

## **REGIONAL VARIATION AND CORRELATES OF CRIME AGAINST WOMEN**

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### **Abstract**

*The occurrences of crime against women are imbued in spaces as well as in the socio- economic profiles of the places. In this study an emphasis has been made to identify the elements of the spaces and the socio-economic variables that lead towards victimization of women in the district Darjeeling of West Bengal. A comparative analysis of crime against women in the regional division (hill and terai) of Darjeeling has been done; a correlation method is used to identify the variables that have its bearing on crime against women. The other aim of this paper is to explain the regional variation in crime rate. The data pertaining to this study has been collected from SP office Darjeeling and Commissionerate office, Siliguri, Darjeeling for the year 2004 to 2014. An ARC GIS tool is used for preparing maps for the purpose of study.*

### **Keywords:**

Regions,  
Crime against women,  
Growth rate,  
Crime rate,  
Correlates

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## 1. Introduction

Regional variation in the study is referred to the physical division of Darjeeling categorised into two parts based on their altitude from the mean sea level. The regions above 300ft are hilly and below are the terai (Gazetteer 2001). The three sub-divisions of districts namely Darjeeling, Kurseong and Kalimpong lie in the hilly tracts and Siliguri subdivision extends along the foothills of the Himalayas in the terai. The percentage of crime against women in hill region is less than in the terai. It could be due to the location of the police station in the town area which is away from the far located villages having rugged terrain and poor communications. The public /private transportation communication in the hill is not much facilitated as in the terai due to which most of the reporting of crime against women remains unreported. The other factors of cases remaining unreported may be the economic condition of the individual who cannot afford to reach the far-off located police station, prestige in the society, reputation, fear of threatening, etc. The terai region of the district is densely populated and large numbers of economic activities are carried out than in the hills. The reporting of crime and its rate is high because of the facts that the terai region has better public/private transport facility, high police strength, numbers of police check post, etc. Though, all the cases of crime against women are not reported, but still its reporting is high than in the hill.

### Objectives

- To analyse crime rates of the region
- To identify and explain the various correlates of crime against women.

## 2. Research Method

This paper is based on secondary data which were collected from the offices of Superintendent of Police, Darjeeling and Siliguri Police Commissionerate, Siliguri. Data was also collected from other sources like District Census Handbook of Darjeeling, National Crime Record Bureau, Gazetteers 2001 of Darjeeling district, and number of literature reviews. The data pertaining to crime against women collected from the offices of Superintendent of Police and Siliguri Police Commissionerate office, Siliguri was taken for the analysis of varying crime rate, in different regions of Darjeeling district. Crime rate per lakh of female population was calculated to know the differences in region. Several socio-economic variables were taken up to

identify the relationship with crime against women by using Pearson's Coefficient of Correlation in SPSS Tool as well as the magnitude of relationship too, was calculated to know the influence of variables on the crime against women.

### **Study area**

Darjeeling lies between 26°31' to 27°13' north latitude and 87°50' to 85°53' east longitude comprising the total area of about 3149 sq. km (Gazetters, 2001). Regionally, the district is divided into hill and terai. The hilly tract of district begins from 300ft. above the mean sea level up to the height of 12000ft. The three sub divisions Darjeeling, Kurseong and Kalimpong lie in the hilly region and the only sub division Siliguri is situated in the terai extending along the foot hills of the Himalayas (Gazetteer 2001). Hill part of the district has eight Community Development Blocks, 349 villages/towns which is covered by nine Police Stations. Terai region is covered by four Community Development Blocks under which lie the 365 villages/towns and is patrolled by seven Police Stations. The region is interspersed with tea gardens situated from 610 to 2134mts on the hill slopes. It is also noted, that Darjeeling till 1830s was covered with very thick jungles and forests and was also very scantily populated by human beings. British then in the time dominated over the area and developed some eponymous town, established British Cantonments and Military units and grew tea plantation on the hill slopes which resulted in the reduction of forest cover. Such developmental activities during the time attracted large number of people from the neighbouring states. Since independence there has been a growth in population and anthropocentric activities in the area (DCH 2011). It has a total population of 1,842,034 out of which male is 934,796 and female is 907,238. The density of population is 585, sex-ratio is 971, total literacy is 79.92 out of which 85.94 per cent are male literates and 73.7 per cent are female (DCH 2011).

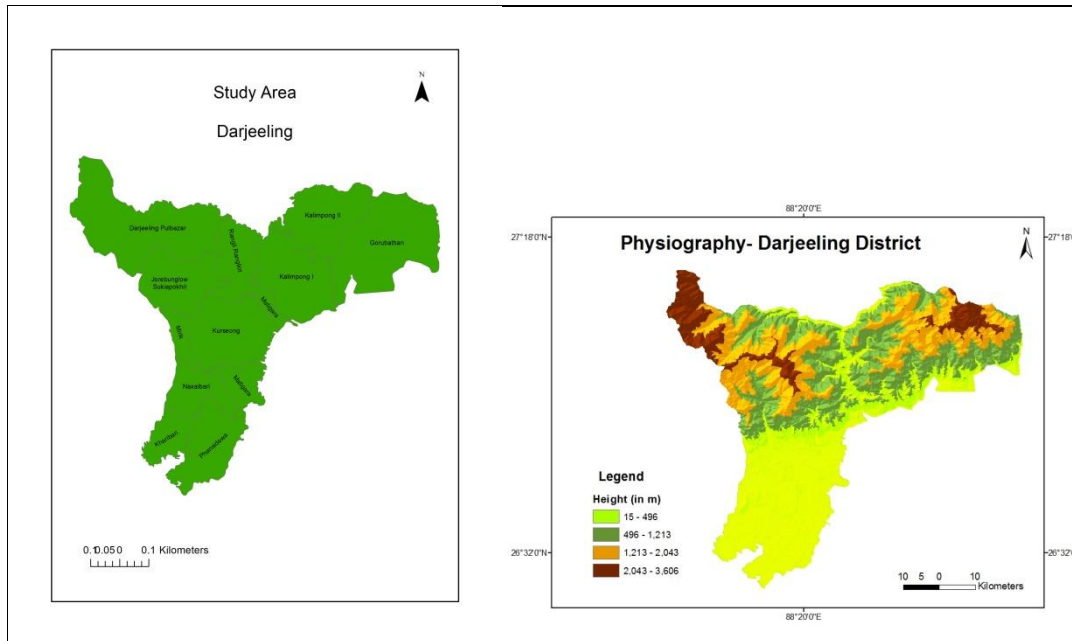


Fig 1.1 Study Area

## Review literature

The concept of region evolved during 20<sup>th</sup> century, which since then went under various formulation and rejection. Its definition was first given by Herbertson in an article published in 1905 and according to him it is a unity of configuration, climate and vegetation or is a reflection of physical reality. Another prominent geographer, Paul Vidal de La Blachegave his concept about geographical region, that, it is a combination of naturaland cultural elements or is the influence of man and nature that shape each other. Region is also an outcome of interactions made by individual or social groups within the context of different economic, political and cultural aspects. Similarly, crime is also a phenomenon that is derived out from the prevailing social system. Crime against women is the violation of women's human right (Fried, 2003). It is the cause of gender inequality which can be prevented by education and working together with young boys and girls at early start of life to promote gender equality (Bajpai&Keshava).As is mentioned in theConstitution of India about the equality of sex, but still women are struggling and rampantly discriminated and crimes like dowry death, molestation, sexual harassment, ill treatment are increasing day by day (Nagindrappa, 2013). It is very concerning issue. There persist variations in crime over the space which reflects the cultural and economic development (Rao, 1981). Ray. Et.al (2015), conducted their study on 70 women injured by their husband

found that the young women were assaulted/tortured at early period after their marriage because of maladjustment in new relationship in new environment to which she was not use to it earlier. It is also found by Tahir (1996), that, crime as an urban phenomenon is the result of interaction of several factors arising out of increasing urbanisation. Herbert (1989), crime in geography is the interplay of space, environment and peculiarity of place. Akers (1999), found the theories of crime is classified as – biological theories, psychological theories, social psychological theories and sociological theories. Murphy and Patrick (1985), environmental factors like topography, overcrowding, pollution and recreational opportunities effects on human physics and psyche in their course of life and in result it causes variation in crime rate. Physical environment also determines type of opportunity available for committing of crime.

### **3. Results and Analysis**

This section of paper deals with the statistics of crime against women in detail. In Darjeeling during 2004 to 2014, among the total crime against women of all types, cases of torture (498A IPC) was very high of about 49 per cent and it is further followed by molestation (354 IPC) 20 per cent, rape (376 IPC) 14 per cent, kidnapping and abduction (363-373 IPC) 13 per cent and the remaining 3 per cent included eve-teasing (509 IPC), dowry death (302/304-B IPC), and ITP and IRW from Special and Local Laws section. The torture cases were mostly caused due to non-fulfilment of dowry demanded in the form of money and materials by the husband and their family members. Victims of molestation were molested at their house when they were alone, on way to their office, public/private places, etc and were convicted by known as well as unknown of the victims. Ill motives, false hope of marriage and employment, for ransom, slave, prostitutions, keeping hope of becoming rich in short span, etc became the purpose of kidnapping and abductions of victims. Girls from teenage group were mostly targeted as because they easily came into the trap of accuse. The accused allured the victims with gifts and took them to lonely places; served drinks laced with medicines, dragged them to nearby jungles etc. and committed rape. The cases of eve-teasing took place at the school premises, bus stops, public transport, market area, cinema complexes, etc. Due to unbearable torture by the husband and their family members enforced the victims to commit suicide by hanging themselves, by burning, were beaten severely and succumbed to death in hospitals, etc. and for which the accused were booked under the IPC section 302/304-B or Dowry death. The crimes against women since 2004 to 2014

showed an alarming increase from 2.48 per cent in 2004 to 21.77 per cent in 2014. The growth rate fluctuated from high to low in between the period. In 2005 it reached to 42.86 per cent and declined to 6.32 and 9.90 per cent in 2006 and 2007. It recorded highest 50.26 per cent growth rate of crime against women in 2011 and step down to 5.23 per cent in 2014 as is evidenced from the figure 1.2.

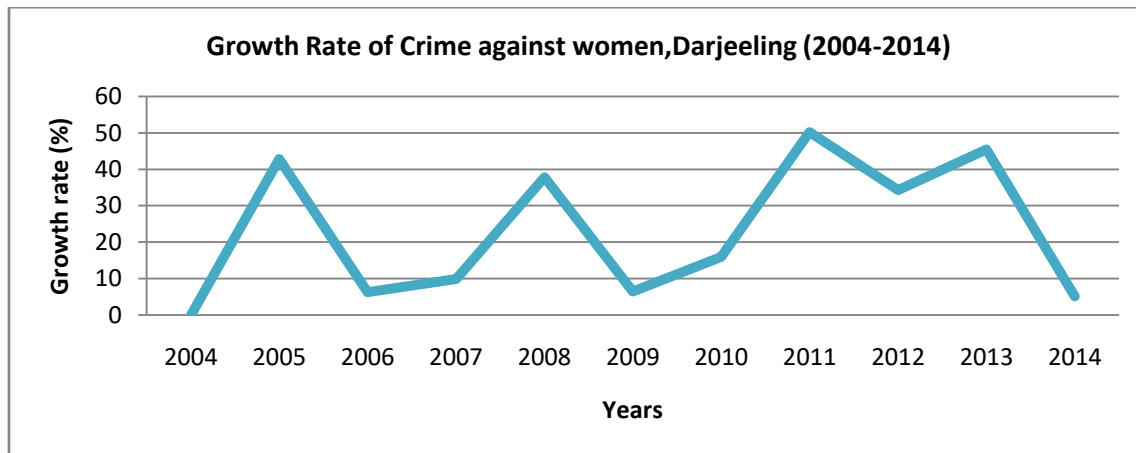


Fig 1.2

While reviewing the FIR reports of all the police stations of Darjeeling district, it was found that the maximum incidences were reported from the terai than the hills. It is evidenced from the figure 1.3 that regionally, there persisted a vast variation in total number of incidences against women in terai and the hill. Climatically, the terai regions are warmer than the hills and it has been found by Cohen (1941) and Mishra (2014) in their studies that the warmer regions are prone to high crime rate as because the impact of temperature influences the human behaviour. Thus similar result was seen in regional analysis of crime against women in Darjeeling.

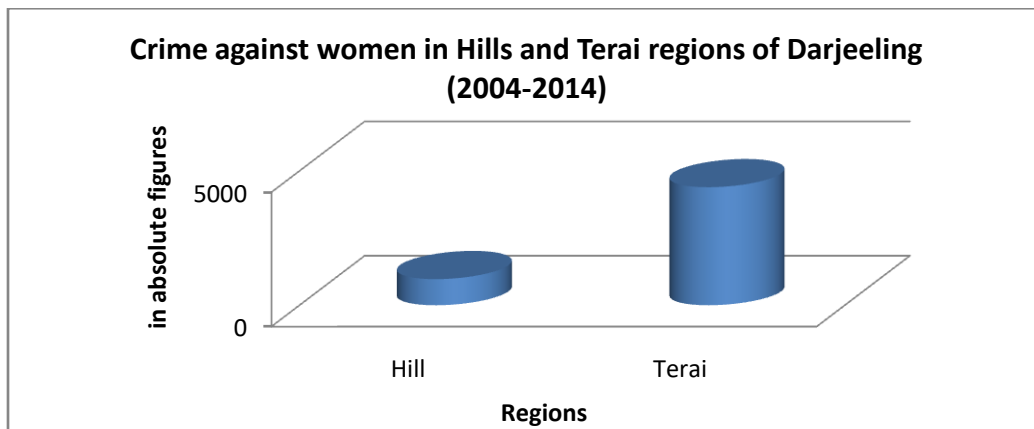


Fig 1.3

Though there is only a variation of one per cent in female population in both the regions of Darjeeling (Hill 49% and Terai 50%), the rate of crime against women is high in terai (1327.06 per cent) than the hill (299.42). The rise in crime rate is influenced by some of the demographic and social characteristics of the region. Out of total area, 25.52 per cent of area lies in terai which is very less than hill region of about 74.47 per cent. The terai region has high population density of about 939 and the hill has 310. Percentage of scheduled caste population, illiterates, workers, non-workers and police strength are high in terai (fig 1.4) which has resulted a rise in crime rate against women. It is also found that the percentage of torture, molestation, kidnapping and abduction and rape crimes are high in terai (fig 1.5).

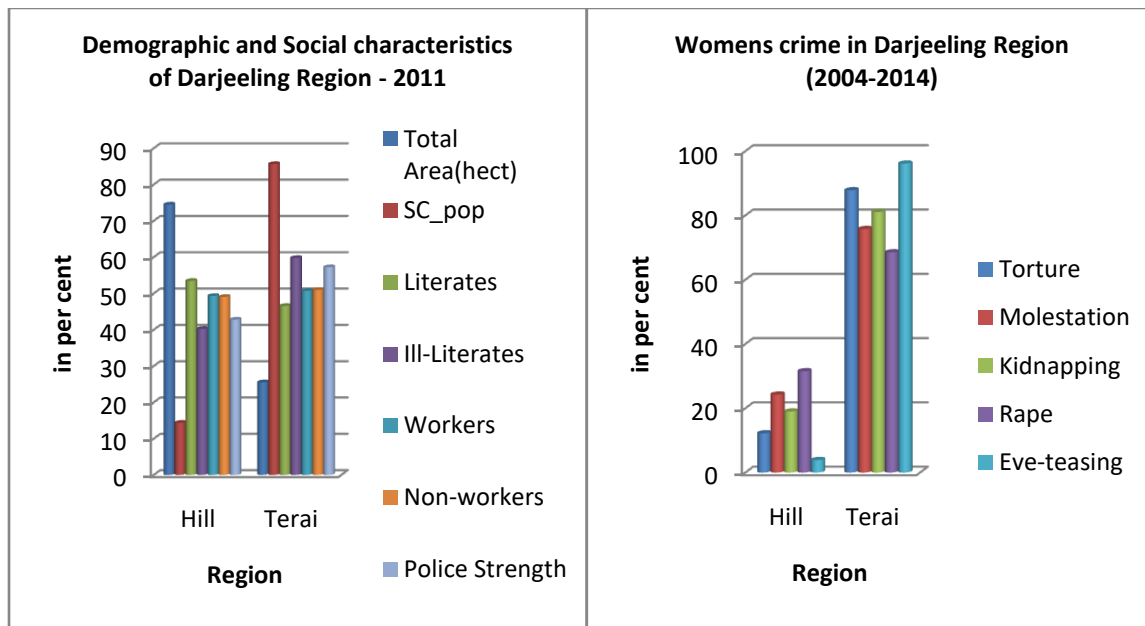


Fig 1.4

Fig 1.5

While analysing the rural urban population and its density for the year 2001 and 2011 of the blocks lying in hill and terai region of the district some change took place in them within the decade. It was noticed that the two hill blocks Kalimpong and JorebunglowSukiapokhri had a rise in urban population of about 4.8 per cent in Kalimpong and 23.68 per cent in JorebunglowSukiapokhri in 2011 from 2001. In the terai region except Phansidewa block there was a change in percentage of rural urban population during 2001 to 2011. Rising of urban

population and increasing population density in 2001 to 2011 has coupled with rise in crime rate against women in both the regions of the district. Overall, crime rate increased due to increasing of population density, change in rural urban structure and rapid urbanization (table 1.1). A similar phenomenon of urbanization and increasing population density leading to rise in crime rate was found by Mukhopadhyaya (1999) and Tahir (1996) in their studies.

Table 1.1 Crime rate and rural/urban population in Darjeeling

Blocks	Crime Rate /lakh of Female Population		Population Percentage				Density	
	2004*	2011*	2001		2011		2001	2011
<b>Hill</b>			Rural	Urban	Rural	Urban		
Darjeeling Pulbazar	12.19	33.28	98.59	1.41	82.84	17.16	302	331
RangliRangliot	6.24	11.40	100.0	0.00	100.00	0.00	236	257
Kalimpong I & II	4.82	14.43	100.0	0.00	95.20	4.80	254	281
Gorubathan	18.72	37.15	100.0	0.00	100.00	0.00	179	200
JorebunglowSukiapokhri	1.96	22.69	100.0	0.00	76.32	23.68	496	559
Mirik	47.34	39.16	100.0	0.00	100.00	0.00	354	389
Kurseong	4.70	19.02	84.09	15.91	84.69	15.31	272	299
<b>Terai</b>								
Matigara	24.46	76.88	95.82	4.18	68.73	31.27	1147	1750
Naxalbari	13.03	48.47	89.11	10.89	59.04	40.96	904	1033
Phansidewa	21.54	29.76	100.00	0.00	100.00	0.00	560	668
Kharibari	142.59	649.5	100.00	0.00	89.15	10.85	627	776
* Crime data 2004 and Population is of 2001. ** Crime data and Population data of 2011								

Source: Compiled by Author from data collected from the office of the Superintendent of Police, Darjeeling and from Siliguri Police Commissionerate office, Siliguri. DCH Darjeeling 2001 and 2011

In the blocks lying in hill region, the temperature and population density is lower than those of the terai region. Except Mirik block of hill area has temperature above 30 degree celsius because it lie in the valley due to which it is warmer and also stands in second position in terms of



population density. It also recorded the highest crime rate of about 39.16. In terai region, the blocks have temperature above 35 degree celsius and high population density which have led to a high crime rate against women (table 1.2).

Table 1.2 Crime rate and temperature in Darjeeling

Blocks	Crime rate/ lakh of female Population	Population Density	Maximum Temperature (in °C)
<b>Hill</b>	2011	2011	
Darjeeling Pulbazar	33.28	331	24
RangliRangliot	11.40	257	20
Kalimpong	14.43	281	17
Gorubathan	37.15	200	19
JorebunglowSukiapokhri	22.69	559	23
Mirik	39.16	389	31
Kurseong	19.02	299	22
<b>Terai</b>			
Matigara	76.88	1750	36
Naxalbari	48.47	1033	36
Phansidewa	29.76	668	36
Kharibari	649.50	776	35

*Source: Compiled by Author from data collected from the office of the Superintendent of Police, Darjeeling and from Siliguri Police Commissionerate office, Siliguri. (2004-2014). DCH, (2011) Darjeeling.*

### **Correlates of crime against women (torture, molestation, kidnapping and abduction and rape)**

From the given correlation table of crime against women (torture, molestation, kidnapping and abduction and rape) a relationship with the several variables (SC Population, Density of Population, Literates, Ill-Literates, Workers, Non-Workers, Temperature (Max) and Police Strength) has been established (Table 1.3) .

There is a positive relationship of torture, molestation, kidnapping and abduction and rape with SC population which is denoted by their r values .703, .605, .691 and .806. Among the types of crime against women, influence of scheduled caste population is high on rape which is determined by its coefficient of correlation ( $R^2$  0.649). 65 per cent of variance of rape is explained by scheduled caste population and remaining 35 per cent by other unexplained forces.

The torture, molestation, kidnapping and abduction and rape are strongly and positively correlated with population density which are known by the values of  $r=.91$ ,  $.87$ ,  $.92$  and  $.80$ . The impact of population density on crime against women is high known by their coefficient of correlation value expressed as  $R^2 = 0.837$ ,  $0.769$ ,  $0.839$ ,  $0.828$ . Between 76 to 84 per cent variance of crime against women is affected by population density and the remaining by some other factors.

Occurring of torture, molestation, kidnapping and abduction and rape are also positively correlated with literates known by  $r = .67$ ,  $.64$ ,  $.68$  and  $.82$ . 68 per cent variance of rape is met by literates and the remaining by other unexplained forces. It is been justified that the literates are highly involved as compared to illiterates in committing rape.

Illiterates are also involved in committing of crimes like torture, molestation, kidnapping and abduction and rape which is know the correlation value  $r= .57$ ,  $.48$ ,  $.56$ , and  $.76$ . Even the illiterates too have high magnitude positive relation with rape as compared to other crimes against women. 57 per cent variance of rape is explained by illiterates and remaining 42 per cent by unexplained forces.

The relationship of workers with torture, molestation, kidnapping and abduction and rape are denoted by r value  $.66$ ,  $.61$ ,  $.66$ , and  $.83$ . Magnitude of workers with rape is very high as compared to other crimes against women. 70 per cent variance of rape is caused by workers and the remaining 30 per cent is the result of other forces.

There also exist a strong relationship of non-workers with torture ( $r=.64$ ), molestation ( $r=.59$ ), kidnapping and abduction ( $r= .64$ ) and rape ( $r=.82$ ). 68 per cent variance of rape is caused by non-workers.

According to review of literatures and season wise monthly analysis of crime data of Darjeeling a relationship between the temperature and crime against women were established. The obtained result signified that the maximum crime against women took place during hotter period than the colder. Thus a relationship of torture, molestation, kidnapping and abduction, and rape with maximum temperature is known by the r value .46, .40, .46 and .62. 37 per cent variance of rape is caused by high temperature.

An effective mechanism of police strength does impact upon the crime rate. Both has a close association with each other which is known by the r value torture .92, molestation .93, kidnapping and abduction .93 and rape .93. More than 85 per cent variance of torture, molestation, kidnapping and abduction and rape is explained by police strength. Available of good number of police check post, police strength and faith upon them have led more reporting of crimes (table 1.3)

Table 1.3 Correlates (r) and nature of relationship ( $R^2$ ) between variables

Variables		Torture		Molestation		Kidnapping & Abduction		Rape	
		r	R <sup>2</sup>	r	R <sup>2</sup>	r	R <sup>2</sup>	r	R <sup>2</sup>
x1	SC Population	.703*	0.494	.605*	0.366	.691*	0.477	.806**	0.649
x2	Density of Population	.915**	0.837	.877**	0.769	.916**	0.839	.910**	0.828
x3	Literates	.672*	0.451	.648*	0.419	.682*	0.465	.826**	0.682
x4	Ill-Literates	.577*	0.332	0.485	0.235	0.561	0.314	.766**	0.586
x5	Workers	.663*	0.439	.610*	0.372	.665*	0.442	.835**	0.697
x6	Non-workers	.646*	0.417	.590*	0.348	.644*	0.414	.824**	0.678
x7	Temp_max	0.464	0.215	0.400	0.16	0.467	0.218	.622*	0.386
x8	Police Strength	.923**	0.851	.930**	0.864	.939**	0.881	.930**	0.864

**.	Correlation is significant at the 0.01 level (2-tailed).
*	Correlation is significant at the 0.05 level (2-tailed).

Source: SP office, Darjeeling. Commissionerate Office, Siliguri. DCH Darjeelin, 2011

#### 4. Conclusion

Hence it is concluded that the crime against women occur at any place, anytime and anywhere. It has no definite place or time whether it's a hilly tract or the plain terairegion, the phenomena of crime exist everywhere. Variation in percentage of crime against women and its rate persist in the terai and hilly region of the district. The terai has high percentage and rate of crime against women than the hills. The reason of high crime in terai are due to more reporting of crimes, more numbers of police check post, better public/private transport facility, high police strength, influence of high temperature and impact of some of the demographic and social characteristics of the population like high percentage of scheduled caste population, population density, illiteracy, non-workers, literates and workers which are positively correlated with crime against women. From the correlation analysis, the magnitude of relationship of rape is positively high with SC Population, Density of Population, Literates, Ill-Literates, Workers, Non-Workers, Temperature (Max) and Police Strength denoted by their R<sup>2</sup> values.

#### Acknowledgement

This research paper is a part of my Ph.D Thesis. I am very much thankful to Prof. Mary Tahir and the Department of Geography, Jamia Millia Islamia for providing me resources and facilities for the purpose of carrying out my research work.

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