognizable offenses pose greater challenge before the society. Police officers have legal duty to protect the society from crime and criminality. This duty can only be complied when the case is properly investigated. Investigation may be properly initiated when police officer has recorded FIR. FIR is lodged to set the criminal law in motion.
- (III) In FIR circumstances of case, the manner of commission of crime, incriminating things used in commission of crime, victim and impact of crime on him, person acquainted with fact and circumstances of the case, the person suspected for commission of crime; are mentioned and all these information are very crucial for determining direction of investigation, therefore lodging of FIR is mandatory for the police officer.
- (IV) Lodging of FIR reduces crime rate. When a criminal is penalized, it provides a lesson for him and other potential criminals to not commit the crime. Punishment to criminal satisfies victim that justice is imparted to him otherwise victim may attempt to take revenge himself resulting in multiplicity of crime.<sup>2</sup>

Provisions contained in Cr.P.C. further clears that the police officer is bound to register the case on the basis of information made about commission of cognizable offense:

- (I) In Sec.154(1) Cr.P.C. "shall" word has been used repeatedly like – "shall be reduced to writing", "shall be signed by the person" and "shall be entered in a book" ;it clearly show the mandatory duty cost on police officer that he must lodge the FIR.
- (II) In Sec.154 (1) Cr.P.C. with word information prefix used is "every". From term "Every information relating to the



commission of cognizable” can be inferred that as and when any information relating to commission of offense is given to police officer, he is finding that information is related to commission of cognizable offense, he is bound to record the information, because this provision directs police officer to record “every information”. Information may be given by any person because every information term indicates that information may be made by any person.

- (III) In Police Act SS.23 and 29<sup>3</sup> imposes compulsory duty on police officers to collect evidences and detect criminals and for these purpose it is essential that the police officer must record the FIR.
- (IV) If FIR is not recorded by police officer, the whole object relating to FIR may frustrate, therefore some recourses are given to aggrieved person. Victim wants to take retribution means revenge against criminal and therefore he is setting the criminal law in motion by giving information to police officer with willingness that police officer will investigate the case and ultimately criminal be penalized by court. When information is given to police officer in case of cognizable offense and police officer has not recorded the FIR, then three recourses are available to aggrieved informant :-
  - (a) U/s.154 (3) Cr.P.C. provision is given that the aggrieved person may send such information to superior police officer:

“Any person aggrieved by refusal on part of an officer in charge of a police station to record the information referred to in sub sec. (1) may send the substance of such information, in writing and by post, to the Superintendent of police concerned who, if satisfied that such information discloses the commission of cognizable offense, shall either investigate the case himself or direct an investigation to be made by any police officer subordinate to him....”

This provision gives recourse to aggrieved person that if officer in charge of police station is not recording FIR then in this situation substance of information may be send to

Superintendent of Police of the area and SP may direct for lodging of FIR and investigation. It makes clear that whenever information relating to commission of cognizable offense is led before the police officer, he is bound to lodge the FIR.

- (b) Another recourse available to the aggrieved person that if police officer is not lodging the FIR and taking action thereon, he may apply to Judicial Magistrate u/s.156(3) Cr.P.C. directing the police officer to lodge FIR and investigate the case.
- (c) One more recourse available to aggrieved person is that he may file complaint before judicial magistrate u/s. 190 Cr.P.C. and magistrate may direct police officer to lodge FIR and investigate the case or magistrate may take cognizance and initiate criminal proceeding.

Provisions contained in Code of Criminal Procedure and Police Act clear that police officer is bound to record the information and at the same time he is bound to record the information verbatim as it is given. Sec.154 (1) Cr.P.C. prescribes that information reduced to be writing be read over to informant or information be given in writing. Further requires that it be signed means informant is authenticating that information is recorded what information be provided. It is ensured by requirements of writing; reduce to writing and signing the information. Therefore police officer has two fold mandatory duty (i) FIR must be recorded and (ii) it must be recorded in the same words and detail as given by informant.

In case of Hari Singh V. State of U.P.<sup>4</sup> Supreme Court gave its observation about recourses available to informant when police officer is not recording the FIR or if lodging but not taking any action on FIR means not investigating the case. In this case a writ petition was filed before Supreme Court that the son of petitioner, Yashbir Singh, Additional Commissioner, Gorakhpur found dead, FIR was made to police alleging murder committed by in laws. But in pressure initially police officers were not recording FIR, later it was recorded but not properly investigating the case and police officers were saying that it was suicide. This type of opinion is given under pressure of in laws. Supreme Court observed that issue of

writ is not required in this case; lower Court is much empowered to provide the remedy. When information is laid with the police, but no action is taken, the complainant can file complaint u/s.190 read with Sec.200 or get direction for lodging of FIR and investigation u/s.156 (3) Cr.P.C.

In *Ramesh Kumari V. State (NCT of Delhi)*<sup>5</sup> Supreme Court clearly laid down that police officer is duty bound to register the case on the information given by informant. Appellant was in possession of land and there was dispute relating to it, pending in the court. High Court issued stay order protecting possession of appellant. Allegation was made that respondent violated stay order and broke open the lock and removed various articles. Information about cognizable offence was given to SHO but no case was registered by police officer. Thereafter, the matter was brought to notice of the police commissioner without any result. Court observed that police officer is bound to record information u/s.154Cr.P.C. At the time of recording information, police officer cannot determine genuineness of information, it is tested during investigation:

“Police Officer mandatorily registers a case on a complaint of a cognizable offence by the citizen u/s.154 of the code are no more *res integra* ..... At the stage of registration of a crime or a case on the basis of information disclosing a cognizable offence in compliance with the mandate of Sec.154(1) of the Code, the concerned police officer cannot embark upon an inquiry as to whether the information laid by the informant is reliable and genuine or otherwise ..... On the other hand, the officer in charge of police station is statutorily obliged to register a case and then to proceed with the investigation if he has reason to suspect commission of an offence which he is empowered u/s.156 of the code to investigate, subject to the proviso to Sec.157.....”

### **Court further observed**

“It is, therefore, manifestly clear that if any information disclosing a cognizable offence is laid before an officer in charge of a police station satisfying the requirements of

Sec.154 (1) of the code, the said police officer has no other option except to enter the substance thereof in the prescribed form, that is to say, to register a case on the basis of such information.”<sup>6</sup>

### **And court directed CBI to register the case and investigate**

Lallan Chaudhary V. State of Bihar <sup>7</sup> court observed that recording of FIR is mandatory duty of police officer. At that time of lodging FIR, information must be recorded what is made by the informant. In this case Informant made information that the accused Lallan Chaudhary together other persons armed with Lathi, Fatta, Farasa, Nalkatwa and Rifle entered in the house of complainant and caused grievous hurt to family members, teased females and committed loot pat. Complaint was filed before Sub Divisional Magistrate. Offences disclosed by complaint were punishable u/ss.147, 148, 149, 448, 452, 323 and 395 of IPC. Sub-Divisional Magistrate u/s.156 (3) Cr.P.C.. directed police officer to register and investigate the case. SHO registered the case U/ss. 452, 380, 323 read with. Sec.34 IPC. It would therefore clear that police officer lodged the case but it was not lodged as it was given by complainant and lodged the case under provisions punishing minor offenses and also case was not investigated for the offenses complained. Supreme Court observed that –

“Sec, 154 of the code thus casts a statutory duty upon police officer to register the case, as disclosed in the complaint and then to proceed with the investigation. The mandate of Sec.154 is manifestly clear that if any information disclosing a cognizable offence is laid before an officer in charge of police station, such police officer has no other option except to register the case on the basis of such information.”

In Sec.154 (1) Cr.P.C. ‘information’ term is used, and also in Sec.41 Cr.P.C. information term is used; both the provisions are related to police officer’s power. In Sec.41 information term is prefixed with qualifying words like ‘reasonable’ and ‘credible’ means police officer can only act on and arrest, when he has inquired about information. But in Sec.154 ‘every information’ term is used. ‘Every

information' term is much widening term than 'information', for lodging FIR it may be any information. Use of every information' term clears intention of legislature that at the time of lodging FIR police officer cannot test genuineness of information but he is simply bound to record the information.

In case of *Shashikant V. Central Bureau of Investigation*<sup>8</sup> Court observed that in one situation police officer before recording information may make preliminary inquiry for testing genuineness of information, when information is given by anonymous person who is not identifiable. In this case an anonymous complaint was received by CBI. CBI did not register the case but started preliminary inquiry. Supreme Court observed:

“Although ordinarily in terms of sec. 154 of the Code when a report is received relating to the cognizable offence, First Information Report should be lodged to carry out a preliminary inquiry even under the Code is not unknown. When an anonymous complaint is received, no investigating officer would initiate investigation process immediate thereupon. It may for good reasons carry out a preliminary inquiry to find out the truth or otherwise of the allegations contained therein.”

### **3. FIR Must be Prompt, Clear and Definite**

Criminal Procedure Code does not enumerate essential qualities of First Information Report. Supreme Court in its decisions has emphasized that the information in a case should be prompt, clear and definite. Judicial verdicts have now established that the FIR should be prompt, clear and definite and on the basis of these qualities status and evidentiary value of FIR are determined. When any crime is committed it may happen that police officer may have two or more information. Any one of them may be treated as FIR which is satisfying the requirement of prompt, clear and definite information. These are three essential qualities of FIR means which information is first in time and at the same time clear and definite would be treated as FIR. If first information is not clear and definite, then second in time which is clear and definite would be treated

as FIR. Prompt requirement determines evidentiary value. If FIR is promptly filed, it will have more evidentiary value and with delay evidentiary value decreases. With delay always there is possibility of filing of tutored, doctored and fabricated FIR falsely implicating innocent persons. Another requirement is that FIR must be clear and definite. It decides status of FIR. If information is not clear and definite, it will not be treated as FIR but some other information will be recorded as FIR which is clear and definite.

### **(i) Prompt**

The provisions in sec. 154 Cr.P.C. is enacted to obtain earliest information about alleged criminal activity by which prompt action may be taken, to record the circumstances before the person giving information may forget some very important part of information thereby criminal justice system may loss some very important clues for investigation or the person giving information may have time to deliberate and plan to implicate someone and file false fabricated, tutored and embellished FIR. Therefore in criminal cases always emphasis is given for filing of prompt FIR. Prompt requirement ensures that FIR is genuine and informant is trustworthy. In Criminal Procedure Code it is not mentioned that what is time limit for lodging of FIR but criminal courts attach great importance for lodging prompt FIR because with delay always there is possibility of false implication and informant being tutored. If information is given by delay it does not diminish its status as FIR, it is still FIR fulfilling criterion given U/s.154 Cr.P.C. that information is related to cognizable offense and recorded in book kept in police station. In case of delay only courts become cautions in evaluation of FIR and prosecution evidences. If delay is explained that why delay was caused and court is reasonably satisfied, FIR and first informant are considered trustworthy and no doubt is created, evidentiary value of FIR and prosecution evidences are not affected. Even in case of delay whole prosecution version of the case is not discarded but only court becomes cautions in evaluation of FIR and prosecution evidences. If delay is explained how and why delay occurred, trustworthiness of FIR is not affected. The informants in most of the cases are victim if not dead or in case of death of victim family

members of victim so due to mental agony they may reach police station by delay or there may be some other circumstances, it all depends on the fact and circumstances of a particular case.

Vedpal V. State of Haryana<sup>9</sup> case was related with murder. In this case gunshot was fired in which victim was seriously injured. Complainant brought the victim in the hospital and complainant was busy throughout in attending the victim and shifting from one hospital to another. After the death of victim FIR was filed. Court observed that delay in lodging FIR is reasonably explained and FIR is trustworthy. Whenever any person is seriously injured, no relative can think to go to police station and lodge FIR but first attempt is always made to save the life, that's why there was no deliberate delay in lodging FIR and it could not be said that deliberation or any concoction caused the delay. But in similar fact situation in case of Bijoy Singh V. State of Bihar<sup>10</sup> Court observed that delay was deliberate and therefore doubt is created and benefit of doubt was given to some accused persons in this case. This case is related with murder. In this case allegation was made that Bijoy Singh with other accused person fired indiscriminate gunshots on Vijay Singh and Sanuj Singh causing death of Vijay Singh at spot and Sanuj Singh was seriously injured. Sanuj Singh was rushed to the hospital. Some of the person accompanying Sanuj Singh remained in the hospital for his treatment and some returned where body of Vijay Singh was lying. In between the way from crime scene to hospital, police station was situated but nobody informed the police station even when they were returning from the hospital. Incident took place at about 5 PM and FIR was lodged when police came on the spot at 2:30 am. FIR was challenged in this case that it was lodged with delay and time period was used for falsely implicating some persons. Court in detail analyzed importance and objectives of FIR. It observed that the First Information Report is report giving information of the commission of a cognizable crime which may be made by complainant or by any other person knowing about the commission of such offence. It is intended to set the criminal law in motion. Court in this case observed that the FIR is usually lodged by victim or his relatives therefore they may have mental agony and it must be considered:

“It is not the requirement of law that the minutest details be recorded in the FIR. The fact of state of mental agony of the person making the FIR who generally is the victim himself, if not dead or the relations or associates of the deceased victim apparently under the shock of the occurrence reported has always to be kept in the mind.”<sup>11</sup>

Further court observed that delay was not properly explained as some person returned from the hospital and police station was in the way but they not reported in the police station and returned to crime spot therefore some person might be falsely implicated. Some of the accused were convicted but benefit of doubt because of delayed FIR, was given to ten accused and acquitted. If Vedpal and Bijoy Singh case are compared, in the former case complainant was busy in getting treatment for victim but in later case opportunity to report to police was available and persons were having time but report was not made.

In *Silak Ram V. State of Haryana*<sup>12</sup> Supreme Court observed that circumstances of the case is properly explaining delay therefore trust worthiness of FIR is not affected. In this case there was allegation on three persons for causing murder of one individual. Deceased was only male member of his family and another only one member in the family was aged widowed mother. Murder took place in the night, there was complete darkness and it was flooding situation and police station was situated at 21 Km. distance from the village. Incident took place in the night 9 to 9:30 pm. and FIR was lodged at 9:30 am morning. Court observed that delay is well explained that only alive person in the family is widowed aged mother. Incident took place in the night and it was flooding condition, in such situation 21 Kms. distance is much for the widowed aged women:

“Coming to the stand that there was delay in lodging the FIR and in dispatch of the report to Illaqua magistrate, this also has been elaborately dealt with by the High Court. Delay in lodging FIR by itself would be sufficient to discard the prosecution version unless it is unexplained and such delay coupled with the likelihood of concoction of evidence. There is no hard and fast rule that delay in filing FIR in each and



every case is fatal and on account of such delay prosecution version should be discarded. The factum of delay requires the court to scrutinize the evidence adduce with the greater degree of care and caution.”

If delay is not explained, prosecution case is not thrown away but it is required that court should be very cautious in taking and evaluating prosecution evidences. Even after delay in lodging FIR if evidences are properly proving allegation guilty may be convicted. In this case court held that delay is reasonably explained by the circumstances of the case itself.

Case of State of Himachal Pradesh V, Rakesh Kumar<sup>13</sup> was related with murder. In this case High Court acquitted the accused on the basis of doubt created by filing of delayed FIR. Against this decision appeal was filed before the Supreme Court. In this case victim was prosecution witness in a previous case of kidnapping against accused and he was star witness. One day he was stabbed and then his relatives rushed him to a hospital and no doctor was available at that time and then he was shifted another hospital where he died and only after that relatives went to police station to lodge FIR. Incident took place around 12 to 12:30 in the night and death was caused at 1:30 am. Only after that FIR was lodged. Court observed delay is well explained. If any person is injured, it is needed that he must be first rushed to hospital, and then only a person can think about filing of FIR. Sahebrao V. State of Maharashtra<sup>14</sup> clears that in some circumstances a person may have mental agony because of crime commission with his nearly relative therefore he may not be in situation to lodge FIR promptly and some delay may be caused, it is well explained and will not affect trustworthiness of FIR. This case is related with dowry death. In this case father of deceased bride was informed by groom family that his daughter is seriously ill but when he reached to the house of daughter, father found his daughter dead and no one from the family of her in laws was present in the house. This occurred at 1:00 pm., police also reached to spot and asked the father for lodging FIR but father told that his mental condition is not good and he would lodge the complaint later on. Father lodged complaint at 7:30 pm. on next day with delay of

about 30 hours. On the basis of delay of FIR appeal was made that the time period was used for fabrication and false implication. Court observed that:

“The settled principal of law of this court is that delay in filing FIR by itself cannot be a ground to doubt the prosecution case and discard it. The delay in lodging FIR would put the court on its guard to search if any plausible explanation has been offered and if offered whether it is satisfactory.”

Court observed that delay in lodging FIR cannot be used as ritualistic formula for doubting the prosecution case and discarding the same solely on the ground of delay in lodging FIR. Only court should be at guard to search the reason of delay. If prosecution fails to give plausible reason to explain delay, the delay would be fatal to the prosecution and cause possibility of embellishment.

In case of *Ravinder Kumar V. State of Punjab*<sup>15</sup> Supreme Court enumerated some reasonable causes of delay:

“When there is criticism on the ground that FIR in a case was delayed the court has to look at the reason why there was such delay. There can be a variety of genuine causes for FIR lodgment to get delayed. Rural people might be ignorant of the need of informing the police of a crime without any lapse of time. This kind of unacquaintance is not too uncommon among urban people also. They might not immediately think of going to the police station. Another possibility is due to the lack of adequate transport facilities for the informers to reach the police station. The third, which is quite common bearing, is that the Kith and kin of the deceased might take some appreciable time to regain a certain level of tranquility of mind or sedateness of temper for moving to the police station for the purpose of furnishing the requisite information. Yet another cause is, the persons who are supposed to give such information themselves could be so physically impaired that the police had to reach them on getting some nebulous information about the incident.”

In case of *Himmat Sukhdeo Wahurwagh V. State of Maharashtra*<sup>16</sup>

FIR was lodged on next day when police reached the spot. This case is related with multiple murders. In this case is related with multiple murders. In this case murder was committed at 6:00 pm. in which brother B and J were killed and after one hour when N father of deceased person, was going to police station to file FIR, was killed. On telephone police was informed and police reached the village on 1:00 pm next day, then only FIR was lodged. Court observed that delay in lodging of FIR is well explained. This was the case of multiple murders causing murder of three person of the same family. Terror was there.

In sexual assault cases delay is a very common situation. Because of Indian societal consideration when such cases are reported, it affects reputation and prestige of victim's family even though she has not committed any crime and she is victim of crime. Therefore whenever such incident takes place, family members again and again think whether the FIR be filed, it takes much time. In case of sexual assault court considers it and the nature of offence itself explains delay. In case of *Dildar Singh V. State of Punjab*<sup>17</sup> a minor girl of age below 16 years was sexually assaulted by her teacher. Prosecutrix did not report the incident to anyone either on first occasion or on second. Ultimately when she became pregnant, her mother discovered the fact. Then she disclosed the incident. So in filing of FIR there was delay of 6 months from the first incident. Court observed that having regard to the facts and circumstances of the case delay could not be treated as fatal to prosecution case:

“In normal course of human conduct an unmarried girl would not like to give publicity to the traumatic experience she had undergone and would feel terribly embarrassed in relation to the incident to narrate such incident. Overpowered, as she may be, by a feeling of shame her natural inclination would be to avoid talking to anyone, lest the family name and honour is brought into controversy. Thus delay in lodging the first information report cannot be used as ritualistic formula for doubting the prosecution case and discarding the same on the ground of delay in lodging first information report. Delay has the effect of putting the court on guard to search if any

explanation has been offered for the delay and, if offered, whether it is satisfactory. In the instant case, the girl was a minor below the age of 16 years. She was studying in class VIII and appellant was the drawing teacher of that class. It is no doubt true that the prosecutrix did not report the incident to anyone either on the first occasion or on the second. Ultimately a stage was reached when she could not keep it a secret since her mother discovered that she was pregnant. In these circumstances, she was compelled to disclose the true facts. Having regard to the facts and circumstances of the case, we do not find any infirmity in the reasoning of the High Court and the conclusion reached by it.”

In case of Santosh Moolya V. State of Karnataka<sup>18</sup> FIR was lodged after 42 days delay. This was a rape case in which accused persons were alleged that they committed rape with both sisters. Besides victims in family other member was mother who was completely illiterate. Court observed that delay was well explained. It was fear that both sisters were raped and further no male member was available and further nature of offence was such as needed to be calculated properly that how much FIR lodging may affect the family position. State of U.P. V. Chhotey Lal<sup>19</sup> is a case of sexual assault, there was delay of 10 days in lodging FIR. Court observed that delay is well explained and delay will not affect trustworthiness of the case. Court observed that in case of rape (sexual assault) there may be delay in lodging FIR because future of the victim and reputation of family, all are at stake.

Even if the prosecution is not giving any explanation for delayed lodging of FIR but circumstances of the case is indicating about some circumstances because of which delay may have caused. Court may take it and consider that delay is explained. In case of State of Punjab V. Mohinder Singh<sup>20</sup>murder was committed at 8:00 pm. It was complete darkness and besides deceased in family only wife was alive. FIR was lodged by wife of deceased in morning only when police reached the spot. Trial Court convicted but High Court acquitted on the basis of doubt raised by filing delayed FIR. Appeal was filed against it before Supreme Court and Supreme Court

reversed the order and person was convicted. Court observed that circumstances itself is speaking about reasons of delay. There is no need of giving explanation in such a situation.

### **(ii) Definite and Clear**

First Information report is very important in criminal cases. Whole Investigation revolves around FIR and in trial also FIR provides crucial yardstick to test all the evidences adduced by prosecution side. Therefore it is much required that FIR must be clear and definite. Clear and definite are important requisites for the first information report. It decides status of information. If information is clear and definite, then it may be treated as FIR when it is first in time. Investigation depends on FIR therefore FIR must provide certain information without any ambiguity that what crime committed, against whom committed, when committed, what are crucial evidences, name of witnesses and if criminal is known, the name etc. But at the same time it is not required that FIR should adduced minutest detail of occurrence of the incident, only it is needed that it should provide information about the incident in clear and definite terms. Information in a case is mainly given by victim or his relatives, they may be in mental agony because of crime commission, therefore may not be in situation to provide all and minutest detail of the incident. It is responsibility of police officer to find out details of case and collect evidences in this regard during investigation. Main objective of FIR is to set the criminal law in motion by giving information to police officer about commission of cognizable offence. This requirement is satisfied and objective is realized when information about offence is given in clear and definite terms. Police Officer will know by such information that what crime is committed, where crime is committed, against whom crime is committed, who has committed crime (if known) and who crucial witnesses are. Detail of incident is not required to be given means it is not needed that informant has provided step by step enumeration of incident and also it is not necessary to enumerate all the witnesses – if one or more witnesses are named, if known, may be sufficient. In other words it can be said that information should be given in clear and definite terms providing broader outline of the

incident, information may be treated as FIR.

In case of Bijoy Singh V. State of Bihar <sup>21</sup>Court observed that in most of the cases information about offence is given by victim or his relatives. They may not have tranquility of mind and therefore it is not possible for them to give minutest detail of the incident:

“It is not requirement of law that the minutest details be recorded in the FIR lodged immediately after the occurrence. The fact of state of mental agony of the person making the FIR who generally is victim himself, if no dead, or the relations or associates of the deceased victim apparently under the shock of occurrence reported has always to be kept in the mind.”

In case of S. Sudershan Reddi V. State of Andhra Pradesh<sup>22</sup> Supreme Court observed that FIR need not be detailed. This case is related with murder. In this case deceased and informant were going somewhere on two wheeler. The deceased was driving the vehicle and informant was pillion rider. When two wheeler reached near a railway gate an auto rickshaw overtook the two wheeler and in this process deceased lost control over his vehicle and fell down. It was night 8:30 pm. and four persons came out of auto rickshaw attacked on deceased and he died at spot. FIR by name was filed in police station at 10:30 pm. In the FIR information about whole incident was given but it was not mentioned that in which light informant identified the assailant as it was night. At the time of cross examination in trial, informant, who lodged FIR, improved his statement (it is very common that usually informant improves statement later on, because when he lodged FIR he may be in mental agony so he may not able to give elaborate information, only that information is required which should give clear and definite information about the incident giving broader outline of the case. The detail may be given at the time of examination in the trial) and made statement that he identified assailants in light of scooter headlight though the light was dim but he identified the assailants. Also in the FIR information was given that assailants assaulted on deceased means blows were there but he could not enumerated number of blows and each blow by each assailant. Court observed that:-

“Non-mention in the FIR about the source of light is really non-consequential. It is well settled that FIR is not an encyclopedia of the facts concerning the crime merely because minutest details of occurrence were not mentioned in the FIR. The same cannot make the prosecution case doubtful. It is not necessary that minutest details be stated in the FIR. It is sufficient if a broad picture is presented and the FIR contains the broad features. For lodging FIR in a criminal case and more particularly in a murder case, the stress must be on prompt lodging of FIR. Therefore mere absence of indication about the source of light does not in any way affect the prosecution version.”<sup>23</sup>

The decision of Supreme Court lays down clearly that FIR need not be detailed in every reference but only it is needed that it should provide broader outline about the incident in clear and definite terms so that police officer may be able to initiate the proper investigation. In case of Subhash Kumar V. State of Uttarakhand<sup>24</sup> Supreme Court reiterated that FIR need not be detailed but only should be clear and definite. If information is cryptic and indefinite, it cannot amount to FIR. In this situation police officer will record some other information as FIR. This case is related with attempt to murder punishable U/s.302 read with Sec, 34 of IPC. In this case victim was a college student, when he was entering in the college gate; he was assaulted by 4 accused persons armed with Khukries. Incident took place at about 1:00 pm. and FIR was lodged at 3:15 pm. FIR was lodged by victim himself when police officer visited to him. In this case one person was alleged in the FIR by name and other three persons were only mentioned. In this case FIR was lodged that all the persons were armed with Khukries but particular name of Subhash was not mentioned that Subhash was armed with ‘Khukry’. It was challenged. The court observed that:-

“FIR as is well known is not to be treated to be an encyclopedia. Although the effect of a statement made in FIR at the earliest point of time should be given primacy, it would not probably be proper to accept that all particulars in regard to commission

of offence must be furnished in detail.”

### **Court not to interfere with decision of lower court and conviction was upheld**

Case of Motilal V. State of UP<sup>25</sup> is related with murder. Judgment was given by Session Court and all the accused were convicted. Appeal was filed before High Court which upheld conviction and sentence u/ss.148, 302 read with Sec.149, 307 read with Sec.149, S.452 and Sec.427 of IPC. Except one accused other accused including appellant were sentenced to death. In this case information (FIR) was given that accused person entered in the house of victims with whom they were having enmity since long. After entering in the house all the family members were assaulted by indiscriminate firing some person died and some were injured. Assailants were ensuring that all the persons are dead. In this case before the Supreme Court contention was made that FIR is ant dated means FIR was lodged later on but earlier date was shown to make it prompt filed FIR. Contentions were made that in this FIR names of all persons present in the house were not given and it was not mentioned that how the informants saved their lives, also it was not mentioned that how the first informant had got the courage to go to police station in night after multiple murder of family members, also information was not given that on whose bicycle she (informant) reached the PS. Court observed that in FIR minutest detail is not required to be given:-

“It is well settled that the first information report need not contain every minute detail about the occurrence. It is not substantive piece of evidence. It is not necessary that the name of every individual present at the scene of occurrence is required to be stated in the First Information Report.”

### **Court dismissed the appeal and conviction was upheld**

For FIR most important requirement is that the information must be clear and definite. It is completely immaterial that how and by which means information is given to police officer. Even information may be given by the instantaneous means of communication like telephone. Most of the situations such information is given with a view to call the police officer at crime scene and not with a view



to lodge FIR therefore information usually given on instantaneous means of communication are cryptic, vague and indefinite. Further the problem is also that usually person giving such information may not be identifiable. First informant is very crucial witness, therefore police officer also does not make unidentifiable person as first informant. If information given on telephone is clear, definite and providing broader outline of incident then it may amount to FIR. In case of *Vikram V. State of Maharashtra*<sup>26</sup> Telephonic message about the incident was given in the night just after incident and that information was reduced in writing by police officer on duty and then police officer reached to spot and there in the morning recorded a detailed statement of informant. This later recorded statement was treated as FIR by police officer. When information is recorded as FIR, at the time of trial proceeding it may be used for contradiction and corroboration of first informant. Prosecution tried to use this statement for corroboration. It was opposed by defence side. Defence was making contention that really FIR was telephonic message recorded by police officer and what statement was recorded in morning at crime scene was statement recorded u/s.161 Cr.P.C. on which Sec.162 Cr.P.C. imposes restriction that such statement cannot be used for corroboration and it cannot be used by prosecution. Court observed that first call was made only with a view to call police officer, so circumstances are indicating that it might not be definite and detailed enough about incident therefore police officer was not at fault in treating second information that was recorded in morning at crime scene, as FIR. Conviction was upheld.

Thus judicial verdicts have well established that for FIR there are three essential requisites : prompt; clear and definite. On satisfying these requisites information relating to commission of cognizable offense will become FIR.

#### **4. Number of FIR in a Case**

First information report in a cognizable offense is very crucial. Whole investigation depends on FIR at the initial stage of investigation and also at the time of trial FIR is very important both for the prosecution and defence. Any person can give information disclosing commission

of cognizable offense and Sec.154 provides manner of recording of information. When information is recorded according to procedure given in Sec.154 it becomes First Information Report. In a case normally there can be only one FIR. Sometimes it may happen that the police officer may have received two or more information relating to the same incident. In such situation police officer may treat one of them as FIR. But it is not subjective discretion of police officer because in law subjective discretion is not permissible. Always discretion must be objective based and guided by rule of law. For FIR law requires that FIR should be prompt, clear and definite. The information, which is clear and definite providing broader feature of the offense and first in time, will be FIR. Therefore when police officer receives two or more information about the same incident there can be only one FIR decided on the criteria of prompt, clear and definite.

In some exceptional situation there may be more than one FIR, when information are giving rival version of case. It is very common that opposite parties lodge rival version of information – one party alleges that other party has committed crime and second party gives information alleging that first party has committed crime. In such a situation there may be more than one FIR in the same case.

In case of T.T. Antony V. State of Kerala<sup>27</sup> there was attack by bomb by unlawful assembly on Mr. M.V. Raghavan an MLA and minister. For protection of minister police opened firing resulting in death and injury to many persons – five died and six injured and in Lathi charge more than hundred injured, Two FIRs were filed and also judicial inquiry was called. Court gave its observation about the FIR that in a case there may be only one FIR. In Kari Coudhary V. Sita Devi<sup>28</sup> a mother-in-law filed FIR. She was complainant for culpable homicide of her daughter-in-law but later on police found that actually murder was committed by mother-in-law herself with conspiring with some other. Police completed investigation in the FIR lodged by mother-in-law and report was sent to the court with information that police officer has lodged one more FIR and mother-in-law is accused in it and investigation is in the process. Means there were two FIR in the same case. Supreme Court observed that

legal position is that generally there cannot be two FIR against the same accused in respect of same case. But when there are rival versions in respect of the same episode, they would normally take the shape of two different FIRs and investigation can be carried on under the both of them by the same investigating agency. Because in investigation it is to be decided that which FIR is true and which one is false and further evidences are also same for both the FIR, therefore when investigating agency will make investigation in the case, investigation for both the FIRs are completed. If investigation officers are different, it may cause another problem that in respective police report they may give different and different opinion.

If against one accused person there are many allegations of committing a number of crime, then there will be as many FIR and investigation as the number of allegation of different-different crime commission. In other words it can be said that as the number of the case, such number of FIR and investigation may be there against one accused. In *Ramesh Chandra Nand Lal Parikh V, State of Gujrat*<sup>29</sup> petitioner was Managing Director between 1973 to 1991 and then became Chairman of Madhavpur Mercantile Co-operative Bank Ltd. Against Ramesh Chandra allegation was made of committing large scale scam. About 15 complaints were filed against the accused. Magistrate directed police u/s.156 Cr.P.C. and cases were lodged with CBI, civil police, CID (economic Cell) and investigations were started by these agencies separately in each case. Special Leave Petition was filed in Supreme Court that against one accused there should be only one FIR, therefore all other FIRs and investigations be quashed. Supreme court observed that second FIR is not permissible in view of the provisions of Sec.154 Cr.P.C. read with Sec.173 of Cr.P.C. Court quoted observation of Supreme Court in case of *T.T. Antony V. State of Kerala AIR 2001 SC 2637* :

“From the above discussion it follows that under the scheme of provisions of Sec.154, 155, 156, 157, 162, 169, 170 and 173 Cr.P.C. only the earliest information in regard to the commission of a cognizable offence satisfied the requirements of Sec.154 Cr.P.C. There can be no second FIR and consequently there can be no fresh investigation on receipt of every subsequent

information in respect of the same cognizable offence or same occurrence or incident giving rise to one or more cognizable offence. On receipt of information about a cognizable offence or an incident giving rise to a cognizable offence or offences and on entering the FIR in the Station house diary, the officer in charge of a police station has to investigate not merely the cognizable offence reported in FIR but also other connected offences found to have been committed in the course of the same transaction or the same occurrence and file one or more reports as provided in Sec.173 Cr.P.C.”

Supreme Court observed that it is well settled law that in one case for all the offences committed in same transaction or same occurrence there should be one FIR and one investigation and in it all the offences be investigated. Court further observed that this rule is not applicable when the different-different offences were committed in separate transactions but not in same occurrence. In such situation there may be more than one FIR for each transaction or occurrence and separate investigation for each FIR:

“In the facts of the present case, we are satisfied that the complaints, which were filed in respect of malfeasance and misfeasance within the jurisdiction of Ahmedabad police, were not in the respect of the same cognizable offence or the same occurrence giving rise to one or more cognizable offences, nor were there they alleged to have been committed in the course of same transaction....”<sup>30</sup>

### **By this observation petition was dismissed**

Supreme Court in case of T.T. Antony V. State of Kerala, Kari Choudhari V. Sita Devi and Ramesh Chandra Nand Lal Parikh V. State of Gujrat established law relating to FIR that in one case normally there should be only one FIR and one investigation. When informations reveal rival versions of the case for same occurrence, there may be more than one FIR but it will be investigated in one investigation. Same rule is applicable when against same accused allegations of commission of many offenses are made which are not committed in the same transaction or same occurrence, there

may be separate FIR for each case and each may be investigated separately.

## 5. Contents of FIR

There is no hard and fast rule about the contents of FIR. Only it is required that information should be disclosing commission of cognizable offense. Preferably information be given in writing addressed to SHO of concerned police station. Even it may be given orally reduced to writing by SHO, read to informant and signed by informant. The information is entered in the Station House Diary. It becomes FIR. Essential requisites for FIR are that the information should be prompt, clear and definite. Minutest details means graphic details of incident are not required to be given. Only broader features of incident are sufficient, which crime was committed, where committed, against whom committed, who committed if know, if any person was eye witness of crime commission his name should be given in FIR.

## 6. Evidentiary Value of FIR

FIR is very crucial in a criminal case. Investigation initiates on the basis of information recorded U/s.154 Cr.P.C. In criminal trial also FIR is very important evidence and informant who lodged FIR is very important witness. FIR provides a very important yardstick to test the prosecution evidences. It is also very crucial for defence side, if by evidences doubt is created for the information given in FIR, prosecution case becomes weaker. FIR is not substantive evidence under the provisions of evidence law means it cannot be used as evidence for the facts mentioned in the FIR itself. FIR can be used only to contradict or corroborate the informant when he is produced as witness in a criminal trial. FIR can be used for corroboration when informant is called as witness in a trial. If informant in his examination as a witness gives similar statement what was given at the time of lodging FIR, his statement is corroborated and becomes clear that his statement may be true and he is trustworthy. Sec.157 of Evidence Act provides that:

“In order to corroborate the testimony of a witness, any

former statement made by such witness relating to the same fact, at or about the time when the fact took place or before any authority legally competent to investigate the fact may be proved.”

Sec.157 of Evidence Act makes FIR admissible evidence for the purpose of corroboration. The procedure of corroboration is that when informant is called as witness and he gives his testimony in examination in chief, then prosecution may put the information recorded in FIR that both the statements are same or similar and it is proved that whatever witness is giving statement, it is true. FIR is lodged as earliest as possible, therefore always presumed that information may be true. After corroboration testimony of witness and also the prosecution version of case and evidences become much stronger.

Defence party may use the FIR for cross examination and contradiction of informant in cross examination when informant is produced as witness during trial. Sec.145 of Evidence Act provides that :

“A witness may be cross examined as to previous statements made by him in writing or reduced into writing, and relevant to matters in question, without such writing being shown to him or being proved; but if it is intended to contradict him by the writing, his attention must, before the writing can be proved, be called to those parts of it which are to be used for the purpose of contradicting him.”

Sec.145 Evidence Act contains two parts one is referring to cross examination. U/s.145 Evidence Act FIR may be used for cross examination as u/s.145 Evidence Act it is required that either statement be given in writing or if given orally, it be reduced into writing therefore FIR may be used for cross examination of informant as witness. The second part in Sec.145 of Evidence Act is referring to contradiction made during cross examination. If in cross examination some questions were asked and person is giving some answer which is contrary to information given by him at the time of lodging of FIR. Then defence may prove contradiction in statements

one in previous statement in FIR and another now given in cross examination. It will shake the veracity of very important and crucial prosecution witness and hereby prosecution case may become weaker. FIR may be used by defence both for cross examination and contradiction.

Informant is very vital witness, he is in majority of cases either victim himself or the person who is eye witness or person knowing properly about the fact and circumstances of the case. Therefore, his evidence is very crucial for the case. If promptly filled means FIR is prompt, clear and definite, the evidentiary value of the FIR will be greater. Because always it is presumed that in such situation whatever information was given at earliest moment without any opportunity to deliberate and being tutored, he may not have filed doctored and concocted FIR. Such FIR has greater evidentiary value and it becomes more crucial when it is clear and definite. Even if there is some delay in filing FIR but prosecution provides some plausible reason of delay, evidentiary value of FIR is not affected and FIR is considered trustworthy. When proper reason for delay is not given court becomes careful and cautions in taking prosecution evidences and evaluation of it means whole prosecution case may be affected. FIR is used for corroboration, cross examination and contradiction: corroboration by prosecution and cross examination and contradiction by defence. In evidence law provision provides that FIR as evidence can be used for corroboration, cross examination and contradiction of informant only when he is produced as witness during trial and FIR is not used against other witnesses and evidence. But in reality FIR has much more evidentiary value. It is given at the earliest moment and informant is crucial witness therefore it provides to court a touchstone to test other evidences and witnesses. If other evidences and witnesses provides similar fact as it is mentioned in FIR means these are corroborating each other, prosecution case becomes much stronger. But when FIR is in contradiction with other evidences or witnesses, prosecution case becomes much weaker, doubt emerges and benefit of doubt is given to accused.

C. Magesh V. State of Karnataka<sup>31</sup> case is related with murder in

which two groups of trade union in a company assaulted on each other during a strike and resulted in death of one person. FIR was lodged. FIR was typed supposedly dictated by company officials and send to police station. Person informant was not identifiable. As the information was typed and informant was not identifiable, genuineness of FIR was raised by defence that it was raising doubt and benefit of doubt should be given to accused. Court observed that only on the basis of doubt raised about FIR, a case cannot be decided. If other evidences are proving case beyond all reasonable doubts, accused may be convicted. FIR is not substantive evidence. It is only used for contradiction and corroboration of informant when he is called as witness during trial. In a case FIR is important but it is not only evidence on the basis of which case may be decided. If other evidences are supporting the case, accused may be convicted. But in this case there was nothing except FIR and dying declaration. FIR was doubtful as it was not known who had filed it and therefore his veracity was not tested and genuineness of FIR was not tested. Dying declaration was not corroborated by any other evidence. Therefore accused was acquitted.

FIR is not substantive evidence because it is filed by prosecution side, they may get undue advantage. FIR is filed by informant who is almost all cases prosecution witness, therefore FIR is very weak evidence and it can only be used against the informant for corroboration and contradiction. For the purpose corroboration it is weak evidence. But in reference to contradiction it is stronger evidence because a very crucial witness is contradicted. Contradiction of first informant creates doubt about prosecution case and benefit of doubt goes to accused. At the same time only FIR cannot determine fate of whole case. *Alagarsamy V. State by deputy Superintendent of Police*<sup>32</sup> case is related with murder. In this there was tension between two communities of village as a result of village election dispute. One community assaulted on another community when they were coming by a bus causing multiple murder and injury to many persons. One injured person filed FIR. During the trial court asked prosecution to produce FIR book in the court to check the genuineness of FIR that the FIR was not improved and fabricated later on during the investigation. On demand by court FIR book



was not produced before the court. Contention from the side of defence (appellant) was that the FIR was liable to be thrown out on this ground alone and FIR had lost all its credibility, particularly, because the deliberate attempt on the part of the prosecution agency to suppress the FIR book which though demanded right from trial court to this court, was not supplied by the prosecution nor was its mysterious absence explained. Further defence contended that once FIR itself becomes a doubtful document, then the whole prosecution case becomes doubtful and it was obvious that the names of accused persons surfaced based on imagination. While the prosecution (respondent) argued before the court that incident took place in day light, therefore eye witnesses have seen properly the assailants, it is sufficient. Only FIR is not to be all and end all of matter. Court accepted the argument of respondent (prosecution) and observed that:-

“We have deeply considered the above mentioned three reports, as also the contention raised that coupled with earlier circumstances of the FIR book not being made available, the whole prosecution story would be extremely suspicious. We are unable to agree.”<sup>33</sup>

Court observed that informant was crucial witness, he himself was injured in the incident and without wasting time he lodged FIR in the hospital when police officer visited him in the hospital. In this case Special Report was sent immediately after lodging the FIR u/s, 157 read with Sec.159 Cr.P.C.. It is also one method to check fabrication of FIR during the investigation later on. Therefore, it tests genuineness of FIR. When special report is immediately sent to magistrate, in such a short time between lodging FIR and sending SR fabricated FIR cannot be prepared. Court further observed:-

“After all, the FIR is not a be-all and end-all of the matter, though it is undoubtedly, a very important document. In most of the cases, the FIR provides corroboration to the evidences of the maker thereof. It provides a direction to the investigating officer and the necessary clues about crime and perpetrator thereof .... On the basis of evidence led before the court, the court can weigh the inconsistencies in the FIR and direct

evidences led by the prosecution. It is not a universal rule that once FIR is found to be with discrepancies, the whole prosecution case, as a rule, has to be thrown, such can never be law..... The correct view would be to weigh all the situations including the discrepancies found in the FIR, as also the other evidence made available before the court and after carefully appreciating the same, to come to the correct conclusion."<sup>34</sup>

Court upheld conviction of all 17 accused for committing murder of six person and injury to three others.

## 7. Concluding Remarks

In India criminal justice system is facing greater problem due to the increase in crime rate. Crime and criminality needed to be immediately tackled. It can only be checked when criminal elements will have deterrence that if crime is committed, punishment may be inflicted. Infliction of punishment is only possible when investigation of a case is initiated promptly and investigation is completed effectively by which accused may be identified, evidences can be collected and accused may be produced before court for infliction of sentence. For initiation of investigation, completion of investigation and penalizing criminals; First information report plays a very crucial role. First Information Report is very important document in a criminal case. FIR provides earliest information to police officer about crime. When any person gives information disclosing commission of cognizable offense, it is entered in FIR book immediately and it is required that SHO must send the SR to magistrate u/s.157 Cr.P.C read with Sec.159 Cr.P.C. without any delay. These requirements are made to check the improvement and fabrication in FIR later on during investigation. FIR is earliest in time therefore it is presumed that whatever information given, is genuine. FIR is important evidence and first informant is crucial witness. When FIR is prompt, clear and definite, FIR, first informant and other prosecution evidences become trustworthy and stronger. But even after importance of FIR for criminal justice, police officers are much reluctant in lodging FIR. Police officers always try to conceal crime rate and resultant problem in their respective area because in these references police officers are answerable. Some

suggestions are submitted:

- In sec. 154 Cr.P.C. Specific term First Information report be added in main provision or in marginal note to clear the confusion about nature of information.
- In sec. 154 Cr.P.C. Essential requisites of FIR as emphasized by courts those are prompt, clear and definite be added which differentiate a mere information and first information.
- In sec. 154 Cr.P.C. Provisions be added expressly imposing mandatory duty to register FIR.
- Police officers are generally reluctant in registering case because if FIR is lodged , it will show increased crime rate in area for which police officers are answerable. This situation causes victim dissatisfaction, criminal elements are fearless and ultimately whole criminal justice system is affected. To cure this situation there should be liability for qualitative investigation instead of quantitative investigation.
- Police officers should be encouraged for lodging of FIR. Number of FIR lodged should be taken account for determining ability and promotion of police officer.
- Police officers are not properly trained for investigating cases; it is another potent reason for not registering FIR. To cure this situation government should take step for separation of investigation department of police from police department concerned with maintenance of law and order.
- First Information Report is crucial evidence in a criminal case therefore in Evidence Act express provisions should be added determining its use as evidence and evidentiary value. ■

### References

<sup>1</sup> Sec.154 (1) Code of Criminal Procedure 1973.

<sup>2</sup> In crime causation retribution is important cause. One of the important objectives of criminal law is to satisfy retributive mental element of victim by imposition of sentence on criminal. If criminal law is not coming in motion and criminal is not punished, victim may attempt

to take revenge himself and he will become a criminal resulting in increased crime rate causing greater challenge before society at large.

<sup>3</sup>Sec. 23 of Police Act provides that “It shall be the duty of every police officer ...to collect and communicate intelligence affecting the public peace; to prevent the commission of offence and public nuisance; to detect and bring offenders to justice and to apprehend all persons whom he is legally authorized to apprehend, and for whose apprehension sufficient grounds exist;...” police officer has duty to investigate the case and apprehend accused and produce him before the court. For these purposes lodging of FIR is necessary.

<sup>4</sup>. AIR2006SC2464.

<sup>5</sup>. AIR2006SC1322.

<sup>6</sup>. Id at p.1324

<sup>7</sup>. AIR2006SC3376.

<sup>8</sup>. AIR2007SC351.

<sup>9</sup>. 1995 CrLJ 3556(P&H).

<sup>10</sup>. AIR 2002 SC 1949.

<sup>11</sup>. Id at p. 1952.

<sup>12</sup>. AIR 2007 SC 2739.

<sup>13</sup>. (2009) 6 SCC 308.

<sup>14</sup>. AIR 2006 SC 2002.

<sup>15</sup>. (2001) 7 SCC 690.

<sup>16</sup>. (2009) 6 SCC 712.

<sup>17</sup>. AIR 2006 SC 3084.

<sup>18</sup>. AIR 2010 SC 2247.

<sup>19</sup>. AIR 2011 SC 697.

<sup>20</sup>. AIR 2008 SC 92.

<sup>21</sup>. op. cit

<sup>22</sup>. AIR2006 SC 2716.

<sup>23</sup>. Id at p.2720.

24. (2009) 6 SCC 641.
25. AIR 2010 SC 281.
26. AIR 2007 SC 1893.
27. AIR2001 SC 2637.
28. AIR 2002 SC 441.
29. AIR 2006 SC 915
30. Id at p.917.
31. AIR 2010 SC 2768.
32. AIR 2010 SC 849.
33. Id at p.858.
34. Id at p.860.



# Eleven Guidelines to be Followed in all Cases of Arrest and Detention<sup>1</sup>

Khush Kalra\*

## Keywords

Arrest, Detention, Eleven Guidelines.

## Abstract

*The police personnel carrying out the arrest and handling the interrogation of the arrestee should bear accurate, visible and clear identification and name tags with their designations. The particulars of all such police personnel who handle interrogation of the arrestee must be recorded in a register.*

*That the police officer carrying out the arrest of the arrestee shall prepare a memo of arrest at the time of arrest and such memo shall be attested by atleast one witness, who may be either a member of the family of the arrestee or a respectable person of the locality from where the arrest is made. It shall also be counter signed by the arrestee and shall contain the time and date of arrest.*

Ratio Decidendi<sup>2</sup> "Where one is guaranteed right by State, it is against the State that the remedy must be sought if there has been a

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<sup>1</sup>Appellants: D.K.Basu Vs. Respondent: State of West Bengal  
AIR1997SC610

<sup>2</sup>Meaning of Ratio Decidendi

Ratio decidendi is a meaning "the reason" or "the rationale for the decision."  
The ratio decidendi is "[t]he point in a case which determines the judgment" or  
"the principle which the case establishes."

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Author Intro.:

\* Lawyer, Delhi High Court, New Delhi.

failure to discharge the constitutional obligation imposed.”

### **Facts in Nutshell**

The Executive Chairman, Legal Aid Services, West Bengal, a non-political organisation registered under the Societies Registration Act, on 26th August, 1986 addressed a letter to the Chief Justice of India drawing his attention to certain news items published in the Telegraph dated 20, 21 and 22 of July, 1986 and in the Statesman and Indian Express dated 17th August, 1986 regarding deaths in police lock-ups and custody. The Executive Chairman after reproducing the news items submitted that it was imperative to examine the issue in depth and to develop “custody jurisprudence” and formulate modalities for awarding compensation to the victim and/or family members of the victim for atrocities and death caused in police custody and to provide for accountability of the officers concerned. It was also stated in the letter that efforts are often made to hush up the matter of lock-up deaths and thus the crime goes unpunished and “flourishes”. It was requested that the letter along with the news items be treated as a writ petition under “public interest litigation” category.

Considering the importance of the issue raised in the letter and being concerned by frequent complaints regarding custodial violence and deaths in police lock up, the letter was treated as a writ petition and notice was issued to the respondents.

### **Reply of Respondents**

In response to the notice, the State of West Bengal filed a counter. It was maintained that the police was not hushing up any matter of lock-up death and that wherever police personnel were found to be responsible for such death, action was being initiated against them. The respondents characterised the writ petition as misconceived, misleading and untenable in law.

### **Suggestion by Law Commission**

The Law Commission of India in response to the notice issued by Court forwarded a copy of the 113<sup>th</sup> Report regarding “Injuries in

police custody and suggested incorporation of Section 114-B in the Indian Evidence Act<sup>3</sup>

The Universal Declaration of Human Rights in 1948, which marked the emergence of a worldwide trend of protection and guarantee of certain basic human rights, stipulates in Article 5 that “No one shall be subjected to torture<sup>4</sup> or to cruel, inhuman or degrading treatment or punishment.”

### Privacy of the Fundamental Rights

Article 22 provides “no person shall be deprived of his life or personal liberty except according to procedure established by law”. Personal liberty, thus, is a sacred and cherished right under the Constitution. The expression “life or personal liberty” has been held to include the right to live with human dignity and thus it would also include within itself a guarantee against torture and assault by the State or its functionaries. Article 22 guarantees protection against arrest and detention in certain cases and declares that no person who is arrested shall be detained in custody without being informed of the grounds of such arrest and he shall not be denied the right to consult and defend himself by a legal practitioner of his choice. Clause (2) of Article 22 directs that the person arrested and detained in custody shall be produced before the nearest Magistrate within a period of 24 hours of such arrest, excluding the time necessary for the journey from the place of arrest to the court of the Magistrate. Article 20(3)

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<sup>3</sup>Section 114 in The Indian Evidence Act, 1872

Court may presume existence of certain facts. The Court may presume the existence of any fact which it thinks likely to have happened, regard being had to the common course of natural events, human conduct and public and private business, in their relation to the facts of the particular case. Illustrations The Court may presume—

(b) that an accomplice is unworthy of credit, unless he is corroborated in material particulars;

<sup>4</sup>“Torture” has not been defined in the Constitution or in other penal laws.



of the Constitution lays down that a person accused of an offence shall not be compelled to be a witness against himself. These are some of the constitutional safeguards provided to a person with a view to protect his personal liberty against any unjustified assault by the State. In tune with the constitutional guarantee a number of statutory provisions also seek to protect personal liberty, dignity and basic human rights of the citizens. Chapter V of Criminal Procedure Code, 1973 deals with the powers of arrest of a person and the safeguards which are required to be followed by the police to protect the interest of the arrested person. Section 41, Cr. P.C<sup>5</sup>. confers powers on

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‘Torture’ of a human being by another human being is essentially an instrument to impose the will of the ‘strong’ over the ‘weak’ by suffering. The word torture today has become synonymous with the darker side of the human civilisation.

Torture is a wound in the soul so painful that sometimes you can almost touch it, but it is also such intangible that there is no way to heal it. Torture is anguish squeezing in your chest, cold as ice and heavy as a stone paralyzing as sleep and dark as the abyss. Torture is despair and fear and rage and hate. It is a desire to kill and destroy including yourself. --Adriana P. Bartow

<sup>5</sup>The Code of Criminal Procedure, 1973 (CrPc)

When police may arrest without warrant.

(1) Any police officer may without an order from a Magistrate and without a warrant, arrest any person :-

(a) who has been concerned in any cognizable offence, or against whom a reasonable complaint has been made, or credible information has been received, or a reasonable suspicion exists, of his having been so concerned; or

(b) who has in his possession without lawful excuse, the burden of proving which excuse shall lie on such person, any implement of house-breaking; or

(c) who has been proclaimed as an offender either under this Code or by order of the State Government; or

(d) in whose possession anything is found which may reasonably be suspected to be stolen property and who may reasonably be suspected of having committed an offence with reference to such thing; or

(e) who obstructs a police officer while in the execution of his duty, or who has escaped, or attempts to escape, from lawful custody; or

(f) who is reasonable suspected of being a deserter from any of the Armed Forces of the Union; or

any police officer to arrest a person under the circumstances specified therein without any order or a warrant of arrest from a Magistrate. Section 46<sup>6</sup> provides the method and manner of arrest. Under this Section no formality is necessary while arresting a person. Under Section 49,<sup>7</sup> the police is not permitted to use more restraint than is necessary to prevent the escape of the person. Section 50,<sup>8</sup> enjoins every police officer arresting any person without warrant to communicate to him the full particulars of the offence for which he is arrested

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(g) who has been concerned in, or against whom a reasonable complaint has been made, or credible information has been received, or a reasonable suspicion exists, of his having been concerned in, any act committed at any place out of India which, if committed in India, would have been punishable as an offence, and for which he is, under any law relating to extradition, or otherwise, liable to be apprehended or detained in custody in India; or

<sup>6</sup>The Code of Criminal Procedure, 1973 (CrPc)

Arrest how Made

(1) In making an arrest the police officer or other person making the same shall actually touch or confine the body of the person to be arrested, unless there be a submission to the custody by word or action.

(2) If such person forcibly resists the endeavour to arrest him, or attempts to evade the arrest, such police officer or other person may use all means necessary to effect the arrest. (3) Nothing in this section gives a right to cause the death of a person who is not accused of an offence punishable with death or with imprisonment for life.

<sup>7</sup>The Code of Criminal Procedure, 1973 (CrPc)

No unnecessary restraint.

The person arrested shall not be subjected to more restraint than is necessary to prevent his escape.

<sup>8</sup>The Code of Criminal Procedure, 1973 (CrPc)

Person arrested to be informed of grounds of arrest and of right to bail.

(1) Every police officer or other person arresting any person without warrant shall forthwith communicate to him full particulars of the offence for which he is arrested or other grounds for such arrest.

(2) Where a police officer arrests without warrant any person other than a person accused of a non-bailable offence, he shall inform the person arrested that he is entitled to be released on bail and that he may arrange for sureties on his behalf.

and the grounds for such arrest. The police officer is further enjoined to inform the person arrested that he is entitled to be released on bail and he may arrange for sureties in the event of his arrest for a non-bailable offence. Section 56<sup>9</sup> contains a mandatory provision requiring this police officer making an arrest without warrant to produce the arrested person before a Magistrate without unnecessary delay and Section 57<sup>10</sup> echoes Clause (2) of Article 22 of the Constitution of India. There are some other provisions also like Sections 53<sup>11</sup>

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<sup>9</sup>The Code of Criminal Procedure, 1973 (CrPc)

Person arrested to be taken before Magistrate or officer in charge of police station.

A police officer making an arrest without warrant shall, without unnecessary delay and subject to the provisions herein contained as to bail, take or send the person arrested before a Magistrate having jurisdiction in the case, or before the officer in charge of a police station.

<sup>10</sup>The Code of Criminal Procedure, 1973 (CrPc)

Person arrested not to be detained more than twenty-four hours.

No police officer shall detain in custody a person arrested without warrant for a longer period than under all the circumstances of the case is reasonable, and such period shall not, in the absence of a special order of a Magistrate under section 167, exceed twenty four hours exclusive of the time necessary for the journey from the place of arrest to the Magistrate's court.

<sup>11</sup>The Code of Criminal Procedure, 1973 (CrPc).

Examination of accused by medical practitioner at the request of police officer.

1) When a person is arrested on a charge of committing an offence of such a nature and alleged to have been committed under such circumstances that there are reasonable grounds for believing that an examination of his person will afford evidence as to the commission of an offence, it shall be lawful for a registered medical practitioner, acting, at the request of a police officer not below the rank of sub-inspector, and for any person acting in good faith in his aid and -under his direction, to make such all examination of the person arrested as is reasonably necessary in order to ascertain the facts which may afford such evidence, and to use such force as is reasonably necessary for that purpose.

(2) Whenever the person of a female is to be examined under this section, the examination shall be made only by, or under the supervision of, a female registered medical practitioner.

54<sup>12</sup> and 167<sup>13</sup> which are aimed at affording procedural safeguards to a person arrested by the police. Whenever a person dies in custody of the police, Section 176<sup>14</sup> requires the Magistrate to hold an enquiry into the cause of death.

## Recommendations by National Police Commission

The Third Report of the National Police Commission in India

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<sup>12</sup>The Code of Criminal Procedure, 1973 (CrPc)

Examination of arrested person by medical practitioner at the request of the arrested person.

When a person who is arrested, whether on a charge or otherwise, alleges, at the time when he is produced before a Magistrate or at any time during the period of his detention in custody that the examination of his body will afford evidence which will disprove the commission by him of any offence or which will establish the commission by any other person of any offence against his body, the Magistrate shall, if requested by the arrested person so to do direct the examination of the body of such person by a registered medical practitioner unless the Magistrate considers that the request is made for the purpose of vexation or delay or for defeating the ends of justice.

<sup>13</sup>The Code of Criminal Procedure, 1973 (CrPc)

Procedure when investigation cannot be completed in twenty-four hours.

(1) Whenever any person is arrested and detained in custody, and it appears that the investigation cannot be completed within the period of twenty-four hours fixed by section 57 and there are grounds for believing that the accusation or information is well-founded, the officer in charge of the police station or the police officer making the investigation, if he is not below the rank of sub-inspector, shall forthwith transmit to the nearest Judicial Magistrate a copy of the entries in the diary hereinafter prescribed relating to the case, and shall at the same time forward the accused to such Magistrate.

(2) The Magistrate to whom an accused person is forwarded under this section may, whether he has or not jurisdiction to try the case, from time to time, authorise the detention of the accused in such custody as such Magistrate thinks fit, a term not exceeding fifteen days in the whole; and if he has no jurisdiction to try the case or commit it for trial, and considers further detention unnecessary, he may order the accused to be forwarded to a Magistrate having such jurisdiction

<sup>14</sup>The Code of Criminal Procedure, 1973 (CrPc)

Inquiry by Magistrate into cause of death

When the case is of the nature referred to in clause (i) or clause (ii) of sub-section (3) of section 174, the nearest Magistrate empowered to hold inquests shall, and in any other case mentioned in sub-section (1) of section 174, any Magistrate so

expressed its deep concern with custodial violence and lock-up deaths. It appreciated the demoralising effect which custodial torture was creating on the society as a whole. It made some very useful suggestions. It suggested:

...An arrest during the investigation of a cognizable<sup>15</sup> case may be considered justified in one or other of the following circumstances:

- (i) The case involves a grave offence like murder, dacoity, robbery, rape etc., and it is necessary to arrest the accused and bring his movements under restraint to infuse confidence among the terror stricken victims.
- (ii) The accused is likely to abscond and evade and the processes

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empowered may hold an inquiry into the cause of death either instead of, or in addition to, the investigation held by the police officer; and if he does so, he shall have all the powers in conducting it which he would have in holding an inquiry into an offence.

(1A) Where,-

(I) any person dies or disappears, on

(II) rape is alleged to have been committed on any woman,

while such person or woman is in the custody of the police or in any other custody authorised by the Magistrate or the Court, under this Code in addition to the enquiry or investigation held by the police, an inquiry shall be held by the Judicial Magistrate or the Metropolitan Magistrate, as the case may be, within whose local jurisdiction the offence has been committed.]

(2) The Magistrate holding such inquiry shall record the evidence taken by him in connection therewith in any manner hereinafter prescribed according to the circumstances of the case.

(3) Whenever such Magistrate considers it expedient to make an examination of the dead body of any person who has been already interred, in order to discover the causes of his death, the Magistrate may cause the body to be disinterred and examined.

(4) Where an inquiry is to be held under this section, the Magistrate shall, wherever practicable, inform the relatives of the deceased whose names and addresses are known, and shall allow them to remain present at the inquiry.

<sup>15</sup>cognizable offence" means an offence for which, and "cognizable case" means a case in which, a police officer may, in accordance with the First Schedule or under and other law for the time being in force, arrest without warrant.

<sup>16</sup>1994 CriLJ1981

of law.

- (iii) The accused is given to violent behavior and is likely to commit further offences unless his movements are brought under restraint.
- (iv) The accused is a habitual offender and unless kept in custody he is likely to commit similar offences again. It would be desirable to insist through departmental instructions that a police officer making an arrest should also record in the case diary the reasons for making the arrest, thereby clarifying his conformity to the specified guidelines....

### **Cases Referred**

In *Joginder Kumar v.State*<sup>16</sup> considered the dynamics of misuse of police power of arrest and opined:

No arrest can be made because it is lawful for the police officer to do so. The existence of the power of arrest is one thing. The justification for the exercise of it is quite another.... No arrest should be made without a reasonable satisfaction reached after some investigation about the genuineness and bonafides of a complaint and a reasonable belief both as to the

person's complicity and even so as to the need to effect arrest. Denying a person his liberty is a serious matter.

### **Decision of Court—ordered requirements to be followed in all cases of Arrest and Detention:**

- (1) The police personnel carrying out the arrest and handling the interrogation of the arrestee should bear accurate, visible and clear identification and name tags with their designations. The particulars of all such police personnel who handle interrogation of the arrestee must be recorded in a register.
- (2) That the police officer carrying out the arrest of the arrestee shall prepare a memo of arrest at the time of arrest and such memo shall be attested by atleast one witness, who may be either a member of the family of the arrestee or a respectable

- person of the locality from where the arrest is made. It shall also be counter signed by the arrestee and shall contain the time and date of arrest.
- (3) A person who has been arrested or detained and is being held in custody in a police station or interrogation center or other lock-up, shall be entitled to have one friend or relative or other person known to him or having interest in his welfare being informed, as soon as practicable, that he has been arrested and is being detained at the particular place, unless the attesting witness of the memo of arrest is himself such a friend or a relative of the arrestee.
  - (4) The time, place of arrest and venue of custody of an arrestee must be notified by the police where the next friend or relative of the arrestee lives outside the district or town through the Legal Aid Organisation in the District and the police station of the area concerned telegraphically within a period of 8 to 12 hours after the arrest.
  - (5) The person arrested must be made aware of this right to have someone informed of his arrest or detention as soon as he is put under arrest or is detained.
  - (6) An entry must be made in the diary at the place of detention regarding the arrest of the person which shall also disclose the name of the next friend of the person who has been informed of the arrest and the names and particulars of the police officials in whose custody the arrestee is.
  - (7) The arrestee should, where he so requests, be also examined at the time of his arrest and major and minor injuries, if any present on his/her body, must be recorded at that time. The "Inspection Memo" must be signed both by the arrestee and the police officer effecting the arrest and its copy provided to the arrestee.
  - (8) The arrestee should be subjected to medical examination by a trained doctor every 48 hours during his detention in custody by a doctor on the panel of approved doctors appointed by Director, Health Services of the concerned State or Union Territory. Director, Health Services should prepare such a

- penal for all Tehsils and Districts as well.
- (9) Copies of all the documents including the memo of arrest, referred to above, should be sent to the illaqa Magistrate for his record.
  - (10) The arrestee may be permitted to meet his lawyer during interrogation, though not throughout the interrogation.
  - (11) A police control room should be provided at all district and state headquarters, where information regarding the arrest and the place of custody of the arrested shall be communicated by the officer causing the arrest, within 12 hours of effecting the arrest and at the police control room it should be displayed on a conspicuous notice board.

The requirements mentioned above were forwarded to the Director General of Police and the Home Secretary of every State/Union Territory. And it shall be their obligation to circulate the same to every police station under their charge and get the same notified at every police station at a conspicuous place. ■





# Organisational Health, Leadership Effectiveness and Influence Tactics as Perceived by Police Personnel- Some Reflections of Vadodara Police

Dhvani Patel \* & Urmi Nanda Biswas\*\*

## Keywords

Organisational Health, Police, Leadership Effectiveness, Downward Influence Tactics.

## Abstract

*Leadership today does not revolve around the heroic actions of a single hero. Rather leadership of the future is increasingly being defined by effective teamwork (T. Wuestewald, 2006). Also, the qualities of an effective leader vary across the situations, teams and organizations. The present study investigates the relationship between perceived organisational health and perceived leadership effectiveness, as well as the relationship between perceived leadership effectiveness and perceived use of downward influence tactics. The sample for the study consisted of 100 police personnel, from 20 police stations located in and around Vadodara City. Five police personnel, varied at five levels of hierarchy, were drawn from each of the twenty sample organizations, all of them reporting to a single leader. The sample organizations comprised of eight police stations and seven special branches under the jurisdiction of Vadodara City Police; and five police stations under the domain of Vadodara District Police. The sample was administered a Personal Data Sheet and a Questionnaire which was divided into three*

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Author Intro.:

\* Research Scholar, Dept. of Psychology, Maharaja Sayajirao University of Baroda, Vadodara, Gujarat.

*sections; Section A included items on perceived organisational health, Section B included items on perceived leadership effectiveness and Section C included items on perceived use of downward influence tactics. Results indicate that there is a positive and significant correlation between all the dimensions of perceived organizational health and perceived leadership effectiveness. Also, ingratiation as an influence tactic emerged as a significant predictor of all the dimensions of leadership effectiveness.*

## Introduction

Working in the police profession is often considered to be a highly stressful job. Scholars in the past have focused their research on the stress, coping and health of police personnel. It is important to note here that employee well-being and performance of the organization depend upon the interaction of individual and organisational factors (Hart & Cooper, 2001). An organization as such, exists in relation with the environment; and the title of 'a healthy organisation' often goes to the one that not only survives in its environment, but in the process, continues to grow and adapt effectively. Organisational Health has been conceptualized as a set of fairly durable and secondary systems properties which send to transcend short term effectiveness (Miles, 1973).

Bruhn and Chesney (1994) propose that in order to achieve a strong organisational health, there needs to be a firm balance across the four interacting dimensions of Interrelation, Identity, Autonomy and Resilience. Interrelation is achieved by the way in which individuals and groups within the organisation relate to each other; Identity reflects on the clarity of purpose, shared goals and values; Autonomy is the capacity to utilize one's resources and contribute significantly; and Resilience indicates the degree of adaptability, innovativeness and problem solving adequacy. The concept of Organizational Health is of significant importance, for it enables the healthy functioning of an organisation in the face of new challenges.

Research on Organisational Health has focused on establishing its relation with other workplace variables like Employee Well-being and Performance (Cotton, P. & Hart. P.M., 2003), Level

of Organisational Commitment (Patel, M.K., 1998), Personality (Miller, R.L., Griffin, M.A., & Hart, P.M., 1999), Organisational Productivity and Effectiveness (Sayeed, O.B., 1980), and Leadership Styles (Sayeed, O.B., & Mehta, P., 1981). A closer look at the literature review leads us to notice two prominent research trends in the area of Organisational Health. One research trend is based on the idea that healthy organisations are ones that make its members healthy. Thus, organisational health is reduced to the health of its members. The other research trend throws light on the belief that organisations as such, need to be considered as individual entities (Bevan, H., 2009).

Organisational health as such can contribute to improved performance, both of the organisation and the individual members through more flexible management structures, increased autonomy and social support, a rich organisational culture and effective leadership. An effective leader in the organisation context is the one who is a fit between the organisation's needs and his/her individual talent. Thus, an effective leader not only represents as a balanced state, but also helps to achieve a balance between the organisation's needs of the present as well as the future, thereby contributing to the development of a healthy organisation. A study by Korkmaz, (2007) has successfully demonstrated how transformational leadership directly affects employees' job satisfaction and indirectly affects the health of an organisation.

Leadership effectiveness as such contributes to organisational effectiveness, in that it enables a productive and purposeful use of human and material resources. This does not mean that the sole responsibility of an organisation's health depends on the leader only. Much depends on broken parts of the system that in turn influences the organisation's health. Modern notions of leadership effectiveness place considerable emphasis on the power of the followers as important constituents of leadership. The Transformational theory of Leadership commonly states that it is the connections established between the leader-followers, which bring about a change in the follower's performance

and which in turn, proves a leader as effective or ineffective (Bass & Avolio, 1994). The concept of leadership effectiveness can also be understood by the organisational setting. As Eagly (1995) has pointed out, that leadership roles are defined within an organisational setting and the leader, whether a male or female, tries to fit into those roles. Females are found to be less interpersonally oriented in organisations that were dominated by males, as in the police department and the military.

A salient factor that paves the path to leadership effectiveness is the leader's success in influencing people (Yukl, 1989). The leader's ability to influence the team to meet the objectives is often sought after by researchers working on influence behaviors. Influence has been described as a process of bringing about a change in an individual's beliefs, attitudes and behaviors (Hinkin & Schriesheim, 1990). The process of influence requires an agent, who is the source of the influence; and the target, upon whom the influence is exerted. Influence tactics in a specific context are a function of a number of factors such as the objective of influence (personal Vs organizational), the direction of influence (downward, upward or lateral), the agent, the target and so on. A study by Yukl et al (1992) indicates toward inspirational appeal, ingratiation and pressure as the most effective tactics used by leaders to influence the subordinates. The organizational setting is also seen to impact the influence behaviors of the leader. Eagly et al (1995) point out that male and female leaders were found to be more task-oriented in male-dominated organizations. Further, a study by Reimers (2003), points out that male and female supervisor differ in their use of influence tactics toward male and female employees. Therefore, the effectiveness of a leader depends upon how gender congenial the work environment is, for the male or the female leader.

Keeping in mind, the predictive and contributing nature of the relationship between organisational health and leadership effectiveness as well as the relationship between leadership effectiveness and downward influence tactics, the present study was carried out to address the research questions: (1). To explore

the relationship between perceived leadership effectiveness and perceived organisational health; and (2). To establish a relationship between perceived leadership effectiveness and perceived use of downward influence tactics.

## Methodology

**Participants:** The sample for the present study comprised of police personnel working at varied branches and police stations, located in and around Vadodara City. From each sample organisation, purposive sampling was carried out where five police personnel, directly reporting to a single leader (i.e. the Police Sub Inspector/ Police Inspector/Assistant Commissioner of Police), were selected. The participants of the study varied at five levels of hierarchy: constable, head constable, assistant sub inspector, police sub inspector and police inspector. The number of organisations considered for the study was twenty, making the total sample size of 100 police respondents. The sample organisations comprised of eight police stations and seven special branches under the jurisdiction of Commissioner of Police, Vadodara City; and five police stations under the domain of Commissioner of Police, Vadodara District.

## Measures

The measures used in the present study were Organisational Health Description Questionnaire (OHDQ) and Leadership Effectiveness Scale (LES). Along with these measures, a Personal Data Sheet was also given to the respondents to provide information on the demographic characteristics of age, gender, educational qualification, occupational position, work experience (in years), number of years in current organization and current position, and gender and designation of the leader.

## Organisational Health Description Questionnaire

For measuring Organisational Health, items were taken from the Organisational Health Description Questionnaire by Dr. HaseenTaj. The dimensions measured are: (i) task dimensions (Goal Focus, Communication Adequacy, Optimal

Power Equalisation); (ii) Maintenance Needs Dimensions (Resource Utilization, Cohesiveness, Morale); and (iii) Growth and Changefulness Dimensions (Innovativeness, Autonomy, Adaptation, Problem Solving Adequacy). In total, 30 statements were selected to measure ten sub dimensions of Organisational Health. The respondents were asked to indicate the description of the functioning of the organisation on a five-point scale (Completely Agree-Disagree).

### **Leadership Effectiveness Scale**

For measuring Leadership Effectiveness, items were taken from the Leadership Effectiveness Scale (LES) by Dr. Haseen Taj. The dimensions measured in this scale are: interpersonal relations, intellectual operations, behavioral and emotional stability, ethical and moral strength, adequacy of communications and operation as a citizen. Respondents were asked to indicate to a five-point scale (Always-Never) the description of leadership effectiveness of their respective Organizational Head/Leader.

### **Downward Influence Tactics**

For measuring Downward Influence Tactics, the Downward Influence Strategies Scale prepared by Sudipa Nag, Sonia Nongmaithem & Nachiketa Tripathi (2008) was adopted for the present study. The scale comprised of 33 items measuring the downward influence strategies of Rationality, Assertion, Ingratiation, Use of Sanctions- both negative and positive, showing Expertise, Personalized Relations, and Exchange of Benefits. Respondents were asked to indicate on a 5 point scale (Always-Never) the ways in which their current leader goes about influencing the subordinates to get some task done.

For the purpose of the present study, the measures used in assessing Organisational Health, Leadership Effectiveness and Downward Influence Strategies were translated into Gujarati language by a group of experts. The Gujarati version of the questionnaire was validated by five experts.

### **Procedure**

In order to carry out the study, official permission for data

collection was sought from the Commissioner of Police, Vadodara City and the Commissioner of Police, Vadodara District. Once the permission to carry out research was granted, the researcher went to the allotted police stations to fix appointments with five police officers reporting to the same police inspector (P.I) or sub-inspector of police (P.S.I). After distributing the questionnaire, the respondents were requested to read the instructions carefully, and indicate their answers on a five-point scale in both the sections of the questionnaire. Participants completed a questionnaire consisting of two sections, including a Personal Data Sheet. Section A assessed Organisational Health along the following dimensions- Task dimensions, Maintenance Needs dimensions, and Growth and Changefulness dimensions. Section B assessed Leadership Effectiveness on the dimensions of Interpersonal Relations, Intellectual Operations, Behavioral and Emotional Stability, Ethical and Moral Strength, Adequacy of Communications, and Operations as a Citizen.

## **Results and Discussion**

The data was subjected to SPSS package for the statistical analysis. In order to explore the predictive relationship between (1) dimensions of perceived organizational health and dimensions of perceived leadership effectiveness, and (2) dimensions of perceived leadership effectiveness and perceived use of downward influence tactics; regression analysis was carried out among the variables. The results are further discussed.

### ***Dimensions of leadership effectiveness as predictors of dimensions of organizational health***

In order to examine the predictive relationship between dimensions of perceived leadership effectiveness and dimensions of perceived organizational health, regression analysis was performed to identify the percentage of variance explained and individual contribution made by the dimensions of leadership effectiveness on different dimensions of the organizational health. The values of significant predictors are indicated in Table 1. As seen in the table 1, the F values of all the dependent variables are significant at 0.01 level.

**Table 1 Compiled Result of Linear Regression Analysis showing the effect of Leadership Effectiveness on Organizational Health**

β values of the significant predictors										
DIS IVs	Goal Focus	Communication Adequacy	Optimal Power Equalization	Resource Utilization	Cohesiveness	Morale	Innovativeness	Autonomy	Adaptation	Problem Solving Adequacy
Interpersonal Relations								0.54**		0.26*
Intellectual Operations		-0.30**								
Behavioral & Emotional Stability					-0.15*					-0.26**
Ethical & Moral Strength										
Adequacy of Communications	0.27*	0.33**	0.37**	0.25*	0.79**	0.27*				
Operations as a Citizen	0.39**	0.51**	0.35**	0.38**	0.30**	0.30*			0.36**	0.37**
F values	6.02**	15.01**	10.63**	9.15**	28.70**	6.11**	7.88**	7.26**	7.32**	16.29**
R	0.52	0.70	0.63	0.60	0.80	0.53	0.58	0.56	0.56	0.71
Adj. R <sup>2</sup>	0.23	0.45	0.36	0.33	0.62	0.23	0.29	0.27	0.27	0.48



This means that all the leadership effectiveness dimensions put together significantly contribute to explain the variance in all the dependent variables, i.e., all the dimensions of organizational health. Pearson's product-moment correlation carried out among the variables also reveals a positive and significant correlation among all the dimensions of organizational health and leadership effectiveness. This means that the police personnel as respondents of the study indicate that their positive perception of organizational health is significantly correlated to their perception of their leader's effectiveness. This finding is in tune with what Lencioni (2012) states that an organization cannot be healthy if there is dysfunction at the top. In order to keep an organization healthy for longer periods of time, the leader must not only communicate clarity but also must reinforce clarity. An effective leader enables a productive and purposeful use of human and material resources. A review of past studies (Mehmet, 2007; Cemaloglu, 2011; Khademfar&Idris, 2012) leads us to a positive correlation between transformational leadership styles and organizational health.

The Regression Analysis reveals that the ethical & moral strength dimension of leadership effectiveness independently does not significantly contribute to any dimension of organizational health. In an organization where ethics and morals hold a high value, this dimension fails to contribute to good organizational health of the police stations. A leader who is high or low on ethics, whose morality is intact or absent, has no significance whatsoever on the organizational health.

None of the dimensions of leadership effectiveness individually contribute toward the innovative dimension of organizational health, although the F value ( $F=7.88^{**}$ ,  $**P<0.01$ ) indicates that all the leadership effectiveness dimensions put together significantly contribute to the organizational health dimension of innovativeness. In an organization of the police nature, which functions more on the "embeddedness" orientation (tension-reducing) as opposed to the "activity" orientation (curious and exploring), lesser value is placed on the innovative functions of the organization. However, the behavioral and emotional stability dimension of leadership

effectiveness is found to be positively and significantly correlated with the organizational health dimension of innovativeness ( $r=0.35^{**}$ ,  $**P<0.01$ ). This indicates that leaders who are perceived as emotionally stable and exhibit predictable behaviors, are better able to generate growth and change within the organization. A leader, who is calm and confident in the face of crisis, is more likely to generate new ideas and strategies for the organization's survival as and when the situation demands.

Intellectual operations emerged as a significant predictor of communication adequacy dimension ( $\beta= -0.30^{**}$ ,  $**P<0.01$ ). However, the negative value indicates toward an inverse relationship between intellectual operations and communication adequacy dimension of organizational health. This means that leaders perceived as higher on the intellectual operations contribute to low levels of communication adequacy within the organization.

Operations as citizen dimensions of leadership effectiveness emerged as a positive and significant predictor of all the dimensions of organizational health, except the inventiveness and autonomy dimensions of the organizational health. A healthy organization is one that not only survives in its environment, but in the process, continues to grow and adapt effectively. When a leader emerges as effective in his role of a liaison officer between the environment and the organization, he contributes to making the organization a healthy one.

Adequacy of communication dimension of leadership effectiveness emerged as a positive and significant predictor of the goal focus ( $\beta= 0.27^*$ ,  $*P<0.05$ ), communication adequacy ( $\beta= 0.33^{**}$ ,  $**P<0.01$ ), optimal power equalization ( $\beta= 0.37^{**}$ ,  $**P<0.01$ ), resource utilization ( $\beta= 0.25^*$ ,  $*P<0.05$ ), cohesiveness ( $\beta= 0.79^{**}$ ,  $**P<0.01$ ) and morale ( $\beta= 0.27^{**}$ ,  $**P<0.01$ ). A study by Rajabian (2012) indicates toward a significant relationship between communication skills of the manager to the perceived organizational health, such that managers' attempt to improve communication skills was reflected upon on an improvement in organizational health. Apart from organizational health, a leader's

ability to communicate effectively, to motivate and to build teams positively lead to successful implementation of organizational change (Luecke, 2003; Gilley et al, 2009).

Interpersonal relations emerged as a positive and significant predictor to the autonomy and problem solving adequacy dimensions of organizational health. Leaders within organizations have the opportunity to enhance skills and lead their team to further change through their routine interpersonal interactions at the workplace (Drucker, 1999; Howkins, 2001). Behavioral and emotional stability dimension of leadership effectiveness emerged as a significant predictor of cohesiveness ( $\beta = -0.15^*$ ,  $*P < 0.05$ ) and problem solving adequacy ( $\beta = -0.26^{**}$ ,  $**P < 0.01$ ) dimensions of organizational health. This inverse relationship indicates that leaders, who are high on behavioral and emotional stability, contribute to low levels of cohesiveness and problem solving adequacy within the organization.

## Downward Influence Tactics as Predictors of Leadership Effectiveness

**Table 2 Compiled Result of Linear Regression Analysis showing the effect of Downward Influence Tactics on perceived Leadership Effectiveness**

$\beta$ values of the significant predictors						
DIS IVs	Interpersonal Relations	Intellectual Operations	Behavioral & Emotional Stability	Ethical & Moral Strength	Adequacy of Communications	Operations as a Citizen
Assertion						

In order to examine the predictive relationship between downward influence tactics and leadership effectiveness, regression analysis was performed to identify the percentage of variance explained and individual contribution made by downward influence tactics on different dimensions of leadership effectiveness. The results are indicated in Table 2. As seen in table 2, the F values of all the dependent variables are significant at 0.01 level. This means that all the downward influence tactics put together significantly contribute

Exchange of Benefits						
Expertise						
Rationality				0.23*	0.31**	
Ingratiation	0.61**	0.46**	0.29**	0.54**	0.42**	0.53**
Personalized Relations						-0.40**
Sanctions-negative			-0.58**	-0.47**		
Sanctions-positive						0.27*
F values	9.87**	5.41**	7.49**	17.15**	7.10**	10.11**
R	0.68	0.56	0.63	0.77	0.62	0.68
Adj. R <sup>2</sup>	0.41	0.26	0.34	0.56	0.33	0.42

to explaining the variance in all the dependent variables, i.e. all the dimensions of perceived leadership effectiveness.

The regression analysis reveals that ingratiation as an influence tactic emerged as a major significant predictor of all the dimensions of leadership effectiveness. This indicates that leaders, who are perceived as using ingratiation to influence their subordinates, are perceived as more effective in their leadership role. Although studies in the past have pointed out ingratiation as a moderately effective tactics (Yukl & Bruce, 1992; Falbe & Yukl, 1992), Higgins et al (2003) indicate toward ingratiation leading to a positive effect on work outcomes. Ingratiation has been categorized as a soft tactics, which means seeking compliance in a polite and friendly manner (Kipnis & Schmidt, 1985). Superiors are found to use more of soft tactics than hard tactics, for two main reasons- (i) soft tactics allows the target to decide whether or not to accept the influence exerted, and (ii). expectation of the agent of a possible future interaction with the target decreases the chances of using hard tactics. More often than not, ingratiation as an influence tactics is

used to meet personal goals of the superiors (Shrivastava, 2007). In the law enforcement sector, the ingratiation tactics emerges as more prominent, the reason being that ingratiation has been seen to be a successful tactics in political climate (Ansari & Rehana, 1986). Also, the police personnel perceive their leaders to be using more of ingratiation tactic to influence them, for studies support this finding that ingratiation is more often used in the downward direction, that is, from superiors-to-subordinates.

Rationality as an influence tactics emerged as a significant predictor of the ethical and moral strength and adequacy of communications dimensions of leadership effectiveness. When leaders use logical reasoning and factual arguments to influence the subordinates to carry out any task, they are perceived as being higher on morality and ethics as well as communication skills. Rationality is more often used as a single tactics, than in combination of tactics. The choice of tactics is seen as a function of the objective as well as the direction of influence attempt. To meet organizational objectives, rational tactics are more frequently employed (Shrivastava, 2007). Like ingratiation, rational tactics are more frequently employed in the downward direction.

The use of negative sanctions emerged as a significant predictor of the behavioral and emotional stability dimensions ( $\beta = -0.58^{**}$ ,  $**P < 0.01$ ) and also the ethical and moral strength dimension ( $\beta = -0.47^{**}$ ,  $**P < 0.01$ ). However, the negative  $\beta$  values indicate that there is an inverse relationship between negative sanctions and the dimensions of leadership effectiveness. This means that leaders, who use negative sanctions as a means of influencing subordinates, are perceived as lower on the ethical and moral strength, and the behavioral and emotional stability dimensions. The use of positive sanctions emerged as a significant predictor of the operations as a citizen dimension of leadership effectiveness ( $\beta = 0.27^*$ ,  $*P < 0.05$ ). This means that leaders, who use positive sanctions to influence their subordinates, are perceived as higher on their functions as a liaison officer between the organization and the environment. Wolfe (2011) in a study indicates that techniques involving positive feelings are more successful than

negative tactics. Use of negative sanctions further reduces the level of job satisfaction among employees (Tripathi & Tripathi, 2001). A leader's use of influence tactics is often considered a mirror of his/her personality. A study by Cable and Judge (2003) indicates toward a relationship between personality dimensions and the leader's preference for specific influence tactics. Elaborating further, the findings reveal that a leader's high score on emotional stability shows a greater use of rational persuasion and lesser use of inspirational appeal. Therefore, leaders' use of negative sanction often reflects upon their behavioral and emotional stability, perceiving the leader as ineffective in controlling oneself and comprehending the situation.

Personalized relations as an influence tactics emerged as a significant predictor of the operations as a citizen dimension of leadership effectiveness ( $\beta = -0.40^{**}$ ,  $**P < 0.01$ ). However, the negative value indicates toward an inverse relationship between personalized relations and operations as a citizen. A study by Yukl et al (2003) indicates toward managers' lesser preference for the personalized relations as a means to influence subordinates as compared to other tactics.

## Conclusion

The Police personnel of Vadodara City Police and Vadodara District Police perceive their leader's effectiveness to be strongly and positively related to the organizational health of the police stations. Furthermore, the qualities of the leader, such as adequate communication skills and operating as a citizen, both for the organization and the surrounding environment, were found to lead to better organizational health.

The police personnel perceive their superiors as using more of ingratiation and rationality as influence tactics to emerge as effective leaders. Within the law enforcement sector, use of positive sanctions has a greater impact than the use of negative sanctions, on the perception of leadership effectiveness. Leaders using negative sanctions as a means of influencing subordinates are found to be low on the ethical and moral strength, as well as the behavioral and emotional stability. ■

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# Influence of Emotional Intelligence on Adjustment of Police Personnel

Dr. Shah Alam\*

## Keywords

Adjustment, Need Deficiency, Self Awareness, Social Awareness, Self Regulation, Motivation, Emotional Intelligence, Social Skills, Personally.

## Abstract

*World has changed in all respects. Scientific inventions and technological developments have brought about tremendous changes in the matter of crime, law and order, security, diplomacy and politics. With this the attitudes of general public regarding policing have been changing. The expectation of the public from the police on police functioning, insecurity of public about their life and property, their knowledge about day to day crime events in the society, the depiction about crime situation in different mass media, the proliferation of new enactments, entrusting the police with additional responsibilities of enforcing many new laws etc. It is also a fact that police's performance is not up to mark. The uncertain nature of police work and changing role of police in society has created greater work demands therefore making our police personnel emotionally vulnerable endangering their adjustment. Keeping in mind these facts, the present study was planned to see the impact of emotional intelligence on the adjustment. The sample (N=200) for the present study was collected from Jammu and Kashmir Police. Two scales namely emotional intelligence scale, developed by Singh and adjustment inventory developed by Kumar were used. In order to meet the objectives of the present study, the data were analyzed by applying multiple regression analysis. The results reveal the fact that*

Author Intro.:

\* Associate Professor, Dept. of Psychology, Amu, Aligarh (UP)

*total emotional intelligence and almost all its constructs influence the one or the other facet of the adjustment of police personnel.*

## Introduction

Indian police organization is one of the largest in the world. In today's dynamic work place, successful organizations need employees who will do more than their role requirements. When employees frequently exert behaviors that exceed their formal role requirements, they improve the overall functioning of the organization but in the present climate of mass demonstration, mob violence, and unexpected terrorist attacks police personnel are sometimes required to perform as a leader, manager, and friend to their colleagues, while maintaining a positive reflection on the society. The danger inherent in their job, the frustrations caused by their supervisors, and the psychological and physical separation from friends and family seemingly make the police personnel's life stressful and thus threatens their adjustment. The uncertain nature of police work and changing role of police in society has created greater work demands therefore making our police personnel emotionally vulnerable and endanger their adjustment. Police personnel are expected to act personably, rather than personally, in dealing with distressing operational instances, with their effectiveness compromised if they fail to maintain this distinction. Emotional control is an important part of occupational identity both in terms of the public's expectation and demands of their job. In many ways, police officers' integrity is considered to rest with the "suppression of affect". So, in this context emotional intelligence skill, such as above-average communication skills, reactions appropriate to the presenting situation, and the ability to resolve conflicts satisfactorily can be listed as desirable characteristics for the proper adjustment of the police personnel.

Following the violent acts world over police organizations have been under increasing demands to hire, retain qualified and trained police officers. Attrition of qualified police officers has been identified as a major challenge facing police administration (Gettinger, 1984; Harris & Baldwin, 1999; Manili & Connors, 1988). Attrition of police officers has been also linked to work attitudes

(Dantzker, 1994; Greene, 1989; Oliver, 2004). Policing, a service-oriented profession, is charged with a critical role in sustaining law and order in an ever-changing and diverse environment. In turn, it also equires police personnel who can adjust to this ever-changing and diverse environment quickly. Therefore, what persists is the need for police personnel who are not only smart but are high at emotional intelligence and have adequate adjustment which allows them to perform their jobs in an efficient and effective manner. The term 'police' broadly refer the purposeful maintenance of peace & harmony in the society and the prevention of unlawful acts. The police are empowered to enforce the law, protect property and reduce civil disorder. Their powers include the legitimized use of force. The term is most commonly associated with police services of a state that are authorized to exercise the police power of that state within a defined legal or territorial area of responsibility.

**Adjustment:** Basically the concept of adjustment was biological and originally it was termed adaptation. The term adaptation has been replaced by adjustment which now stands for psychological survival in which the social scientists are more interested (Lazarus, 1961). The term adjustment has been described in many ways by different psychologists, biologists, mental hygienists and other behavioural scientists. Generally it has been argued that the concept of adjustment is a mere fiction, as people have always failed in giving a standard definition of adjustment, partly because of its many meanings, and partly because the criteria against which adjustment could be evaluated are not well defined; further the boundaries between adjustment and maladjustment are never water-tight. In simple term adjustment refers the extent to which an object fits the purpose for which it is intended. Hence, adjustment is taken to be a process and not as a condition.

During the process of adjustment, an individual is confronted with factors i.e. environmental demands, and needs and motives to be satisfied. There is always a conflict between these two forces which call forth adjustive process. And that behaviour has been considered adjustive behaviour which makes a comparison between these two forces and help the individual achieving harmonious, stable, and

satisfying relationship with his environment. Robert & Levinson (2001) found that police officers took their job stress home and it influences their interaction with their wives it means that the home adjustment of police officers is in question.

**Emotional Intelligence:** Emotional intelligence is the ability to perceive emotions, to assess and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional intellectual growth (Mayer and Salovey, 1997). According to Goleman (1998) "emotional intelligence" refers to the capacity for recognizing our own feelings and those of others, for motivating ourselves, and for managing emotions, well in ourselves and in our relationships. From the above exposition it is clear that emotional intelligence refers to attributes such as understanding one's feeling, empathy for others, and the regulation of emotions to enhance one's life. That is, EQ can lead one to healthy relationships and to have the ability to respond to the challenges of one's life and career in a positive manner.

To understand emotional intelligence, various models have been proposed. Each model allows different classifications of the construct, but these classifications are, in some sense, compelling and complementary. These are- the emotional intelligence ability model by Mayer and Salovey (Brackett & Salovey, 2004), Bar-On's Emotional-Social Intelligence (ESI) model (Bar-On, 2006), and the emotional competencies model focused on the workplace (Goleman, 1998).

## Review of Literature

The importance of emotional intelligence in everyday life can't be overlooked for general people and particularly for police personnel. Several studies have found that emotional intelligence can have a significant impact on various elements of everyday living. Palmer et. al. (2002) found that higher emotional intelligence was a predictor of life satisfaction. It was reported that men higher in emotional intelligence are also more likely to use an adaptive defense style and thus exhibited healthier psychological adaptation. Performance measures of emotional intelligence have illustrated that higher levels

of emotional intelligence are associated with an increased likelihood of attending to health and appearance, positive interactions with friends and family, and owning objects that are reminders of their loved ones. Mayer, Caruso, and Salovey (1999) pointed out that emotional intelligence correlated significantly with higher parental warmth and attachment style while others found that those scoring high in emotional intelligence also reported increased positive interpersonal relationships among children, adolescents, and adults (Rice, 1999; Rubin, 1999). On the other side of the coin, negative relationships have likewise been identified between emotional intelligence and problem behavior. Mayer, Caruso, and Salovey (2000) found that lower emotional intelligence was associated with lower self-reports of violent and trouble-prone behavior among college students. Lower emotional intelligence has been significantly associated with owning more self-help books, higher use of illegal drugs and alcohol, as well as increased participation in deviant behavior.

Adjustment has been studied in relation to approval motives (Shamshad, 1996) cognitive differentiation, effect of intelligence on adjustment (Shamshad, 1996) effect of sex difference on adjustment (Shamshad, 1996). Martin and Robin (1999) examine the relationship between pre-move relation preparations with psychological adjustment to job relocation. They found that pre-move relocation preparation the better was the relocations' post move mental health and job-related contentment and enthusiasm. Those police personnel who have been informed earlier about their move feel less stress. Nezelek and Gable (2002) studied depression as a moderator of relationship between positive daily events and day-to-day psychological adjustment. It was reported that daily adjustment negative co-varied with the number of negative events and adjustment. Furthermore, for the self-esteem and cognitive trial measures, adjustment co-varied more strongly with negative and positive events for the depressed than they did for the non-depressive. Shulman and associates (2000) conducted study on associations between family relationships and individual adjustment on young male soldiers during the first week of basic training. Three sources of information were used to evaluate. The results show that family relationship partly soldier's closeness to best friends, number

of social nominations and commanders rating of soldier's military and social competence. In addition, family relations explained soldiers perceived serial competence as assessed via closeness to best friend and number of socio-metric nominations. It is argued that together, the results retreat the role played by the family and attitude toward offspring learning home and toward their adjustment to military service. Emotional intelligence has also been studied with: job satisfaction (Muhammad, 2006), personality (Day & Associates, 2005), adaptation to occupational culture (Bar-On et al. 2000), negative mood regulation, and burnout (Ricca, 2003) etc. It has been demonstrated to correlate with various organizational outcomes such as job performance, organizational commitment, and organizational citizenship behaviors (Cote & Miners, 2006; Martin et. al., 2005; Zukerman et. al., 2006). Whereas, adjustment has been taken in relation to need deficiency and job stressors (Alam, 2007). But to date, fairly little is known as it pertains to the relationship between emotional intelligence and adjustment in general and even less is known with regards to this relationship as it applies to police personnel.

## Objective and Hypothesis

**Objectives-** The objective of present research endeavor is to see the influence of emotional intelligence on adjustment and to assess the levels of emotional intelligence and adjustment of police personnel.

**Hypotheses-** Keeping in view the above objectives following hypotheses were formulated:

**Ho1:-** "Emotional intelligence" will not influence adjustment and its two facets viz; social and emotional among police personnel.

**Ho2:-** "Self awareness- a facet of emotional intelligence will not effect adjustment and its two facets i.e. social and emotional among police personnel.

**Ho3:-** "Self regulation" a facet of emotional intelligence will not influence adjustment and its two facets i.e. social and emotional among police personnel.

**Ho4:-** “Motivation” a facet of emotional intelligence will not influence adjustment and its two facets i.e. social and emotional among police personnel.

**Ho5:-** “Social awareness”- a facet of emotional intelligence will not influence adjustment and its two facets i.e. social and emotional among police personnel.

**Ho6:-** “Social Skills”- a facet of emotional intelligence will not influence adjustment and its two facets i.e. social and emotional among police personnel.

## Method

### *Participants*

For the present study a sample of male police personnel were selected (N=200). The data was collected from Jammu and Kashmir police and the sample was purely purposive in nature. The average age, salary, and number of dependents of the sample was 32.21 years, 10,383.82 rupees, and 6 members respectively.

### *Measures*

Emotional intelligence Scale developed and standardized by Singh (2004) was used. The scale consists of sixty statements with five alternative responses. The items of Emotional Intelligence scale were grouped under five categories namely, Self Awareness, Self Regulation, Motivation, Social Awareness and Social Skills. The subjects have to weight statements in 5,4,3,2 &1 for describe me moderately well, described me a little and not at all described me respectively. High score indicates high level of Emotional Intelligence and low score indicates low level of Emotional Intelligence. The author has reported the scale as highly reliable and valid.

Adjustment measurement scale as constructed and standardized by Kumar (1999) has been used. There are two dimensions of the adjustment inventory i.e. Social & Emotional. The social adjustment consists of ten items whereas emotional adjustment consists of thirty items, in this way there are forty items of the inventory. The inventory is applicable to both individual and group. The scoring of inventory



is very simple. A, 'No' response is assigned a numerical value of 1 except for the item no. 33 in which case reverse is applicable. Higher the total score, the better would be the adjustment of the subject. The reliability and validity of the inventory is reported  $r=0.93$  and  $r=0.71$  respectively.

### Statistics Used

In order to meet the objectives of the study, the objectives were transformed into the hypothetical relationship called hypothesis. In the light of the proposed hypotheses, it was decided to apply Stepwise Multiple Regression Analysis (SMRA) which is quite flexible to assess two or more predictors at a time to see their influence on criterion variables. It was done with the help of SPSS (Statistical Package for research in Social Science).

### Results and Discussion

Stepwise multiple regression gives forth many tables, in the present section only two tables viz; table for ANOVA and table for Coefficients have been shown for the sake of understanding and interpretation of results. Table – 1.1 of ANOVA presenting F-values ranging from  $F=14.531$  to  $F=29.820$  which are statistically found highly significant far beyond .01 level of confidence hence, it confirms that there would have been definitely some IVs predicting 'social adjustment' an area of adjustment of police personnel.

**Table–1.1 Showing Stepwise Multiple Regression Predictors (IVs) of Social (DV) - a dimension of adjustment**

#### ANOVA

Model	Sum of squares	df	Mean Square	F	Sig.
1. Regression	686.624	1	686.624	29.820	.000 <sup>a</sup>
Residual	2259.166	198	23.053		
Total	2945.790	199			
2. Regression	809.137	2	404.568	20.722	.000 <sup>b</sup>

Residual	2136.653	197	22.027		
Total	2945.790	199			
3. Regression	949.852	3	316.617	18.248	.000 <sup>c</sup>
Residual	1995.938	196	20.791		
Total	2945.790	199			
4. Regression	1071.184	4	267.796	14.531	.000 <sup>d</sup>
Residual	1874.606	195	19.733		
Total	2945.790	199			

a=self regulation, b=motivation, c=social skills, d=social awareness. dependent- social

**Table-1.2: Showing Coefficients**

Model	Un-standardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1. Constant: self regulation	.716	3.223		2.222	.825
	.103	.019	.483	5.458	.000
2. Constant: self regulation motivation	3.824	3.692		1.036	.303
	.101	.018	.474	5.480	.000
	.244	.104	.204	2.358	.020
3. Constant: self regulation motivation social skills	3.364	3.591		2.937	.351
	.137	.023	.644	6.051	.000
	.265	.101	.221	2.621	.010
	.492	.189	.278	2.602	.011

4. Constant:	3.145	3.500		3.899	.371
self regulation	.160	.024	.749	3.394	.000
motivation	.287	.099	.239	4.020	.005
social skills	.568	.187	.321	3.941	.003
social awareness	.435	.175	.221	2.183	.015

This has been ascertained by another step of multiple regression analysis which calculated t-values as given in table-1.2 for coefficients. The table clearly emphasizes that four dimension of emotional intelligence viz; self regulation, motivation, social skills and social awareness are found to be significant predictors of social adjustment as there corresponding t-values,  $t=3.394$ ,  $t=4.020$ ,  $t=3.941$  and  $t=2.183$  respectively are statistically rendered significant far beyond .01 level of confidence. Hence related null hypotheses =  $H_03$ ,  $H_04$ ,  $H_06$  and  $H_05$  respectively stand rejected.

Emotional Intelligence is an important element for the success of human being particularly at workplace. It is very much clear from above findings that four facets of emotional intelligence i.e. self respect, motivation, social skills and social awareness are influencing social adjustment of police personnel. The police personnel of Kashmir Valley were found to be emotionally mature as the result indicates that they are able to identify their feelings emotions and moods, they know their strength and weaknesses and they take initiative to interact in social situation inspite of their hard work. They always try to improve their performance by striving to achieve the goals. They also believe in performance and also have faith in 'where there is will there is way', hence, they are always motivated. They have social skills and social awareness too. They have belief in themselves as communicator, leadership, etc. They have ability to sense pulse of others. It means that they are completely aware about the feelings, emotions of the people of the society hence, they are socially adjusted. It is very difficult for police personnel to interact and attend social gatherings but due to emotional ability the social adjustment of police personnel is possible otherwise they

would be maladjusted.

**Table-2.1 Showing Stepwise Multiple Regression Predictors (IVs) of Emotional (DV) - a dimension of adjustment**

**ANOVA**

Model	Sum of Squares	df	Mean of Squares	F	Sig.
Regression	1292.720	1	1292.720	60.913	.000 <sup>a</sup>
Residual	5090.860	198	25.711		
Total	6383.582	199			

a=motivation. dependent- emotional.

**Table-2.2 Showing Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	34.347	1.082	.450	31.749	.000
motivation	.205	.029		4.739	.000

In the Table – 2.1 the influence of predictor variables (IVs) have been shown for the emotional- a dimension of adjustment and the F-value (F=60.913) is found to be highly significant. It denotes that there is certainly some predictor variable significantly influencing one of the adjustment dimensions namely 'emotion'. It is amply clear from the Table-2.2 that IV that entered the equation is 'motivation' - a dimension of emotional intelligence. As it's corresponding t-value given in Table-2.2 (t=4.739) is highly significant beyond .01 level of confidence and hence related null hypothesis Ho4 is rendered rejected.

So far as police work is concerned it is fact that police work does not advocate the demonstration of feelings and emotions. Indeed,

it strongly encourages the suppression of emotions; for fear that it would interfere with the ability to make rational judgments and decision. Emotions and feelings, however, do impact police work. Emotions are inherent within the human condition and it cannot be legislated out of existence by organization policy or culture. So the findings of present research study indicates that a facet of emotional intelligence i.e. motivation found its impact on adjustment. Furthermore most of police personnel are not highly qualified but getting an average salary of more than ten thousand per month hence, they identify themselves with the work and also perceive satisfaction from the work they are doing. As the level of emotional adjustment is low but their job is such that they cannot demonstrate their negative kind of emotions, feelings and fear etc., but sometimes, they became emotionally imbalance which leads to them to commit unlawful acts like suicide, homicides.

**Table-3.1 Showing Stepwise Multiple Regression Predictors (IVs) of Total Adjustment**

#### ANOVA

Model	Sum of Squares	df	Mean of Squares	F	Sig.
Regression Residual Total	942.606	1	942.606	54.838	.000 <sup>a</sup>
Regression Residual Total	1249.032	2	624.516	21.090	.000 <sup>b</sup>

a=total emotional intelligence,

b=self awareness.

dependent- adjustment.

**Table-3.2: Showing Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)					
total	32.927	.977		33.692	.000
emotional	.176	.027	.419	6.497	.000
intelligence					
(Constant)					
total	30.069	1.204		25.326	.000
emotional	.210	.037	.500	3.649	.000
intelligence					
self	.232	.053	.353	2.528	.000
awareness					

Table-3.1 indicates that some predictor variables significantly influence total adjustment of police personnel as highlighted by significant F-value ( $F=21.090$  and  $F=54.838$ ). The predictor variables that emerged to influence adjustment are 'total emotional intelligence' and self awareness- a facet of emotional intelligence as their t-values ( $t=3.692$  &  $t=2.528$ ) given in Table-3.2 are found to be highly significant respectively. As a consequence, null hypotheses  $H_{o1}$  and  $H_{o2}$  are rendered rejected.

Since police personnel have perception of self awareness which refers to cognitive ability to accurately appraise one's own functions, feelings and behaviours. So by keeping in mind the above negative and positive aspects of job life they make judgments and decisions which help them to adjust socially and emotionally. In the light of the discussions on these two predictor variables, it is imperative to mention that these IVs should be given proper care to enhance overall adjustment. This can be done by imparting training how to increase level of emotional intelligence and self awareness. If

overall adjustment is maintained then in view of present investigator adequate success will be attained in which the adjustment level of police personnel may be automatically enhanced. In the end it will not be out of context to mention some suggestions and recommendations.

## **Recommendations**

The population of country is increasing with its own pace but the number of police personnel is static, even less than the sanctioned position. Hence, there is urgent need to increase manpower position for decreasing workload and extra burden. The number of police personnel should be according to the proportion of population of each police station. Police personnel have to do a variety of tasks. There must be specialized training for each task and only competent personnel may be deputed for this. During data collection it was observed that interpersonal relations between colleagues, superiors and subordinates are not congenial. That should be improved by creating better working conditions. Psychologists/counsellors be appointed for early detection of emotional, social and mental problems for promoting positive mental health and thinking to avoid psychological disorders. It has been researched out that Emotional Intelligence can be increased by providing Emotional Competence training programme. The Government should organize such training for police personnel irrespective of their hierarchy. The police personnel must plan their daily time. They should be taught time management that will lead to better adjustment. It is important that the police personnel must avoid excessive use of alcohol and drugs to reduce anxiety, stress and emotions. Use of such things put negative impact on adjustment. Generally, public harbors negative attitude towards police without ample reasons as they keep themselves away when their participation is required. It is necessary to modify the public perception regarding police functioning; this can be done by giving the role of police to public on experimental basis. The public must be invited to come to police station and act as police personnel. This will help the public to understand the practical problems of police personnel as well as modify the misperception of the police personnel. In the end it is

imperative to mention here that the public should keep in mind that police personnel are human being they have emotions and feelings too. They need public cooperation for effective and honest work. ■

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# Forensic Aquatic Entomology A Review

Sahil Sharma\* & Rajinder Singh\*\*

## Keywords

Forensic Aquatic Entomology, Insects, Postmortem interval, Carcass.

## Abstract

*Forensic entomology is one of the most useful tools in estimating the post mortem interval (PMI). Insects on corpses are important in the decomposition of cadavers, and are used as evidence in criminal investigation. Number of researches and review articles are available on forensic entomology in terrestrial habitat signifying their importance but not much work has been reported on forensic entomology in aquatic habitat. The present paper reviews the studies done on forensic aquatic entomology, its importance, future prospective and forensically important aquatic insects as reported previously has also been listed.*

## 1. Introduction

In death related investigations, the determination of time since death is of paramount importance to verify or disprove alibi and to reconstruct the event of crime. By using medical parameters we can determine the time of death, only if body is recovered within short period after death, but this becomes difficult as the time progresses. Infact, after 72 hours, forensic entomology is usually the most accurate and often the only method for determining PMI

Author Intro.:

\* Research Scholar, Dept. of Forensic Science, Punjabi University, Patiala.

\*\* Assistant Professor, Department of Forensic Science, Punjabi University, Patiala  
– 147002. Mobile no. – 8968741133

(postmortem interval) [1]. In most of the homicidal cases victims are not discovered until months or even more after death and in these types of cases it is vital to determine time of death [2]. Forensic entomology is the use of the insects and other arthropods that feed on dead-decaying remains to aid legal investigations. It helps in determining the time since death [3,4,5,6,7,8], medicolegal questions regarding the surroundings [5,7,8] and hygiene of the scene [5], physical abuse or neglect if any [7,8], determination of poisons or drugs [6,7] and food contamination[5,8].

Decomposition of a dead body starts through the action of bacteria and fungi, there are two major groups of insects which get attracted to cadavers and provide the majority of information required for forensic investigations. These are flies (order Diptera) and the beetles (order Coleoptera). The larvae of flies can feed directly on the carcass and thus the flies are reported to arrive first on carcass. The insects undergo physical changes from one life stage to the next which is known as metamorphosis. Flies undergo holometabolous development, with a distinct variation i.e. the flies begin life as an egg then grow to form larvae (first, second and third instar larvae), then to pupae stage and finally to adult stage. Beetles undergo complete metamorphosis, but their egg and pupal stages are often hidden in protected areas and the larvae are often underground or under the body and not readily visible. These four stages (egg, larva, pupa, and adult) are also part of each beetle's life cycle. In aquatic environment insects also undergo gradual or complete metamorphosis. Each stage of metamorphosis takes specific time depending upon the type of species, temperature, season, presence/absence and type of clothing, scavenging and biogeoclimatic zone etc. and based on these stages PMI is estimated. Therefore, it is very essential to identify the morphological and anatomical features of the immature stages of these insects and taxonomic keys are utilized to identify order, family, and species [3,4,]. The study regarding the use of terrestrial insects in estimating the PMI has been very well established very less emphasis is given to the forensic aquatic entomology [2]. The terrestrial insect fauna of most of the European countries is very much established and it is very well utilized for legal investigations and accepted in court of law [9].

## 1.2. Forensic Aquatic Entomology

Aquatic insects have received considerable attention within the last few decades. Insects are very successful in the fresh water environment and this is demonstrated by their diversity and abundance, broad distribution, and their ability to exploit most types of aquatic habitats [10]. However, only 3% of all insect species resides in aquatic or semi-aquatic habitat. In some freshwater habitats, insects may comprise over 95% of the total species of macro-invertebrates. Most aquatic arthropods spend a major portion of their life cycle in water, but in many species only the growing and feeding stages are in water while the reproductive portion of the life cycle (winged flying adults) is terrestrial and of short duration. Therefore, death scene investigators usually will encounter only larvae, pupae, or other immature stages on submerged bodies. However, during warmer times of the year, newly emerged winged adults may be encountered on corpses found on the surface or along shorelines or riverbanks [3,4]. The importance of study of aquatic entomology to the Forensic Science is very much similar to that of terrestrial entomology, by using aquatic entomology we can determine time of submergence i.e. for how long the body was submerged in water [2,11,12,13].

Historically, different organisms, such as plants, pollen, fungi, mammals, and insects, have proven useful in forming evidentiary linkages among suspects, victims and property with specific locations, particularly at outdoor crime scenes [14]. The terrestrial insect fauna is very well known and is being used in estimating the PMI. But in those cases where the corpses are found in aquatic environment it is very difficult to use terrestrial insects to determine PMI, as aquatic environment resist the oviposition and subsequent development of terrestrial sarcophagous insect larvae. The freshwater and marine insect fauna plays very important role in forensic investigations but they received very little attention with respect to the other aquatic organisms such as macro-invertebrates and algae in both freshwater and marine environments. A review of the literature found that over 80% of studies pertained to terrestrial organisms, while less than 20% pertained to aquatic organisms [3,4] and these studies

were mostly concentrated on Blowflies and a few other terrestrial species that colonize the putrid corpse after it floats to the surface. Submersion in freshwater environments can alter the terrestrial faunal succession on carrion or corpses, and subsequently alter the process of decomposition but very little work has been done on possibility of aquatic insects found on bodies to estimate the length of time the body has been in water. The insect species that are restricted to aquatic ecosystem for survival in one or more life stages have been largely ignored [14]. The geographical region also affects the arrival times of different species of insects thus the data generated in one region or biogeoclimatic zone should not be used to determine time of death in a different region and the databases should be developed for every biogeoclimatic zone in which insects are being used to estimate time of colonization (TOC) [15].

Thus, the baseline data of insect colonization of pig carcass for rural and urban areas of Nova Scotia was collected under various conditions such as under-exposed, shaded and buried [16]. Similarly, the data regarding the colonization of rat carcasses by aquatic insects in riffle and pool areas of a small woodland stream was collected and utilized for determining the postmortem submersion interval (PMSI) of corpses in flowing water habitats. After 39 days, the rat carcasses had no visual signs of deterioration in the absence of large scavenging animals. Midge larvae (Diptera: Chironomidae) were the dominant insects colonizing the carcasses and Orthocladus larvae begin to colonize the carcasses after 13 days of submersion in the riffle and after 20 days of submersion in the pool. The separation between Riffle and pool carcass were only 20 meters and the insect fauna was found to be dissimilar[17]. Decomposition and insect colonization on rat carrion on land and in water were also compared for summer and winters in a plowed field in northwestern South Carolina and the differences in the stages of decomposition and colonization on corpse in land and water were studied. They found that rate of decomposition varies with temperature which affects the bacterial activity. There was great difference between the ambient temperature of land and water carcasses. The main aim of this study was to isolate the influence of the water on decomposition and colonization [11]. The pig carcasses were also utilized for studying

the aquatic invertebrate succession and decomposition changes, to determine time of submergence (TOS). The pig carcasses were placed in pond and stream habitat in the Malcolm Knapp Research Forest in Maple Ridge, B.C., approximately for one year. The development, identification of the species and the sequence of invertebrates associated with the carrion were observed and a data base was created on invertebrate succession for pond and stream habitat so as to estimate the TOS in water related death investigations. The succession of invertebrate colonization on the carrion is predictable but it is not clearly understood whether this succession is carrion dependent or seasonal dependent. There were differences in the species composition between pond and stream habitat as species colonization is habitat specific. In both habitats, no single organism can determine time of submergence alone. The collected data was compared with 15 freshwater related death investigations and the similarities were seen in the earlier decompositional characteristics like bloat, discoloration, and nail shedding. However, the human descriptions were so vague that they had little value in determining TOS and hence time of death [12], similarly, the pig carcasses were used to determine the entomological succession and tropical role of arthropods associated with different stages of carcass decomposition in two freshwater ecosystems in the Colombia Andes.

The carcasses were placed one in a stream (lotic) and another in an artificial lake (lentic). Decomposition time of skeletal remains was 74 days in the lake and 80 days in the stream. Six phases of decomposition: submerged fresh, early floating, floating decay, bloated deterioration, floating remains and sunken remains, were established. 18,832 organisms associated with the carcass: 11,487 in the lake (four orders, 19 families and 33 species) and 7345 in the stream (eight orders, 15 families and 25 species) were collected and classified in the following ecological categories: shredders, collectors, predators, necrophagous, sarcosaprophagous and opportunists. The physical and chemical properties of the habitats, such as water temperature, CO<sub>2</sub> and conductivity are very much dependent on rainfall. In lake, the ecological categories i.e. shredders (Coleoptera: *Tropisternus* sp. and *Berosus* sp.), collectors (Diptera: *Chironomus* sp.) and predators (Odonata) were found to

be associated with submerged phase; Coleoptera (Dytiscidae) were found during floating decay and bloated deterioration stages. In the stream, shredders (*Hyaella* sp.) and collectors (*Simulium* sp.) were found during all stages, whereas the predator (*Oxelytrumdiscolle*) was found exclusively during the floating stages, during which body temperature increased in a fashion similar to active decay in terrestrial environments[13].

Along with different experimental studies discussed above, in a case study it was established that the Caddisflies plays very important role in PMSI so during collection of aquatic entomological samples these insects should not be ignored as they can provide valuable details in estimating a PMSI. The case was of a river in Michigan, USA, the remains were in advanced state of decomposition and the colonization by Caddisflies larvae (either directly on the remains or the attached clothing or material) provided evidence that was used in accurately estimating the time period during which the remains had been submersed [18]. Thus, the PMI of the corpse colonized by terrestrial sarcophagus insects can be estimated if and only variables caused by differences in the species life cycle and microenvironments are considered. The aquatic environment is not that much established and thus it can be considered as a new frontier for forensic entomology. The primary problem with the aquatic environment is that there are no purely known sarcophagous aquatic insects to compare with the common terrestrial indicator species such as Blow flies, Carrion beetles or the Cheese skippers because water resist oviposition and subsequent development of terrestrial sarcophagous insect larvae and the aquatic insect communities were studied mostly for water pollution surveys [2].

### 1.2.1 Forensically Significant Aquatic Insect Fauna

Order	Family	Species	Reference
Diptera	Calliphoridae	<i>Cynomyacadaverina</i>	Tomberlin and Adler, 1998
		<i>Calliphoravicina</i>	
		<i>Luciliaillustris</i>	



		Cochliomyiamacellaria	
		Phaeniciasericata	
		Phormiiregina	
		Calliphoravomitorea	Hobischak and Anderson, 2002
		Compsomyiopsverena	Barrios and Wolff, 2011
		Calliphoranigribasis	
		Sarconesiopsismagellanica	
		Chrysomyaalbiceps	
	Muscidae	Hydrotaeavillosa	
		Muscadomestica	
		Trichomorellianigribita	
	Sarcophagidae	Helicobia sp.	Barrios and Wolff, 2011
		Sarcophagabullata	Tomberlin and Adler, 1998
Hemiptera	Alydidae	Alyduseurinus	
	Gerridae	Aquarius remigis	Hobischak and Anderson, 2002
	Corixidae	Centrocorisa sp.	Barrios and Wolff, 2011
	Notonectidae	Notonecta sp.	
		Buenoa sp.	
Trichoptera	Limnephilidae	Chyrandacentralis	Hobischak and Anderson, 2002
Coleoptera	Staphylinidae	Homeotarsussellatus	
		Aleocharanotula	Tomberlin and Adler, 1998
		Platydracusmaculosus	

		Ambodina sp.	Barrios and Wolff, 2011
	Dermeestidae	Dermeestescanus	Tomberlin and Adler, 1998
	Leiodidae	Catoptrichusfrankenhausen	Hobischak and Anderson, 2002
	Dytiscidae	Acilius sp.	
		Hydroporous sp.	
		Rhantus sp.	Barrios and Wolff, 2011
	Elmidae	Stenelmis sp.	Hobischak and Anderson, 2002
	Hydrophilidae	Hydrochara sp.	
		Tropisternus sp.	Barrios and Wolff, 2011
	Leptodiridae	Catoptrichusfrankenhausen	Hobischak and Anderson, 2002
	Silphidae	Nicrophorus sp.	
		Necrophilia Americana	Tomberlin and Adler, 1998
		Oxelytrumdiscicolle	Barsrios and Wolff, 2011
	Curculionidae	Stenopelmus sp.	Tomberlin and Adler, 1998
	Dryopidae	Helichus sp.	
	Scarabaeidae	Canthidium sp.	Barrios and Wolff, 2011
	Anobiidae	Stegobium sp.	
Odonata	Libellulidae	Erythrodiplax sp. 1	
		Erythrodiplax sp. 2	
		Erythrodiplax sp. 3	
	Aeshnidae	Rionaeschna sp.	
	Coenagrionidae	Acanthagrion sp.	

### 1.3. Conclusion and Future Prospect

It is evident from the literature survey that, in past more emphasis has been given on forensic terrestrial entomology and very less research work has been conducted on forensic aquatic entomology. Both terrestrial as well as aquatic insects are of immense importance in determining the time since death (i.e. PMI). In many homicidal cases after the commission of crime the culprit tries to dispose of the victim's body into water stream, lakes or ponds so as to mislead the case as drowning, in such cases the forensic aquatic entomology plays vital role. Similarly in case of poison or drug abuse, where the body of the victim gets skeletonized (i.e. no tissue is present) in those cases entomology plays very significant role as the study of insects present on carcass leads to determination of cause of death. Forensically important aquatic entomological data is still in its growing phase, there is very less work reported worldwide and no work have been reported regarding the aquatic entomology in India so far. The collection of aquatic insects associated with the carcass is always a difficult task because the flow of water stream produces interference. There are some other problems, as in Forensic aquatic entomology water bodies (lakes, rivers, ponds etc.) are involved that sometimes leads to social issues. These are some reasons due to which the reference data of the aquatic insect fauna is not well established as that of terrestrial insect fauna.

Several cases are reported which shows wide range of application of Forensic entomology in determining the postmortem interval, place or surrounding of the crime scene, physical abuse or neglect, determination of poison or drugs, food contamination etc. Thus, considering the significance of aquatic insects in various criminal investigations, it is the need of the hour to generate the reference data of forensically important aquatic insects across all the countries so as to help various law enforcement agencies to solve the criminal cases. ■

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# An Introduction to Major Computer Attacks and Preventive Measures

Aparna Kumari\*, Rashmi Sharma\*\*  
Dr. A. K. Gupta\*\*\*

## Keywords

Attacks, DOS Attacks, POD, Sniffing, Keyloggers.

## Abstract

*With the explosive growth of Internet, computer security has become a major concern for businesses and governments. Everyone wants to be able to take advantage of the Internet for electronic commerce, advertising, information distribution and access, and other pursuits, but they are worried about the possibility of being a target of “criminal attack”. From past decades cyber forensic investigation has played a major role in identifying the digital information, investigating digital conspiracies and military investigations. There are an endless number of attacks, which a system administrator has to protect his /her system from technical attacks, non technical attacks, operating system attacks, etc. With the upcoming era cyber forensic investigator faces major challenges in collection, presentation and examination of digital evidence.*

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Author Intro.:

\*1-Senior Research Fellow, Central Forensic Science Laboratory, Hyderabad-500013.

<sup>2</sup>Senior Research Fellow, Department of Forensic Science, Sam Higginbottom Institute of Agriculture, Technology & Sciences, (Formerly Allahabad Agriculture Institute), Allahabad, U.P.-211007. E-mail: aparna\_kri15@yahoo.co.in

<sup>3</sup>Prof (Dr.) A.K.Gupta, Head of the Department, Department of Forensic Science, Sam Higginbottom Institute of Agriculture, Technology & Sciences, (Formerly Allahabad Agriculture Institute), Allahabad, U.P.-211007. E-mail: akgupta\_aaidu@yahoo.co.in

*The present paper includes the different types of attacks targetting the system in various sectors.*

In the past few decades the Internet has occupied a strategic position. The people are most dependent on the technology, reason being the lack of manual labor, saving of time, speedy communication, easily available resources of knowledge and others. The constant enhancement of technology provides easy handling to user as well as easy room to the frauds and attackers to harm the integrity of user.

With the popularity of network technologies, network attacks are more likely to happen. In order to counteract the attacks faced by a computer network the firewalls are being used. Based on the content of packets and their behavior the firewall determines whether the received packets are attack packets or not. If the packets are detected as an attack, the firewalls take appropriate measures and protect internal network host and devices. Firewalls basically detect network attacks such as denial of service, scanning and snooping, and malformed packet attacks whereas the attack prevention measures include blacklist filtering, packet attack characteristics identification, abnormal traffic detection, and intrusion detection statistics.

This paper discuss various type of attacks to which a computer or network is prone to be affected along with the preventive measures that should be taken by the users. There are an endless number of attacks, which a system administrator has to protect. The attacks can be classified as given below:-

### **A. Network-Infrastructure Attack**

Attacks against network infrastructures is made easy by a hacker, as many networks can be reached from anywhere in the world via the Internet. Flooding a network with too many requests is an example of such type of attacks.

### **B. Operating System Attacks**

As every computer has at least one operating system, so this

category comprises a large portion of attacks and so many well-known exploits can be used against them.

Attacking built-in authentication system, breaking file-system security, cracking passwords, encryption mechanisms are the few common examples of OS attacks.

### **C. Application and other Specialized Attacks**

Applications are the easy target to face a lot of hits by attackers. Programs such as e-mail server software and web applications often are beaten down. Most firewalls and security mechanisms are configured to allow full access to Hypertext Transfer Protocol (HTTP) and Simple Mail Transfer Protocol (SMTP) applications from the internet making them frequently attacked application.

### **D. Nontechnical Attacks**

It involves manipulating people-end users where even user is the greatest vulnerability within any network infrastructure. Social Engineering is a common example of nontechnical attacks.

### **E. Technical Attacks**

These attacks are perpetrated by abolishing the hardware and the protection mechanism of software.

The various types of technical attacks are discussed below:-

#### **1. Denial of Service Attacks (DOS attacks)**

Denial of service attacks on a network is responsible to harm or to cease a network from running. The purpose of DOS attacks is to shut down a site. The attacks unable the network to function properly by destroying the network usability. DOS attacks may occur due to vandalism, extortion or social action (including terrorism).

The DOS attacks can be categorized into ping of death and teardrop which are briefly discussed below.

##### **a) Ping of Death (PoD)**

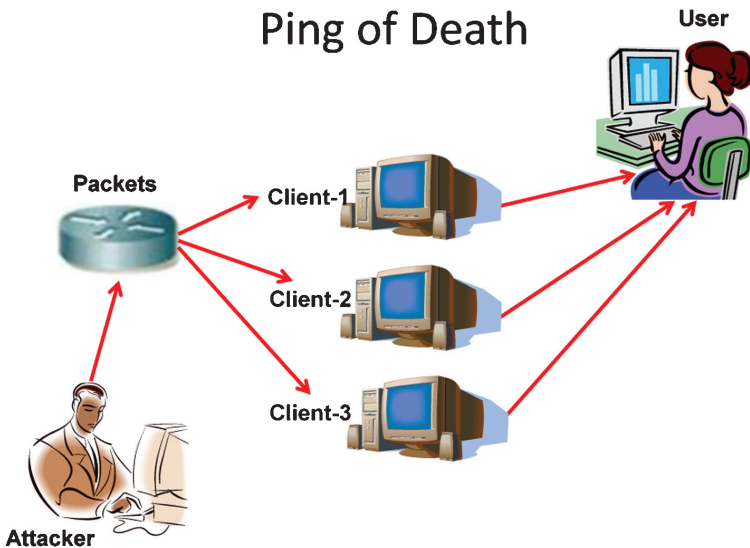
PoD works by sending a malformed or malicious ping to a computer.



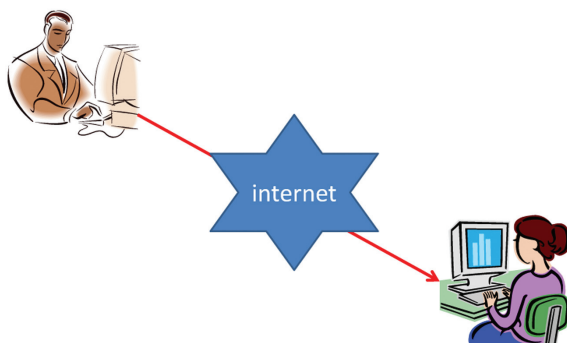
A ping is normally 32 bytes in size (except in the case where the Internet Protocol [IP] header is considered, where the ping size is 84 bytes). Many computer systems could not handle a ping packet larger than the maximum IPv4 packet size, which is 65,535 bytes. If a ping more than this size is sent the target computer could crash. The PoD works on this lack of computer systems.

## b) Teardrop

This type of attacks doesn't cause any significant damage to a system. Teardrop is a sort of program where fragments of internet protocol (IP) is sent to machine connected which is connected to a network. Teardrop abuses an overlapping IP fragment bug present in Windows 95, NT and 3.1 machines. This bug causes the TCP/IP (Transmission Control Protocol /Internet Protocol) fragmentation re-assembly code. Although these attacks are considered to be non destructive, it causes problem if there is unsaved data in open applications at the time when the machine is attacked. In this case the unsaved data may get lost. A simple reboot is the preferred remedy for these kinds of attacks. When a Teardrop attack is run against a computer, it will crash or reboot the computer system.



## Teardrop



### 2. Threat from Sniffing

Sniffing is a data interception technology. Sniffer is a program which monitors all network traffic passing in and out over a network. The protocol which are vulnerable for sniffing are: Telnet, Relogin, File Transfer Protocol (FTP) , Network News Transfer Protocol (NNTP), Simple Mail Transfer Protocol (SMTP) ,Hypertext Transfer Protocol ( HTTP), Internet Message Access Protocol (IMAP) because it can send the data as well as password in clear text. Sniffing has its own pros and cons as it can monitor network traffic, network security and can be used for stealing information like password, files from the network. Two way by which sniffing can be done is a) command line utility and b) Graphical User Interface (GUI). For gaining information on the network, sniffing is one way, e.g. Username/ and password. Many network engineers; security professionals and crackers use sniffing techniques. Sniffing technique is beneficial for ethical hacking.

### 3. Key Logging

Keystroke logging can be either program or hardware device to capture every key strokes on the computer to either monitor employee performance or to steal private information. Main aim is to steal sensitive information such as Usernames & Passwords, Personal Information, Credit card numbers etc. Legally keyloggers can be used to monitor the employee productivity. Key-loggers can be hardware installed to a computer and/or software.

- a) **Key-logging Hardware:-** It is a small device which connect directly on the end of a keyboard to the port on the computer and look rather unassuming.
- b) **Key-logging Software:-** Anybody can download 100's of keylogger programs from the internet. For installing the software on an unsuspecting computer an attacker follows three ways which is given below:
  - Either installs it from a compact disc or floppy disk.
  - Package the software as a computer virus or Trojan horse.
  - Remotely gain access to the computer and then install the software.

#### 4. Spoofing

One person or program who masquerade as another by falsifying data and thereby gain unlawful advantage is a spoofing attack.

#### 5. Cross Site Scripting (XSS)

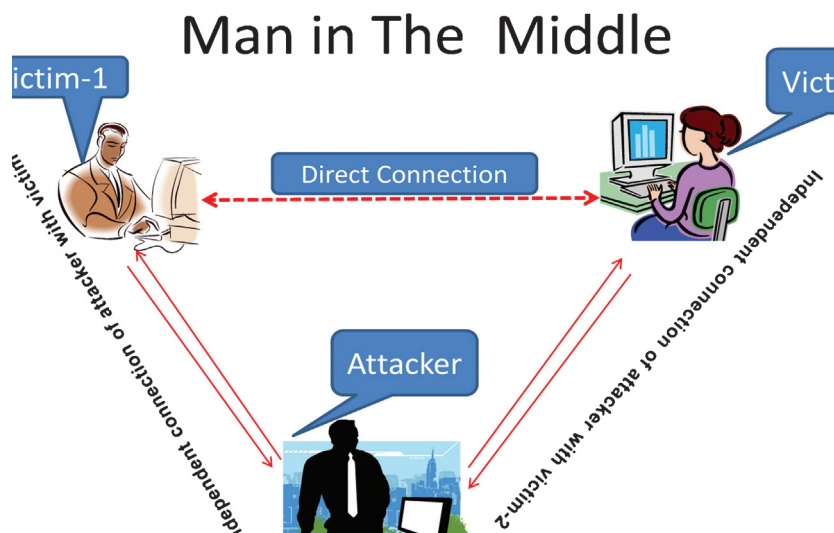
Cross-site scripting is a hacking technique that forces vulnerabilities in the code of a web application to allow an attacker to send harmful content from an end-user and collect some type of data from the victim. In cross site scripting, an attacker embed malicious JavaScript, Visual Basic scripting (VBScript), ActiveX, Hypertext Markup Language (HTML), or Flash into a vulnerable dynamic page to fool the user where they execute the script on his machine in order to gather data. The use of XSS is to 1)manipulate or steal cookies 2) execute malicious code 3) compromise private information.

#### 6. Address Resolution Protocol Poisoning (ARP poisoning)

An attack where the attacker changes the MAC address is Address Resolution Protocol (ARP) poisoning. It can also be called as an ARP spoofing attacks. It is effective against both wired and wireless local networks. From ARP poisoning attacks, an attacker can perform many things which include stealing data from the compromised computers, eavesdrop using man-in-the middle methods, and

prevent legitimate access to services.

The attacker can be placed in the middle of the communications path between the two victim devices; hence the name Man-In-The-Middle (MITM) attack also known as a bucket brigade attack where the attacker makes independent connections with the victims and relays messages between them, making them believe that they are talking directly to each other over a private connection, when in fact the entire conversation is controlled by the attacker is a form of eavesdropping. For example, an attacker within reception range of an unencrypted Wi-Fi wireless access point, can insert himself as a man-in-the-middle.



## 7. Local Area Network Denial (LAND) Attack

A LAND attack is a kind of DoS (Denial of Service) attack which consists of sending a spoofed packet to a computer. The source and destination address of IP packets are set to address the same device which causes the machine to reply to itself. Sending a spoofed Transmission Control Protocol synchronize (TCP SYN) packet (connection initiation) with the target host's IP address to an open

port as both source and destination are the attacks involved.

## 8. Smurf Attack

A moderate amount of traffic sent by an attacker to cause a virtual explosion of traffic at the target is smurf attack. It is a kind of denial-of-service attack where large numbers of Internet Control Message Protocol (ICMP) packets with the victim's spoofed source IP are broadcasted to a computer network using an IP Broadcast address due to which all hosts on the network reply to ICMP request which causes traffic in victim's computer.

Smurf as well as DoS attack can cause blunder damage to network services which can be an individual or host or institute.

### **Smurf attack can affect in various ways:**

- 1) As a network which is abused to amplify the attack,
- 2) As a party harboring the instigator of the attack,
- 3) As a victim or target of the attack.

## **Preventive measures for technical attacks**

The attacks can be prevented by the following preventive measures:

### **DoS Attacks**

- Install and update anti-virus software.
- Install a firewall, and configure it to restrict traffic coming and going out of the computer.
- For distributing email address follow good security practices.
- Apply email filters to manage malicious traffic.

### **Sniffing**

- Transmit encrypted data across a network
- The use of telnet, remote shell, rlogin should be restricted.

- Use Secure Shell
- To encrypt data between systems Virtual private networks (VPN) should be use.
- Use of switches should be preferred over of hubs.
- For critical systems restrict media access control (MAC) addresses that can send and receive data on specific switch connectors (plugs)

### Key logging

- Make use of antivirus/spyware & firewalls.
- Automatic form fillers should be used.
- Alternative Keyboard Layouts should be preferred.
- Use of onscreen keyboards is recommended.
- Be aware of what's installed on your computer.
- Use caution when surfing the internet.
- Keep your computer's security software updated.

### Spoofing

- For email spoofing/forgery
  - a) Use antispam software.
  - b) Keep check on email headers to identify suspicious information.
- For website spoofing

Always access a website via secure sockets layer/ transport layer security (SSL/TLS) because non- SSL/TLS websites provide the opportunities for hackers to spoof.

- Use ingress filtering, which is a technique to verify that whether the packets are coming from a legitimate source or not, is an invaluable tool to safeguard against attacks.

- Egress filtering, in which packets that are being sent out of the internal network are examined via a router or firewall and questionable packets are detained, and is often used in conjunction with ingress filtering.

### **Cross Site Scripting**

- Never insert untrusted data except in allowed locations.
- Use an HTML policy engine to validate or clean user-driven HTML in an outbound way.
- Prevent document object model (DOM)-based cross site scripting (XSS).

### **ARP poisoning**

- The destination address of a received ICMP echo request message which is either a subnet broadcast address or network address, can be checked. If yes drop the packets and log the event.
- Use Port security (Port Binding, MAC Binding).

### **Land Attack**

- Most firewalls should stop the poison packet thus protecting the host from this attack.
- Routers should be configured with both ingress and egress filters in order to block traffic where the source IP address is the same as the destination.
- Firewalls are configured to reject inbound packets with internal addresses.

### **Smurf attack**

- The source address and destination address of each received IP packet should be checked. If both the addresses are the same or even the source address is a loopback address (127.0.0.1), drop the packet and log the event which depends on the configuration.

- Turn off broadcast addressing feature.
- Configure firewall to drop incoming pings

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# The Emergence of Community Policing Initiative: An Overview of Janamaithri Policing in Kerala

Kannan. B\* & S. Ramdoss\*\*

## Keywords

Community Policing, Janamaithri Suraksha Project, Grama Sabha, Kerala Police, Vigilance Committee, Janamaithri Suraksha Samithi, Janamaithri Beat, Janamaithri Kendrams, Jagratha Samithi, Crime Stopper, Vanitha Jagratha Samithi.

## Abstract

*This article mainly aims to give an overview of the community policing initiative namely Janamaithri Suraksha project that was undertaken by the Kerala Police. This article provides an overview of the Janamaithri Suraksha project that has been initiated to transform the policing to abide by the democratic ethos of the country. The article highlights the three major components of the Janamaithri policing implemented by the government of Kerala. It also gives a note on the positive impacts of the same, which proves that it is a successful initiative by the police in curbing the incidences of crime. Two case studies are incorporated in this article which stresses the importance of functional collaboration of Janamaithri policing and Grama Sabha. Since it is identified as a good practice of community policing in the state of Kerala for collaboration between public and police, it was decided to make an overview on this new initiative.*

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Author Intro.:

\*UGC-Junior Research Fellow, Department of Criminology, University of Madras, Chepauk, Chennai-600 005.

\*\*Assistant Professor, Department of Criminology, University of Madras, Chepauk, Chennai-600 005.

## Introduction

Community policing is a sustained collaboration between the police and the community that identifies and solves the community problems. Depending upon the needs and responses of the communities involved, community policing strategies may vary. When sir robert peel Established the london metropolitan police, he set forth a number of principles one of which Could be considered the backbone of community policing. For him, “the police are the public and the public are the police.” It is very clear that without a strong tie-up with the community, police may not have access to pertinent information from people that could help solve or deter crime. Willie Mccamey also reiterates the importance of community policing by pointing out that “police cannot control crime and maintain order by themselves” (2003). He proposes the idea that the police alone cannot maintain law and order in both public and private spheres, thus they need the support of the community to ensure security in a social scenario. Helpful information will be forthcoming from the community members only when police have established a relationship of trust with the community they serve. Moreover, when community members believe the police are genuinely interested in community perspectives and problems, only then they begin to view the police as being a productive and essential part of that community. Community policing, according to Robert r. Freidmann, “is a policy and a strategy aimed at achieving more effective and efficient crime control, reduced fear of crime, improved quality of life, improved police services and police legitimacy, through a proactive reliance on community resources that seeks to change crime causing conditions” (Freidmann,1996). He advocates the “need for greater accountability of police, greater public share in decision making, and greater concern for civil rights and liberties” (Freidmann, 1996). By drawing evidences from the works of Fyfe, Green, Walsh, Wilson, and McLaren, Gennaro F. Vito later develops the

Concept by pointing out that “community policing also demands that police departments adopt Proactive strategies and tactics and repress crime, fear, and disorder within neighborhoods” (vito, 2004).

Social critic Robert Friedmann stresses on the fact that there is a need for “proactive planning” in the policing policies to implement law and order in a society (Freidmann, 1996). It is the duty of the government and the police appointed by the government to ensure law and order. An approach that provides security services to the local communities appropriate to the circumstances and needs of the local communities, by enlisting the cooperation of the people and understanding their security needs is what is envisaged by community policing. By strengthening the link between the police and the community, the ensuring partnership will be better able to pinpoint and mitigate the underlying causes of crime. By better community involvement, police will have more resources available for crime prevention activities, instead of being forced into the ‘after-the-fact’ response to crime. It is essential that the police work closely with all sections of the community to identify specific concern and to find the most effective solutions, and this is the essence of community policing. Community policing ensures the involvement of the public in policing, and thereby offers a democratic space within microscopic level. Many studies were conducted on Community Policing across the world. Trojanowicz (1998) in his book ‘community policing: a contemporary perspective’ gives a complete profile of the concept of community policing and it details the evolution of community policing, its administration, and the ways it addresses various public safety issues. Gary w. Cordner (1995) in his article ‘community policing: elements and effects’ discusses about the evolution of the concept of community policing by considering its philosophical,

### **Strategic and Programmatic Dimensions**

Dr. B. Sandhya (2012), a senior officer of the Indian Police Service (IPS) and the nodal officer for the community policing programme in Kerala state, in her article ‘Janamaithri Suraksha Project: Community Policing Project of the Government of Kerala’ gives a thorough description of the janamaithri suraksha project, the community Policing programme implemented in Kerala and it presents new insights into this policing model and gives a critical appraisal of successes and challenges faced by the same in various Jurisdictions.

Dr. S. Ramdoss in his article 'Police Boy's Clubs in Chennai City: an Empirical Study' published in the Indian Police Journal (July-September 2008) discuss about the police

Boy's clubs and its significant role in preventing juvenile delinquency. He has also done a Project on Community Crime Prevention programmes titled 'Community Crime Prevention Programmes in the city of Chennai – An Evaluation' funded by BPR&D, MHA, Government of India which is unpublished. Kerala government has implemented several programmes with the cooperation and Participation of the public. The community policing security programme, the official Programme implemented by the Kerala Police is one among them and the programme is named Janamaithri suraksha project. It is a statewide community policing project of the Kerala Government that seeks to develop closer ties between the police and the citizens, and create Synergistic partnerships within local communities to deal effectively with anti-social activities and prevent crimes in the society. It is structured so as to facilitate closer community Involvement in ensuring security and safety within communities. The major objectives of the Janamaithri suraksha project are to prevent crime in the society, elicit co-operation of the police And public in security matters and to ensure mutual co-operation of members of the public in the domain of security.

The jurisdiction of a police station has been divided into a number of beats according to the convenience of the beat officer to cover his beat area within a prescribed beat time. Usually, One beat area will not exceed more than three kms, and it is the responsibility of the beat officer to ensure the security of the people in his beat limit. The project basically aims to bridge the gap between the local people and the police and thereby ensure their participation in law Enforcement.

### **Components of Janamaithri Policing**

Janamaithri policing in Kerala comprises the following three components viz.:

- Janamaithri beat – which centres around beat officers who are

police constables/head Constables/assistant sub-inspectors specially selected and trained.

- **Janamaithri Suraksha Samithi**
- **Janamaithri Kendrams**

### **Beat Officer and His Duties**

Each 'janamaithri beat' will be in cost of an assistant sub-inspector or a head constable. The serving of summons, execution of warrant, locating the address, handling the complaint box and all other duties to be conducted by the cops in the position will be synchronized and done by the beat official, subject to the guidance by the place home official. Within 3 several weeks of taking cost, every beat official should personally know at least one participant of every Household in his beat. Every street, street and by- street in the beat should be well known to the Beat official. The beat official should know not only the homes but also all other businesses in The beat position. He should regularly communicate with companies in the position like postmen, linemen, milkmen, gas organizations etc because they are the individuals who regular the

Position essentially on a regular basis and should have continuous programs of devices open with them at a personal stage. The beat official should also keep a difficult map tagging the major Junctions, structures etc. Of the position. He should also keep a journal containing the get in touch with figures and deal with of all essential businesses and individuals. A duplicate of the Map and the journal should be kept in the police place also. The name and identification of the Beat official may be showed at essential locations in the beat position. This will help the group To know their beat official. The name and identification of the beat official may be showed at essential locations in the beat position. This will help the group to know their beat official. At Least three times per weeks time the beat official should reach a pre-announced position at a Preannounced time so as to get in touch with the group as well as to receive problems from them. Information of such group get in touch with programs such as position, time frame, characteristics of problems and recommendations obtained etc. May be joined in the

beat journal By the beat official, who may get it countersigned by the place home official. Apart from the Beat journal, a beat sign-up should also be kept by the beat official. This sign-up, containing the Facts of everyday issues, applications etc., Should be countersigned by the place home official. The beat register should be kept in the police place. For, at least 20 hours weekly, the beat Official should go around the beat position on foot and do his perform by getting in touch with The group. The beat official should gain the confidence of the group in his position in such a Way that any common resident can approach him in a courageous and comfortable way.

### **Janamaithri Suraksha Samithi**

In every police station a 'janamaithri suraksha samithi' should be formed. The samithi Should endeavour to undertake and implement the 'janamaithri suraksha project' within the Limits of the respective police station. With the help of the station house officer, the circle

Inspector may suggest the names of persons to be included in the samithi. The sub-divisional Police officer may examine such names and such list of names will be submitted to the district Police superintendent. After due consideration and such consultation as he may deem proper, the District police superintendent will constitute the samithi and inform the concerned. The samithi Should have proportionate representation from among women and the schedules castes and Tribes. Respectable citizens from the locality who are active in the educational and cultural field Should be included in the committee. High school/college headmaster/principal, teachers, Retired officers, ex-servicemen, corporation/ward councilors, merchants, ngos, workers' Representatives, residents' association office-bearers, postmen, kudumbasree office bearers etc. May be included in the committee. Preference may be given to include office bearers of Residential associations. Those who are involved in any criminal case should not be included in The committee. Office bearers of any political party need not be excluded from the committee if They fulfill other conditions. Care should be taken to pre-empt allegations that any communal or Political interest is treated with any special advantage. The structure of the samithi should be in Such a way that, ordinary citizens with

civic sense and sense of social responsibility get an Opportunity to utilize their talents for the greater safety of society at the local level. The process of constitution of the samithi should be above board, and the members should be persons who command the respect of the community. The samithi should have at least ten members, and preferably not exceed 25. From amongst the samithi members, the district superintendent of Police may nominate one member as the convener. The meetings of the samithi will be chaired By the circle inspector of police and the station house officer will officiate as secretary. An additional sub inspector or an assistant sub inspector from the police station may be designated as the community relations officer by the station house officer. The community

Relations officer should dedicate himself to the cause of implementation of the 'janamaithri Suraksha project' and should render all help to the station house officer for the success of the Programme. The samithi may be reconstituted every two years. The district superintendent of Police may remove any member, who involves himself in any crime case or acts involving moral Turpitude.

### **Meetings of the Samithi**

The samithi should meet at least once in a month, at a pre-announced date and place. In The meeting, the public residing in the beat of that area, (or of other areas, if they so desire) can attend and give their suggestions. The participation of maximum number of people from the local beat may be ensured. In case the participation of the public is very meagre, the samithi may examine the reason for the same and give necessary advice to the beat officer. The minutes of such meetings should be prepared by the station house officer (secretary) and a copy of the minutes should be sent to the deputy superintendent of police and the superintendent of police. The supervisory officers should examine the minutes, assess the quality of the meeting, and in case it is felt necessary, provide advice to the station house officer. The sub-divisional police Officers may attend such meetings once in three months; and the superintendents of police may attend such meetings at least once in a year. Apart from the monthly meetings, the samithi may Hold such other meetings

as and when need arises.

## **Programmes of the Samithi**

Different programmes chosen as per the need are implemented after discussions in the Samithi meetings. As per local needs, the following types of activities are being carried out by the police:

- Night patrolling with public co-operation
- Coordinating with private security guards
- Knowing new residents and strangers
- Fitting burglar alarm and security systems
- Helping senior citizens and physically challenged citizens
- Protection of women and children
- Awareness programmes
- Traffic warden systems
- Organizing counselling centres to resolve family discords, drinking habits etc. May be Started
- Monitoring maintenance of street lights, traffic lights etc.
- Implementation of projects encouraging blood donation, eye donation, organ donation Etc.
- Organizing self defence courses
- School -based safety & vigilance programmes
- Cooperating with kudumbasree units etc.
- Preventing illicit sale of liquor and drugs
- Monitoring illegal financial institutions
- Complaint card systems
- Disaster management and mitigation
- Trauma, rescue and first aid projects



- Victim support cells

10 If so required, for the implementation of a particular programme, sub-committees may be appointed for a particular area or for a particular activity. Formation of such sub-committees can be done during the samithi meetings and such sub-committees can include persons appropriate to the task intended. The membership of such sub-committees need not be confined to the

### **Members of the Station Level Samithi**

Activities under the janamaithri suraksha samithi The janamaithri suraksha samithi may formulate and implement, depending upon local Perception, the following types of plans for betterment of policing and crime prevention in the area.

- Formulation of joint police - community patrols to prevent thefts and street crimes in Residential areas.
- To identify strangers and migrants to the area and to help the police ascertain their Identity and antecedents.
- To formulate plans for security measures and installation of security devices in houses, Flats, shopping complexes etc.
- To identify the needs of the disabled and aged population and of weaker sections living in the limits and to devise plans for ensuring their security.
- To develop and implement plans for improved traffic regulation in the area, including coordination and management of traffic wardens.
- To develop plans to give training to youth in first aid and trauma care, palliative care, blood donation, self employment etc. And involve youth in community oriented projects.
- To form jagratha samithis for women and for school/college students to arrange legal aid/counseling etc.
- Organize legal awareness classes, traffic awareness programmes, blood donation camps etc.

- Special programme for security of taxi drivers etc. Involving local community road accident victims, highway suraksha jagratha samithis.
- Environment friendly volunteers to protect the environment.
- Victim support cells.

### **District Advisory Samithi**

At the district level, an advisory committee headed by the district superintendent of Police should be formed to ensure proper supervision regarding the functioning of 'janamaithri Suraksha project'. Members of parliament, members of legislative assembly, municipal Chairmen / mayor as well as other important personalities nominated by the superintendent of Police may be included in the committee. The committee may consist of 10 to 20 members. This Committee may convene a meeting once in three months and review the working of janamaithri Suraksha samithis of the concerned district and give necessary suggestions, instructions etc. For Improvement of their performance.

### **School/College Jagratha Samithis**

Vigilance cells can be organized in the schools and colleges so as to train students in Responsive and responsible citizenship. The suraksha samithi can organize a meeting of School/college authorities and talk about the project. Under the leadership of teachers, jagratha Samithis may be organized including selected children. These jagratha samithis can organize Awareness programme on traffic, legal literacy etc. With the help of the samithi, classes on unarmed combat, yoga etc. can also be organized. Complaint box can be kept in schools and Colleges which should be regularly opened by the beat officer. Problems of the students during bus journey etc. Can be solved in this way. As a part of the project, school traffic clubs and School traffic wardens can also be encouraged. The Jagratha Samithis can help the students do Social service along with the people of the locality. The Jagratha Samithis can also popularize

Crime stopper and helpline telephone numbers among students

so as to encourage the students to pass on the information to the police to prevent crime. The crime stopper initiative was introduced in Kerala in 1998 with the toll free number as 1090. This system is functioning in all districts and the number is made known to the public through proper publicity. In this system, informants will not be compelled to reveal his/her identity while giving the complaints. As soon as the information is received, it will be entered in The computer/register and a note will be prepared regarding the complaint and will be forwarded for verification to the appropriate authority as decided by the superintendent of police.

### **Vanitha Jagratha Samithi**

With the help women police and the beat officers in the police station, the Janamaithri Samithis may form Vanitha Jagratha samithis. A woman sub inspector or woman police constable may be made an advisor of the vanitha jagratha samithi. In meetings the beat Officer/the station house officer may participate. With the cooperation of kudumbasree units, NGOs, panchayat/corporation etc. Legal literacy classes can be organized for the women. Through the activities of the jagratha samithis, women can be given awareness about how to Move safely as well as how to respond to atrocities committed against them. The Jagratha Samithis can popularize the vanitha helpline number (+91 9995399953). They can also spread Awareness about the existence of the vanitha control room, family counseling centres etc. Through Jagratha Samithis women would be able to report crimes against them and it can also Be able to report crimes against them and it can also be ensured that women get justice.

### **Janamaithri Kendrams**

To popularize the concept of Janamaithri Suraksha project, Janamaithri kendrams were opened in some places. These centers help people to come and interact with police. Classes on traffic safety, career guidance etc. are organized at such centers. Janamaithri kendrams have been functioning in some of the districts and in battalions.

The main objectives of the kendarm is to function as an information

kiosk, developing Janamaithri yuvakendram, to provide sports and youth training facilities, counseling space and facilities for women, giving career planning and self employment training, anti drug campaign, palliative care training, traffic education centre/traffic education park and any other activities facilitating police–community interface helping police to serve the community in a better manner. It is proposed to start janamaithri kendrams in 10 more places. A notice board may be put up giving various news items, photographs etc on janamaithri suraksha project. Various Posters inculcating traffic sense, civic sense etc among student community may be put up. posters depicting helpline numbers, awareness posters on drug abuse, crime against women etc put up. The centre will develop as a community interaction centre. Help from the public is sought in reducing traffic accidents, natural calamities etc. Voluntary groups/ organizations etc which are working in the field of promoting peace, national integration and communal harmony may be encouraged to associate with the centre. Youth are also encouraged to work in the project, under ‘Janamaithri yuvakendram’.

### **Impact of Janamaithri Policing**

Janamaithri policing initiative has started yielding positive results in terms of improving the image of police among the public, reducing crime, easy flow of information from the public and enhancing the quality of life of local residents. Moreover, under this initiative the police have been organizing palliative care units, blood awareness campaigns, traffic warden system etc.

Some of the significant and successful outcomes of janamaithri policing as claimed by the Kerala police are highlighted below:

- In Paravoor (Kollam district), incidents of chain snatching by gangs in broad daylight, as well as increasing instances of house burglaries at night were effectively brought down, as a result of information regarding the perpetrators of such crimes was instantly brought to the notice of the police officers, and immediate action by the police resulted in many arrests. It is reported that, already, the local citizens are quite satisfied about the benefits of the programme.

- In Adoor (Pathanamthitta district), an area where many residents are elderly and living alone in their residences, the house visits by the beat officers have been welcomed enthusiastically. Here, it is reported that these police personnel are often treated as family members by the residents. These citizens have expressed a feeling of increased personal security and household safety, due to these visits to their houses by uniformed police personnel
- Within the jurisdiction of perinthalmanna police station (malappuram district), it was reported that immediately after the house visits by the local beat officers, the residents in several rented houses disappeared, even forgoing the advances paid to the house owners. It is surmised that at least some of these visitors to the area had criminally motivated ulterior motives in staying there, and that the house visits by the police personnel caused them to re-think their plans.
- Similar incidents have been reported from within the jurisdiction of payyanur police station (Kannur district) as well.
- Cherthala police station (Alappuzha district) officers report that the local citizens are Highly appreciative of the beat officers and their involvement in delivery of counseling services within families. The socially backward-kudumbi community, of which there is a fairly good representation in this area, has been the beneficiaries of such services by the beat officers. Here, as a result, instances of anti-social activities such as illicit distilling and sale of liquor have come down.
- In Kasaragod police station (Kasaragod district) limits, it has been reported that the white vehicle of the Janamathi Suraksha programme gets a warm welcome from local residents when they see it pass. Here, located as it is adjacent to the national highway (NH 17), there are usually incidents of vehicular accidents, and the local police have made it a point to respond with urgency to such incidents.
- In Irinjalakuda (Thrissur district), the police have been active

in involving local community members in a community-wide blood awareness campaign, with the aim of developing a valuable community resource, viz. A citizen's blood bank. college students have been associated with the activities of the police in regulating local traffic, after getting trained as traffic wardens

- In Thodupuzha (Idukki district) and kalpetta (wynad district), police have been taking care to address local issues, many of which concern women. The similarities in geographical terrain of both areas gives rise to many similar anti-social activities, many of which have been effectively controlled by cooperation between police and local community members.
- At Ottapalam (Palakkad district), the police have reported success in curtailing instances of illegal sand mining, with the assistance of local communities. The programme has also received a lot of positive feedback from the large number of elderly citizens resident in the area.
- Vaikom (Kottayam district) reports that police have been able to deal effectively with Instances of anti-social activities such as distillation of illicit liquor, illegal sale of pan masala, etc
- In Kozhikode city (Kozhikode district), the police have been working closely with Members of the residents associations, in addressing community issues. Night patrolling
- By community groups, palliative care activities, etc. By the police has all been well appreciated. Local residents have made a request that the local beat officers should be stationed here for at least two years.
- In Kochi city (Ernakulam district), too, police have been working closely with residents associations to make local communities safe for the citizens. Police have been also making efforts to spread awareness about the utility of burglar alarms and other household security devices.
- In addition, a special group of policemen of the kerala armed

police (kap) battalion at Mangattuparamba (Kannur district) has undergone training in palliative care, and stands ready to perform these services for the needy sections of society.[www.Keralapolice.Org]

Some of the significant results of the janamaithri policing initiative mentioned above clearly indicate that the new initiative in policing will bring about a long lasting impact on policing and Governance.

### **Janamaithri Policing and Grama Sabha**

In Kerala, the association of Janamaithri policing and grama sabha (gs) is highly commendable. Kerala enacted the conformity laws include the provisions for Grama Sabha (GS) in the Kerala Panchayat Act (KPRA) and Ward Sabhas (WS) in the Kerala Municipalities Act (KMA) both enacted in the year 1994. The structure of the GS in Kerala is unique because of the larger size of the Kerala Grama Panchayat which consists of around 25000 people on an average and much more in a municipality. In most other states, the entire voters in a Grama Panchayat constitute a GS. But in Kerala GS's are only at the ward level. Similar structure exists for ws's in the municipalities with provision for representative structure for largely populated municipalities. It is generally accepted that the police station is the main delivery point of police services. When the police is having no interaction with the people and distances themselves from the public, it get more and more disillusioned and dissatisfied with the entire police services and as a matter of fact with the services of the entire state machinery, in fact the protection of the people rests with the whole police force and the maintenance of law and order, which is the backbone of a healthy society, is the responsibility of the police. It is in this context that the functional relationship between the local self government institutions and the police becomes relevant. Through such a bond of mutual understanding, joint problem identification and partnership in problem solving is possible. If there is a relationship between the police and the local governments, it will put new emphasis on tackling the underlying causes of crime by addressing problems at the grass root level. All complaints and disputes reported to the panchayat, except those of a confidential/serious nature should be brought before the gram

sabha. Further, opportunities must be created to facilitate the participation of police officers in the gram sabhas.

## Case Study

A case study was conducted to understand the ground reality of janamaithri policing and grama sabha initiatives. The case study was carried out in two Grama Panchayats of Thrissur district of Kerala viz. Pananchery grama panchayat and Adat grama panchayat. This initiative is aimed to effectively collaborate the policing with the Grama Sabha with an objective to bridge the gap between public and police. Once in three months the grama sabha meeting is conducted in the 22 wards of the pananchery panchayat. The ward member is the chairperson for the meeting. The government suggestions, district, block, panchayat projects are discussed in the grama sabha. The police can bring out their suggestions for the needs and the welfare of the ward. The suggestions and the decisions taken at the grama sabha is taken down as minutes and is been approved by the members. The office representatives of the panchayat are present for the Grama Sabha meeting to see to the official matters. The yearly projects are discussed at the grama sabha and these projects are further studied as the working groups at the panchayat level and finally the governing body finalizes the projects. The activities of Jagrada Samithi of the Pananchery Grama panchayat enabled many families and the woman to settle their problems and to live happily. adat grama panchayat is a 'special grade' panchayat with 18 wards. Under the Janamaithri Sureksha project, there were initiatives taken to strengthen the relationship between the police and the public. Some of the activities where there is a mutual sharing of responsibilities between the local self government and the police station are:

- Night patrolling with the public cooperation
- Coordinating with the private security guards
- Knowing new residents and strangers
- Fitting burglar alarms and security systems
- Awareness programmes



- Protection of women and children
- Organizing counseling centers to resolve family discords, alcoholism etc
- School-based safety and vigilance programmes
- Preventing illicit sale of liquor and drugs
- Monitoring illegal financial institutions

The panchayat has so far settled a total of 533 cases till June 2008. The nature of cases settled is:

### **Nature and Number of Cases**

Civil cases 203

Criminal cases 137

Family cases 149

Petty cases 44

*[Source: Office of the Adat Grama Panchayat]*

Of the total number of cases, four cases were taken on suo moto. The cases of suo moto are

- (i) Daughter is harassed by father, (ii) mother in law harassed daughter in law, (iii) family problems of couple, etc. The panchayat receives both oral and written complaints from the affected parties. These complaints are handled with utmost care considering the sensitivity and privacy of the matter concerned. In addition to the redressal mechanism, the vigilance committee (vc) of the panchayat also render activities of prevention, both short term and long term viz. Conducting legal literacy camps, training on gender issues, organizing children's clubs, etc.

### **Conclusion**

In India, community policing has been successfully implemented in Kerala, Tamil Nadu, Madhya Pradesh, etc. However, the main objective of it is limited in aspects of crime prevention, and enabling

co-operation and mutual understanding between the police and the community, for assimilating intelligence. Hence, efforts should be taken so as to bring police ever-closer to the community so that both can work hand-in-hand for the effective crime prevention. Even after fifty years of being a democracy, we still adhere to the out dated colonial methods of criminal justice system. In many criminal cases, the police face hurdles in the investigation procedures because of the non-co-operation of the families and friends of the victim. Due to the lack of trust between the police and public, there is a delay in getting the justice. The slow pace of justice system makes hundreds as under-trials. In this context, community policing initiative assumes an immense significance. As part of community policing initiative, cases of first time offenders committing non-cognizable offences may be settled through community policing initiative like Janamaithri Policing and Grama Sabha. This is a kind of mediation where speedy justice is ensured and the problem of over-population in jails, pendency of cases in courts etc. are reduced to a great extent. Hence, there is a need for a paradigm shift in the basic concepts of our criminal justice system. So by effectively implementing the community policing, the police can deal with humane social solutions and services and instead of ending them to the jails they can be restored to our community as the contributing members for the progress and development of the society. ■

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