



A Regional Perspective of Crimes in Haryana, India

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ABSTRACT Society is an organization of heterogeneous entities and all social orders countenance the inevitable and complex dilemma of crime. The variation of its occurrence is determined by the amalgamation of miscellaneous socio-cultural, economic and others aspect of its surrounding. The present paper is based on secondary data derived from National Crime Records Bureau, Ministry of Home Affairs under Government of India and other sources and agencies. Crime has been defined under Indian Penal Code (IPC) and the ten categories that are; murder, rape, kidnapping and abduction, dacoity, robbery, burglary, theft, riots, cheating and dowry deaths have been used for the spatial pattern of incidence of crime at the district level. The interrelationship of crime and its determinants has been analyzed by Pearson's correlation technique. Kendall's ranking method is applied for calculation of the composite index. The study reveals the overall increase in incidences of crime in the study area and as per composite score, the maximum criminal activities occur in the surrounding of the National Capital Region because these areas are experiencing rapid industrial and economic development as well as change in social structure. The correlation statistic also verified that crime and its determinants form a chain reaction and facilitate the growth of each other.

INTRODUCTION

The word 'crime' is derived from the Latin language which means opinion or judgment of own. The prohibited social incident or a type of blunder either carried out by an individual or a group of people is termed as crime. It thrives on a conflict which is an inexorable module of communal arrangement and its evasion is not doable at all (Beneke et al. 2017). In another way, these are erroneous acts or illegal deeds which can crop up anywhere and anytime by disobeying the guidelines of society, as well as law and order and often these wrongdoings, are impeached and penalized by the concerned authorities or decree. Such malicious act not only affects someone personally but also disturbs the communal well-being and progress (Siegel et al. 2003; Karmakar and Saha 2016). The social order embraces people of multi-temperaments and there is no doubt that moral fibre of entity is controlled by various social, commercial, cultural, racial and religious determinants where dissatisfaction with norms and traditions between two or more persons create conflict and crime which vary from one place to another (Rajalakshmi 2016). In broad terms, apart from broad-

sheet headlines about mugging, slaughter, rape and assault, the term crime also covers all types of violations including white collar crimes like tax scam and others (Marshall 1961). It is universal problem rather than regional which signifies the pessimistic exteriority towards life excellence and always flourish to serious peril for competence across the earth (Chaudhuri et al. 2015). The existence free from fear and appalling experiences of being attacked, assaulted, injured or tortured is also considered an aspect of the superiority of life and every state or society wants to achieve this goal because each type of aggression and indiscipline have dire impacts on human beings directly or indirectly (Dreze and Khera 2000). Since the past, the continuation of law and order to assure the protection and fairness of each civilian has remained prime aim as well as the basic facet for every civilization as it's rising, flourishing and prosperity depends on discipline and non-existence of misdeeds. Thus the absence or prevention of crime not only provides personal comfort but also contributes enormously to the social happiness (Mukumbira 2012). The sequential societal modifications and development lead to change in the scene of offence. The modern world is expe-

riencing marvellous changes in society with the expansion of urbanism and globally urban process as well as the provision of formal police organization has led to an increase in footage of criminal incidents (John 2004). Lochner (2004) examined the maturity and crime relationship and found that most of the offences related to assets and aggression start in adolescence, get maximum height during young age and respectively decline afterwards. The world daily meets with the incidences of violence created by youngsters at common places and in most of the cases, the reduced use and reward of their energetic potential make the teenagers frustrated and antagonistic (Tripathi 2017). Though the matter of violence-free milieu is generally ignored in development studies, yet it is an interesting issue of discipline outside specific ring because progression is another form of humanizing the life grade. If harmony or peace is considered a qualitative aspect of life, matter of hostility should be a prime concern for social sciences (Sen 1985; Dreze and Khera 2000).

Generally, the relative position of an area or locality is hardly dismembered on the basis of crime because of its multi-dimensional expressions (Debnath and Roy 2013). In the present time, the physical reference competence of geographic information system has made the crime investigation more pertinent and intelligent by proffering precious and sequential information with statistics as well as elucidating the societal traits of the areas which enhance the illegal doings at the local level (Jaishankar et al. 2004). Further, as a modern way, Google Street View (GSV) has successfully aided to assess the remote and public issues of the urban environment (Salesses et al. 2013; Edwards et al. 2013). Though, at the global level, as compared to 1970s, the police investigation statistics show a decrease in crimes against public and possessions with considerable inter-regional disparity (Bacon 2013; UN 2014). Yet, in context to India, crime is increasing rapidly with surprising and shocking means or manners of its committing which are reported every day on social media (Crime Wave in India 2008). The wide prevalence of poverty, redundancy, hunger, dissatisfaction, sleazes, discriminations etc. are found to be some major crime supportive factors in the country (Tayal et al. 2014). While observing the crime pattern in the capital city of India, Vij (2017) came across the fact that factors like size and assort-

ed personality of population along with drastic disparities in terms of housing, education, profits, employment and impromptu urbanization makes more typical to the crime continuum of Delhi. It can be justified with the fact that generally, in big cities to cope with unaffordable demands or greediness, people start to depart from self and social control, discipline and tolerance and at that time they get trapped by ill minds and are pushed on wrong ways.

However in India, first but an important attempt to record crime data was done in 1953 when crime in India report was published by Intelligence Bureau yet its systematic edition including different aspects is available from 1954. In this sequence going ahead, National Crime Record Bureau (NCRB) under Ministry of Home Affairs, Government of India was formed on 11th March 1986 which is now a solitary depot of crime statistics in the country. This desk also communicates the figures of clearance and conviction of cases and continuous expands and recovers the documentation types, stages and criteria of crime (Ansari et al. 2015). In Indian constitution, different types of criminal activities such as murder (Sec. 299/304 B), rape (Sec. 376), dowry deaths (Sec. 304 B) kidnapping and abduction (Sec. 362-373), theft, robbery, burglary, dacoity (Sec. 378-402), cheating (Sec. 415) and riots (Sec. 146) etc. have been classified in Indian Penal Code (IPC) under specific section and identification like crime against body, crime against women, crime related to property and public order and other IPC crimes.

Objectives

The study tries to seek the following objectives:

1. To examine the spatial-temporal pattern of crime in the state of Haryana at District level.
2. To identify the responsible factors behind the spatial variation of crime in the study area.

Study Area

Haryana with an area of 44,212 square kilometres is located in north-western part of India. The state was formed on 1st of November 1966 (Fig. 1). The data of districts Mewat and Palwal is not available for the year 2001 as both were formed after this year.

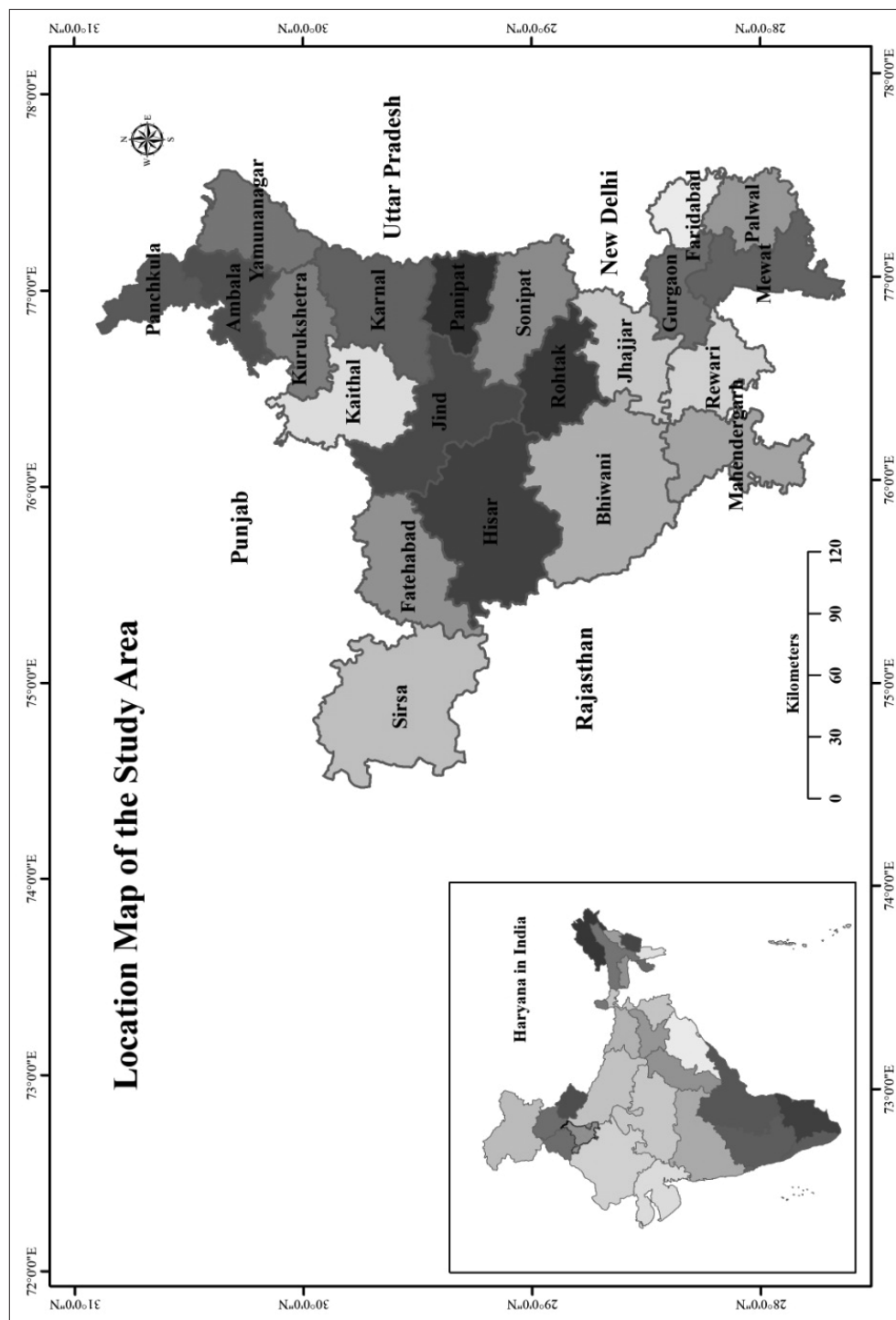


Fig. 1. Location map of study area

METHODOLOGY

The annual reports of crimes printed by National Crime Records Bureau (NCRB) are sources of crime statistics which are compiled from police record. Ten categories: murder, rape, kidnapping and abduction, dacoity, robbery, burglary, theft, riots, cheating and dowry deaths of the crime have been taken for the present study. The statistics of literacy, scheduled caste population and urbanization have been obtained from Primary Census Abstract, Haryana and statistics related to BPL population have been derived from District Level Household and Facility Survey. Karl Pearson's correlation is applied to bring out the existing interrelationship among crime variables. Kendall's ranking method is exercised for calculation of the composite index of different types of crimes.

$$\text{Composite Index of Crimes } I_j = \sum_{i=1}^n R_{ij}$$

Here:

R_{ij} - is the rank of i th crimes in the j th district
 n - is the number of selected crimes

RESULTS AND DISCUSSION

Regional Stereotype of Crimes

In crime ecology, the physical and societal surroundings play a significant role to comprehend the chronological blueprint of crime (Walker et al. 2014). The results of a study carried out by Glaeser et al. (1996) reveals that social interaction, strong ancestral backgrounds, marital position, regularity of visiting any religious place have considerable impinge on the possibility of involving the individual in immoral conducts as well as regional variation of crime incidences.

Crime against Body

The study area has an economically modern society in terms of education and is considered as a developed state in present time as well as an increase in crime incidence is another aspect of the development. The crime of murder, kidnapping and abduction has been labelled as the crime against the body in Indian Penal Code (IPC). The spatial pattern reveals that in 2001, the highest incidences (more than 50 cases) of murder have been registered in four districts namely Sonipat, Rohtak, Faridabad and Gurgaon

on whereas in 2011, including the above four, Hisar, Bhiwani, and Jhajjar, districts also became part of this category. The least murders (below 25) have been identified in Panchkula, Kurukshetra, Fatehabad and Rewari districts in 2001 and in Panchkula, Fatehabad and Mewat in 2011. The equal numbers in eleven districts have been documented as the medium occurrence of murder events in both the time periods. It has been observed that as compared to 2001, there is spatial increase in high incidences of killing. This pattern clears that maximum murder activities appeared in economically and industrially developed districts as well as areas along with the National Capital Region.

Generally, the terms of kidnapping and abduction are used interchangeably but both are different according to Indian Penal Code (IPC). The punishable act of kidnapping is secretly taking away a minor from lawful custody without consent whereas abduction is a continuous process of forcibly carrying away any minor or adult from any place. Abduction itself is not punishable in Indian Penal Code (IPC) but it becomes felony when it associates with other illegal acts like marriage against will, rape, murder, compel to die etc. (Section 362 of Indian Penal Code). The statistic demonstrates that the incidences of kidnapping and abduction have increased in the state. During 2001, the high occurrence of both activities has been found only in Faridabad district whereas medium incidences have taken place in three districts namely, Ambala, Karnal and Gurgaon and rest of Haryana has shown low episode of kidnapping and abduction. In 2011, the situation became different as high and moderate incidences of kidnapping and abduction were seen in three districts namely Hisar, Panipat, Faridabad and in thirteen districts Ambala, Yamunanagar, Kurukshetra, Sirsa, Jind, Sonipat, Rohtak, Jhajjar, Bhiwani, Mahendragarh, Gurgaon, Mewat and Palwal respectively. The number of districts with the low occurrence of these offences has remained only five (Panchkula, Kaithal, Karnal, Fatehabad and Rewari) in 2011 as compared to fifteen in 2001. A total number of 78 cases of kidnapping and abduction have been registered in Faridabad district followed by Gurgaon (50) and Ambala (38) districts whereas minimum cases have been documented in districts Kaithal and Bhiwani (9 in each) pursued by Jind (12) and Rewari, Rohtak and Mahendragarh (13 in each) districts (Table

1). The overall analysis shows that there is a significant change from moderate and low to high incidences of kidnapping and abduction in the state.

Crime Related to Property

The illegal act of dacoity, robbery, burglary and theft are accepted as property offence in Indian Penal Code (IPC). Generally, all four misdeeds look alike but each one is different. Dacoity and robbery are taking away the property by unfair commanding and hurting or murdering any person. There is only difference of participants in both the crimes and dacoity is more serious as it is committed by five or more than five members. Theft is secretly carrying away of any moveable property whereas burglary means breaking a building for doing wrong inside.

The figure reveals that in 2001, in sixteen districts except for Panipat (20), Karnal (9) and Faridabad (8), there was low occurrence of dacoity whereas in 2011, the number of districts having low events of dacoity remained only six (Sirsa, Fatehabad, Jind, Sonipat and Palwal). In 2011, district Mahendragarh is on the first position with 14 cases of dacoity whereas Jind district has no case during the same. A total of 392 cases of robbery were listed in 2001 which increased upto 678 in 2011. According to latest statistics, highest (79) robbery experiences have been registered in district Gurgaon followed by Rohtak (53), Hisar (45) and Sonipat (43) whereas least five cases have been traced in Fatehabad district afterwards Panchkula, Kaithal and Sirsa districts (14 in each).

The value clearly shows that in whole study area, theft and burglary have increased. In 2001, the high incidences of theft and burglary have been reported in two districts namely Gurgaon, Faridabad and in six districts (Ambala, Karnal, Hisar, Rohtak, Gurgaon and Faridabad) respectively whereas, in 2011, twelve and thirteen districts detailed the high cases of theft and burglary correspondingly. The least happening of theft (266) and burglary (38) have been listed from Fatehabad and Mewat districts in that order in 2011 (Table 1).

Crime Related to Public Order and Economic Offense

Riots mean public disorder commanded by an unlawful assembly in order to create the public disturbance or to damage property. A sum of

1466 incidences of riots have been reported in 2011 which is almost two times more as compared to 2001 (741). Spatially, high riots have been observed in two districts that are, Bhiwani and Faridabad in 2001 whereas, in 2011, in seven districts including Panipat, Jind, Hisar, Gurgaon and Palwal. The moderate riots events have been registered in Jind, Jhajjar and Gurgaon districts in 2001 and Rohtak, Jhajjar and Mewat districts in 2011 whereas in Panchkula, Ambala, Kurukshetra, Yamunanagar, Kaithal, Sirsa, Fatehabad, Sonipat and Rewari districts, low riots have been reported in 2011. The district Faridabad is on top with highest (173) incidences of riots followed by Bhiwani district (172) while Ambala, Kurukshetra and Yamunanagar districts have no riots reporting in 2011.

Cheating is defined in Indian Penal Code (IPC) as misleading of any person by fraud or dishonesty during property deliverance.

There is an increase in cheating cases in 2011 as high incidences have been reported only in two districts (Kurukshetra and Bhiwani) in 2001 which increased upto five districts (Karnal, Panipat, Bhiwani, Rohtak and Gurgaon) in 2011. The lowest (10 and 15) cheating events have been traced in districts Mahendragarh and Palwal respectively.

Crime against Women or Sexual Offense

The atrocity against women has been identified as public health crisis because of its cavernous impacts on the physical, psychological and reproductive well-being of women (Campbell 2002). Since historical times, in most of the hostilities, rape, mutilation and other sexual violence are exploited as armaments to vanquish the others (Khanna 2008). During the partition of India, women from both sides not only faced sexual viciousness from males of other religion or caste but at their own home also they were forced to commit suicide in the name of purity and honour (Dey 2016). Presently in several parts of India, females are facing various unnatural types of violence like domestic beating, torturing and murder, rape which are either reported with modification or never reported (Visaria 2000). Keeping in the mind this serious problem, not only NCRB included the crime against women in its fact list but also found National Commission of Women to meet this. The Domestic Violence Act (2005) to defend women from household

Table 1: District wise crimes in Haryana, 2001 and 2011

S. No.	District	Murder		Kidnapping & abduction		Dacoity		Robbery		Burglary		Theft		Riots		Cheating		Rape		Dowry deaths		Total	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ambala	26	42	38	34	2	8	18	29	316	410	365	655	5	0	76	114	11	37	11	5	2197	3111
2	Bhiwani	40	74	9	43	0	12	19	25	132	274	190	675	109	172	54	112	10	41	33	18	2024	3248
3	Faridabad	68	60	78	105	7	10	44	37	236	356	668	1917	133	173	61	42	37	54	19	10	4105	6551
4	Fatehabad	18	25	20	25	3	5	11	5	96	125	141	266	11	30	52	54	17	15	17	7	936	1405
5	Gurgaon	69	89	50	49	4	12	51	79	294	535	794	3345	78	112	29	221	32	40	17	25	5900	9799
6	Hisar	45	73	26	83	2	8	27	45	244	388	438	1167	28	102	159	250	10	36	24	14	3155	4945
7	Jhajjar	48	59	14	31	2	10	25	31	98	157	183	468	68	81	50	62	21	32	20	12	1460	2274
8	Jind	37	50	12	32	2	0	28	34	151	252	148	604	71	105	51	43	21	37	11	15	1689	2647
9	Kaithal	33	36	9	23	3	7	9	14	103	218	144	350	0	0	16	37	16	20	9	8	1047	1503
10	Kamal	42	46	31	22	8	7	16	25	208	218	468	813	47	52	59	131	44	62	18	18	2317	3561
11	Kunshetra	20	29	14	34	5	7	13	18	132	216	343	534	0	0	130	59	31	29	10	7	1624	2424
12	Mahendragarh	26	33	13	46	1	14	1	20	59	184	116	496	47	73	9	10	11	26	8	11	1193	1884
13	Mewat	DNA	22	DNA	32	DNA	6	DNA	16	DNA	38	DNA	358	DNA	80	DNA	40	DNA	28	DNA	7	DNA	513
14	Palwal	DNA	43	DNA	54	DNA	4	DNA	22	DNA	77	DNA	627	DNA	158	DNA	15	DNA	54	DNA	13	DNA	867
15	Panchkula	12	18	18	17	1	4	5	14	118	161	226	413	1	0	19	45	6	17	4	2	1099	1606
16	Panipat	43	49	19	90	20	11	47	39	182	179	415	946	35	126	53	132	38	47	11	11	2482	3881
17	Rewari	21	41	13	26	0	12	7	38	86	217	155	595	39	45	19	19	11	17	12	7	1373	2137
18	Rohtak	57	77	13	47	5	11	29	53	229	340	365	859	37	100	58	127	28	57	17	9	2509	3801
19	Sirsa	37	42	18	60	2	4	5	14	194	233	240	622	24	29	43	42	17	21	12	16	1659	2485
20	Sonapat	73	78	26	54	5	3	28	43	130	190	347	708	6	1	43	115	15	27	18	23	1910	2866
21	Yamunanagar	42	50	26	50	5	6	9	19	100	239	202	487	2	0	32	83	22	36	9	13	1419	2103
Total		757	1062	447	959	77	167	392	638	3108	5011	5948	17425	741	1466	1013	1761	398	733	280	255	42383	66455

DNA: Data not Available

Source: Calculated from National Crime Records Bureau

violent behaviour not only underlined the cruelty against female but also escalated the participation rate to oppose the atrocities and get justice by fighting till the end (Kaur and Garg 2008; Iyer et al. 2012).

Rape has been accepted as most cruel sexual violence against women. The reprisals from rapist as well as social humiliation are the contributing factors which lead to the least reporting of this offence (Smith 2004). The statistics shows that in 2001, only in three districts, Karnal, Panipat and Faridabad, the rape facts are found high whereas in 2011, this grouping has reached in nine districts (Ambala, Karnal, Panipat, Jind, Rohtak, Bhiwani, Gurgaon, Faridabad and Palwal). The whole western and south-western districts of Haryana has been grouped in low incidents of rape in 2001 and except, Fatehabad and Rewari districts, all have been registered in the category of either medium or high numbers of rape in 2011. The medium rape numeral has been reported in Yamuna Nager, Kurukshetra, Jind, Rohtak, Jhajjar and Gurgaon districts of the state in 2001 whereas this number has increased from six to nine districts (Yamunanagar, Kurukshetra, Kaithal, Sirsa, Bhiwani, Sonipat, Jhajjar, Mahendragarh and Mewat) in further study time period. Dowry death is also an appalling form of crime against women where brides are burnt or killed very soon after marriage or later for not satisfying the unnatural and unlimited demands of either husband or his family or both (Cad 1995). It has been observed that in 2001, there was high prevalence (above 20) of dowry deaths in Hisar and Bhiwani districts which changed with Sonipat and Gurgaon districts in 2011. In 2001, whole eastern (except Yamunanagar district) and south-eastern Haryana registered moderate dowry deaths whereas, in 2011, districts of western Haryana have also joined this category.

In 2011, the least events of dowry death have been catalogued in district Panchkula (2) accompanied by Ambala (5), Rewari, Fatehabad and Kurukshetra (7 in each) districts (Table 1). The pattern has shown slight decrease (255) in 2011 from (280)2001 in the number of dowry deaths.

Composite Index of Crime

The composite score of ranks exposes the overall crime of all districts based on ten categories of crime. According to statistics of 2001, in

overall crimes, district Faridabad has highest criminal activities as the value of the composite index is least (28) whereas with a highest composite score of 161.5, Mahendragarh is on the bottom followed by Panchkula (159), Kaithal (151.5) and Rewari (148.5) districts subsequently.

In 2011, the scenario is different and Panchkula has been identified as the district of having overall lowest crimes with the composite score of 186.5 followed by Fatehabad (178.5) and Mewat (164.5) districts. The lowest composite score (30) stands for district Gurgaon accompanied by Hisar district (52) as these districts have registered highest incidences of overall crimes (Table 2).

It is not only fed up, distracted and immoral nature of human being which is responsible for any wrongdoing. Outside this specific assumption, wealth discrimination, political will and power, parental influence, lack in policy formulation, effectiveness and implementation, mis-tracked media exposure and social transformation also contribute to the prevalence of criminal events in any area. However, it is thorny to get a general understanding of the spatial sharing of various natures of crimes on this basis. The observed correlation among crime types has been represented through matrix in Table 3. For example, murder is closely and strongly associated with kidnapping, robbery, theft, cheating and dowry whereas rape incidence is positively interlinked with riots and murders. A strong positive rapport also exists between literacy rate and burglary events and significantly, level of urbanization has either strong or weak but positive bonding with all examined variables except BPL and SC population.

CONCLUSION

The increasing economic disparities and modifications in societal structure as a result of development are significant contributors to illegal events. The comparative information over a period of time demonstrates that with remarkable progress, the study area is also witnessing wide crime situations by means of the generous increase in all types of studied crimes except dowry deaths. The regional analysis of overall crimes shows that the adjoining districts of the National Capital Region have more criminal history as compared to others. It may be the result of economic and industrial growth which attracts the heterogeneous population of surroundings

Crime ranks

S. No.	District	Murder		Kidnapping & abduction		Dacoity		Robbery		Burglary		Theft		Riots		Cheating		Rape		Dowry deaths		Total	
		2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011	2001	2011
1	Ambala	14.5	13.5	3	12.5	13	9.5	10	10	1	2	6.5	9	15	19	3	7	15	8.5	13	20	94	111
2	Bhiwani	10	4	18.5	11	18.5	3	9	11.5	10.5	6	13	8	2	2	7	8	17.5	6	1	3.5	107	63
3	Faridabad	3	6	1	1	3	7.5	3	7	4	4	2	2	1	1	4	15.5	3	3.5	4	13	28	60.5
4	Fatehabad	18	19	8	18	9.5	16	13	21	17	19	18	21	13	14	9	12	10.5	21	9	17.25	178.5	
5	Gurgaon	2	1	2	8	8	3	1	1	2	1	1	1	3	5	15	2	4	7	8	1	46	30
6	Hisar	6	5	6	3	13	9.5	7	3	3	3	4	3	11	7	1	1	17.5	10.5	2	7	70.5	52
7	Jhajjar	5	7	12.5	16	13	7.5	8	9	16	18	14	17	5	9	11	10	8.5	12	3	10	96	115.5
8	Jind	11.5	8.5	17	14.5	13	21	5.5	8	9	7	16	12	4	6	10	14	8.5	8.5	13	6	107.5	105.5
9	Kaithal	13	16	18.5	19	9.5	12	14.5	19	14	10.5	17	20	18.5	19	18	18	12	18	16.5	15	151.5	166.5
10	Karnal	8.5	11	4	20	2	12	11	11.5	6	10.5	3	6	6.5	12	5	4	1	1	5.5	3.5	52.5	91.5
11	Kurushetra	17	18	12.5	12.5	5.5	12	12	16	10.5	13	9	14	18.5	19	2	11	5	13	15	17.5	107	146
12	Mahendragarh	14.5	17	15	10	16.5	1	19	14	19	15	19	15	6.5	11	19	21	15	16	18	11.5	161.5	131.5
13	Mewat	DNA	20	DNA	14.5	DNA	14.5	DNA	17	DNA	21	DNA	19	DNA	10	DNA	17	DNA	14	DNA	17.5	DNA	164.5
14	Palwal	DNA	12	DNA	5.5	DNA	18	DNA	13	DNA	20	DNA	10	DNA	13	DNA	20	DNA	3.5	DNA	8.5	DNA	113.5
15	Panchkula	19	21	10.5	21	16.5	18	17.5	19	13	17	11	18	17	19	16.5	13	19	19.5	19	21	159	186.5
16	Panipat	7	10	9	2	1	5.5	2	5	8	16	5	4	10	4	8	3	2	5	13	11.5	65	66
17	Rewari	16	15	15	17	18.5	3	16	6	18	12	15	13	8	13	16.5	19	15	19.5	10.5	17.5	148.5	135
18	Rohtak	4	3	15	9	5.5	5.5	4	2	5	5	6.5	5	9	8	6	5	6	2	8	14	69	58.5
19	Sirsa	11.5	13.5	10.5	4	13	18	17.5	19	7	9	10	11	12	15	12.5	15.5	10.5	17	10.5	5	115	127
20	Sonapat	1	2	6	5.5	5.5	20	5.5	4	12	14	8	7	14	16	12.5	6	13	15	5.5	2	83	91.5
21	Yamunanagar	8.5	8.5	6	7	5.5	14.5	14.5	15	15	8	12	16	16	19	14	9	7	10.5	16.5	8.5	115	116

DNA: Data not Available

Source: Calculated from National Crime Records Bureau

Table 3: Correlation matrix

Variables	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}	X_{12}	X_{13}	X_{14}
X_1	1													
X_2	.450*	1												
X_3	0.306	0.226	1											
X_4	.825**	0.374	0.392	1										
X_5	.660**	0.317	0.360	.716**	1									
X_6	.636**	.453*	0.364	.809**	.750**	1								
X_7	.696**	.549*	0.353	.680**	.676**	.584**	1							
X_8	.480*	.325	0.230	.616**	.357	.163	.357	1						
X_9	.738**	.449*	.480*	.323	.178	.323	.178	.323	1					
X_{10}	.738**	.449*	.480*	.323	.178	.323	.178	.323	.178	1				
X_{11}	.738**	.449*	.480*	.323	.178	.323	.178	.323	.178	.323	1			
X_{12}	.738**	.449*	.480*	.323	.178	.323	.178	.323	.178	.323	.178	1		
X_{13}	.738**	.449*	.480*	.323	.178	.323	.178	.323	.178	.323	.178	.323	1	
X_{14}	.738**	.449*	.480*	.323	.178	.323	.178	.323	.178	.323	.178	.323	.178	1

Note: ** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Note: X_1 = Murder, X_2 = Kidnapping and abduction, X_3 = Dacoity, X_4 = Robbery, X_5 = Burglary, X_6 = Theft, X_7 = Riots, X_8 = Cheating, X_9 = Rape, X_{10} = Dowry deaths, X_{11} = Literacy Rate 2011, X_{12} = BPL population, X_{13} = Percentage of SC population, X_{14} = Level of urbanization

by providing various opportunities. Such fiscal and communal disparities lead to different types of crimes. The additional concentration of people in urbanized districts as well as more sharing of boundaries by the state also assists the criminals to conceal and escape after consigning the wrongdoings. So there is need to identify the association between the physical setting of locality and occurrence of crime by efficient monitoring of incidences with the amalgamation of the latest technology of crime mapping to make easy and effective approaches and procedures of commanding the misdemeanors.

RECOMMENDATIONS

The preceding discussion is about the analysis of ten categories of crimes which are basically such types of criminal activities that generally take place in any progressive social organizations and their evasion is not possible at all. Instead of total escaping, the humans can minimize the frequency and impact of crimes through proficient policies structure and their effective and factual implementation. The exercise of time and cost-effective technique to monitor the specific crime supportive sites and situations with least spatial and temporal resolution can be the best armament to control these misdeeds. In addition to this, the eagle observation about different types of white collars or skill based crimes (fraud, labour racketeering, patent infractions, falsification, misuse, wisecrack and cybercrimes) could be included in the study for a comparison of crimes' means and ways of developed and immature mores. Furthermore, the work can and should integrate the fact how much proportion of misguided or circumstantial based wrongdoers have come in the mainstream of society after chastisement or counseling.

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