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## A STUDY ON CRIME PATTERNS IN CANTONMENT RANGE OF TIRUCHIRAPPALLI CITY, TAMIL NADU

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### ABSTRACT:

*This paper is an effort to study the major crimes and crime against women of Cantonment range in Tiruchirappalli city. It reveals that robbery (56.6%), K.K Nagar police station (60) and the year 2015 (25%) of major crimes and cruelty by husband (39.4%), AWPS of Cantonment (72) and the year 2013 (24%) of crime against women were high compared to other crimes, police stations and years. The minimum was murder for gain 1.9 % and dowry death 1.1% in the range from 2012 to 2017. The spatial pattern of the crime map has been prepared to reduce the crimes in the study area.*

**KEYWORDS:** Cantonment range, Major crimes, Crime against women, Crime mapping, Hotspot

### INTRODUCTION:

Science has equipped man with many luxuries and has made life much easier. However, human beings are never content with what they have acquired and hence, they crave for more. This insatiable desire to possess more has filled them with the vices like jealousy, greed, deceit and discontentment, which are some of the principal motives of crimes.

A crime that hampers economic development and overall prosperity is a problem in every part of the world. In many countries, the ever-growing population, coupled with limited resources, is the major cause for problems like poverty, unequal distribution of income and wealth, unemployment, lack of health and inadequate sanitation facilities. Countries widespread with such problems have a strikingly high crime rate due to these socio-economic factors. Crimes create a feeling of fear and insecurity among citizens and cast a shadow over a country and its people.

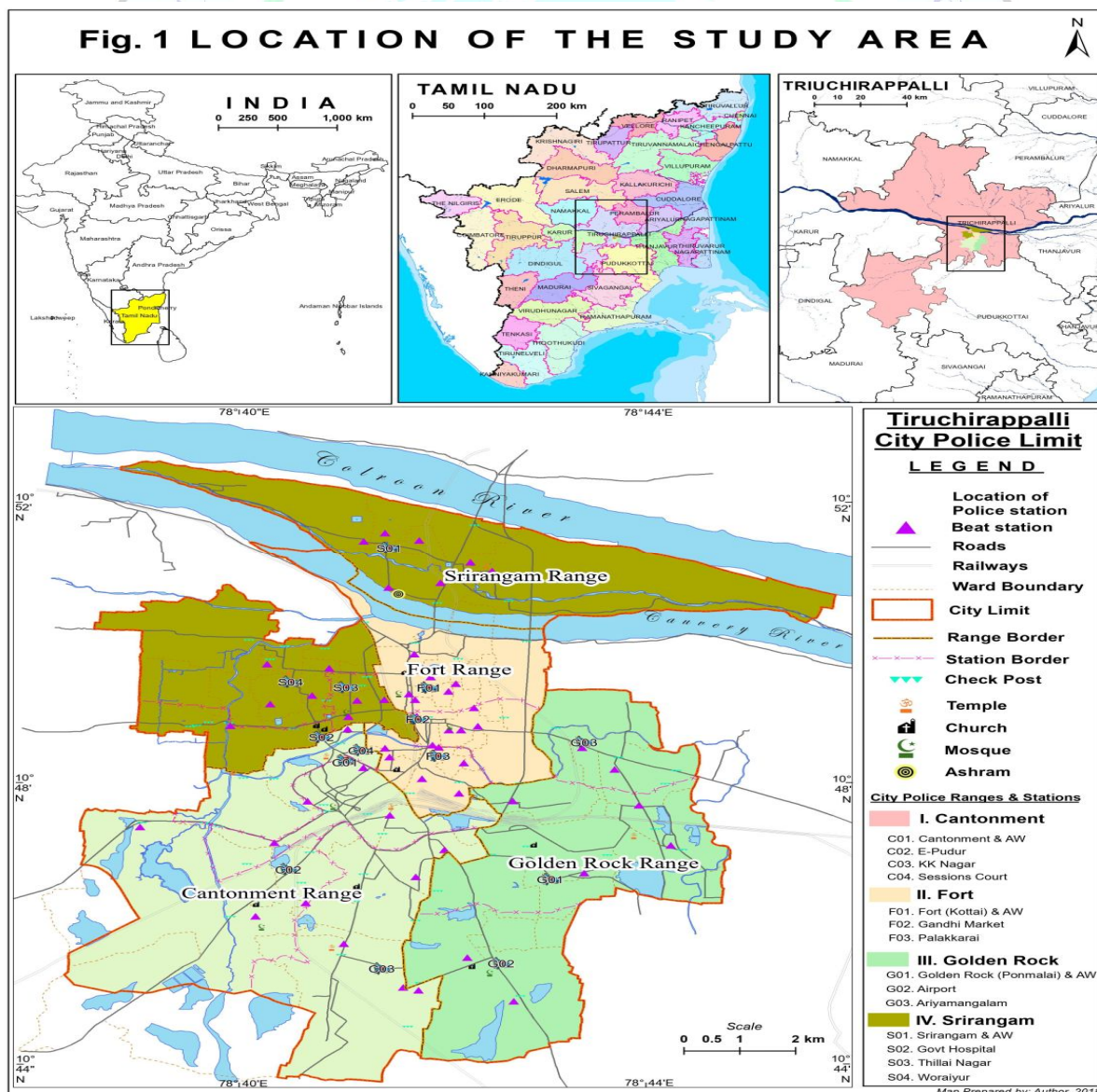
The types of crimes and the intensity of crime rate may differ from country to country, region

to region and from time to time. Though crimes of one sort or another must have taken place even in prehistoric societies, the intensity and diversity of the crimes today have increased multiple. Technological developments have further added sophistication and perfection to the mode of crimes. There have been limited studies concerned about range-wise analysis of crimes such as Bhattacharyya, R. (2016) analysed the contextual factors responsible for the occurrence of Street Violence Against Women (SVAW) in five cities of North-East India; Chauhan, R., and Baraik, V. K. (2016) explored the spatial and temporal aspects of crime against women in India with special reference to rape; Khadke, P. A., et al. (2019) focused on rape, dowry death, kidnapping and abduction, molestation, dowry or cruelty by husband or his relatives for dowry in city-level; Lolayekar, A. P., et al. (2020) studied rape, kidnapping, cruelty, dowry deaths, and molestation, across 35 states in Tamil Nadu; Singh, R., et al. (2020) explained the general forms of violence against women in India includes cruelty by relatives, dowry, rape, sexual assault, kidnapping, immoral trafficking, molestation etc.; Kuralarasan, K., and Priyamvadhya, M. (2019) studied the proportion of rationality and opportunity in the commission of crime; Salomat, N., (2020) examined the experience of victim prevention in violent crimes; Taghidizaj, R. A., (2021) provided a model for explaining violence that feeds on the middle and macro analytical levels; Swanson, J. W., et al. (2020) presented a survival analysis of long-term risk of firearm-related and other violent crime; Alatrash, I., (2021) analysed murder related to age group, gender, and nature of work; Farida, F., and Kusriyah, S., (2021) identified and described the legal protection of women perpetrators of the crime of abortion, victims of rape; Mary Santhi, P., et. al. (2021-A) mapped and analysed the violent crimes; Mary Santhi, P., et. al. (2021-B) attempted to survey the property crimes; Mary Santhi, P., et. al. (2021-C) explored the use of Geo informatics for places of crime occurrences; Mary Santhi et al. (2021-D) have analysed crime against women police station – wise; Wang, Z., and Zhang, H. (2019) studied the distribution patterns of hot crime areas by using the spatial temporal kernel density estimation methods; Rossmo, D. K. (2017) feasibly predicted the most probable location of a criminal's residence; Radović-Stojanović, J.V., & Tomić, M. J. (2019) have attempted that the social and economic status of perpetrators of crimes in relation to the total population in the Republic of Serbia. The above reviews helped in understand the crime patterns to reduce the crimes. This research is also an attempt to help the Cantonment range police administration to have sufficient awareness of the crime patterns to prevent crimes in the range.

#### **STUDY AREA:**

The Cantonment range of Tiruchirappalli city's base map had been framed from the Survey of India (SOI) Toposheets Nos. 58 J/9, 10, 13 and 14. The city lies between the latitudes 10° 43' 40"-10° 53' 00" North and the longitudes 78° 38' 14" - 78° 48' 50" East (Fig.1). The topography of the city is relatively flat and its average elevation is 88 metres from mean sea level.

The Jurisdiction of the Cantonment range covers four Law and Order Police Stations. Cantonment Police Station including All Women Police Station is situated on Ben wells Road and is about 1.3 km from Central Bus Stand. It encompasses an area of 5.58 sq. km in the city. The All Women Police Station is also located in the Cantonment area. The Sessions Court Police Station is situated in the Heber Road, New Raja Colony and Beema Nagar and is about 1.8 km from Central Railway Station and Central Bus Stand. It covers 4.44 sq. km in the city. Edamalaipattipudur Police Station is placed in Edamalaipattipudur and is about 2.8 km from Tiruchirappalli Central Bus Stand. It covers 14.77 sq. km in the city. K.K. Nagar Police Station lies in Rajaram Road, K.K Nagar and is about 5.4 km from the office of the Commissioner of Police. It covers 14.39 sq. km in the city. This range covers an area of 39.18 sq. km and consists of the commercial area of the city such as Ulaganathapuram, Othakadai, Korimedu, Subramaniapuram, Heber Road and the residential area of K. K. Nagar which has an educated population. This range includes a high traffic area and has a high floating population.



**METHODOLOGY:**

The data on the incidence of crimes in various parts of the Cantonment range of Tiruchirappalli city was collected from the City Commissioner of Police Office and 5 Police Stations for the period 2012-2017. They have been analysed to portray the spatial distribution and variation of major crimes and crime against women in the city of Cantonment range. The IPC crimes reported under related offences have been classified into two categories as per CCRB for the present study. They are Major crimes (Murder, Murder for gain, Dacoity, Burglary, Theft, Robbery and Crime Against Women (Rape, Kidnapping, Dowry death, Molestation, Cruelty by Husband, Dowry Prohibition Act, 1961 and POCSO Act, 2012) have been incorporated in the analysis to derive reliable crime rates through thematic maps by using Geo informatics.

**RESULT AND DISCUSSION:****CRIME - WISE ANALYSIS OF MAJOR CRIMES:****MURDER:**

Murder is considered the most serious form of homicide and it is the unlawful premeditated killing of a human being by another.

The reason for murder varies from case to case and scenario to scenario. Moreover, the most common causes are dispute over wealth, property and women. In some cases, sharp provocation becomes the explanation for the murder. The purpose of the murder is largely the gain either from property, money, women or to take revenge.

The analysis of the major crimes in the range for the period 2012-2017 shows that of the total crimes committed, 21.4% had been murder (Table 1). The maximum rate of murder was recorded in 2012, which was 32% and minimum recorded in 2016, which was 3% (Table 2) and the highest number 12 (35.3%) of murders had been registered in Cantonment and the lowest 05 (14.7%) in Session Court police stations.

**Table 1. Crime-Wise Analysis of Major Crimes in Cantonment Range**

Major Crimes	2012		2013		2014		2015		2016		2017		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Murder</b>	11	27.5	6	22.2	9	32.9	4	16.6	1	5	3	9.7	34	21.4
<b>Murder for gain</b>	0	0	1	3.7	0	0	2	8.3	0	0	0	0	3	1.9
<b>Dacoity</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Robbery</b>	18	45	11	40.7	4	23.5	17	70.8	18	90	22	70.9	90	56.6
<b>Burglary</b>	6	15	4	14.8	0	0	1	4.2	1	5	3	9.7	15	9.4
<b>Theft</b>	5	12.5	5	18.5	4	23.5	0	0	0	0	3	9.7	17	10.7
<b>Total</b>	40	25	27	17	17	11	24	15	20	13	31	19	159	100

**MURDER FOR GAIN:**

A murder committed for gain in the continuance of a burglary or theft carried out for payment or discharged in presuming of gain because the death obstructs or affects the sequence of justice.

The study of the murders for gain in the range from 2012 to 2017 reveals that murders committed for gain were 1.9% out of other major crimes in the Cantonment range. The maximum rate of murders for gain was recorded in 2015, which was 67% and the minimum was recorded in 2013, which was 33%. It reveals that the range was not plagued by murder for gain in 2012, 2016 and 2017. One each murder for gain had been registered in Edamalaipattipudur, Sessions Court and K.K. Nagar police stations.

#### **DACOITY:**

If an act of fierce robbery is carried out by an equipped mob, there is no difference between robbery and dacoity apart from the total number of criminals. Robbery is dacoity if the individuals carrying out robbery are five or more in number. This means that if the crime of robbery committed with the collaboration of more than five members it becomes dacoity. Every person so committing, attempting or aiding, is said to commit dacoity (IPC section 391).

While comparing dacoity with other major crimes of the analysing zone from 2012 to 2017, it was found that no dacoity had been recorded in the Cantonment range.

#### **ROBBERY:**

Robbery is the crime of taking or attempting to take anything of worth by force or threat of force or placing the victim in terror. According to common law, robbery is interpreted as snatching the assets of another, to permanently deprive the individual of those assets, using pressure or fright. It is theft accomplished by an assault. Precise descriptions of the crime may differ between jurisdictions. Robbery is distinguished from other procedures of theft (such as burglary, shoplifting, or car theft) by its characteristically fierce nature (a violent crime).

While analysing the major crimes in the study area from 2012 to 2017, it has been found that 24% of robberies were recorded in 2017, which was the maximum, and 04% was recorded as a minimum in the year 2014. Total robberies were 56.6 % of all other major crimes. This reveals the fact that the range was not at all free from robbery and the highest number 38 (42.2%) of robberies had been registered in K.K. Nagar and the lowest 11 (12.2%) in Session Court police stations

#### **BURGLARY:**

A Burglary is an act of breaking in, sometimes a house. It is breaking and gaining illegal entry into a premise or other site to perpetrate a crime. Typically, such a crime is theft, but many jurisdictions consist of others within the domain of burglary. Burglary is usually committed either in the unprotected or unattended house.

After analysing the major crimes of the study area for the period 2012-2017, it was found that total burglaries were 9.4 % of all other major crimes. The maximum rate of burglaries 40% was reported in 2012, and the lowest was 07% in the year 2015 and 2016. The highest number 8 (53.3%) of burglaries had been registered in K.K. Nagar and the lowest 3 (20%) in Cantonment Police stations.

**THEFT:**

Theft is the deed of a deceitful possibility of the privileges of the actual proprietor of perceptible or imperceptible assets by handling it as one’s own, whether taking or not taking it away with the determination of striping it out from the actual owner.

From the year 2012 to 2017, of all the major crimes in the study area it was found that the highest rate of theft was recorded in 2012 and 2013, which were 29% and the lowest in 2017 with 18%. Total thefts were 10.7% of all other major crimes recorded and the highest number 7 (41%) of thefts were registered in K.K. Nagar and the lowest 3 (18%) in Edamalaipattipudur police stations.

**YEAR-WISE ANALYSIS OF MAJOR CRIMES:**

**CRIMES IN 2012:**

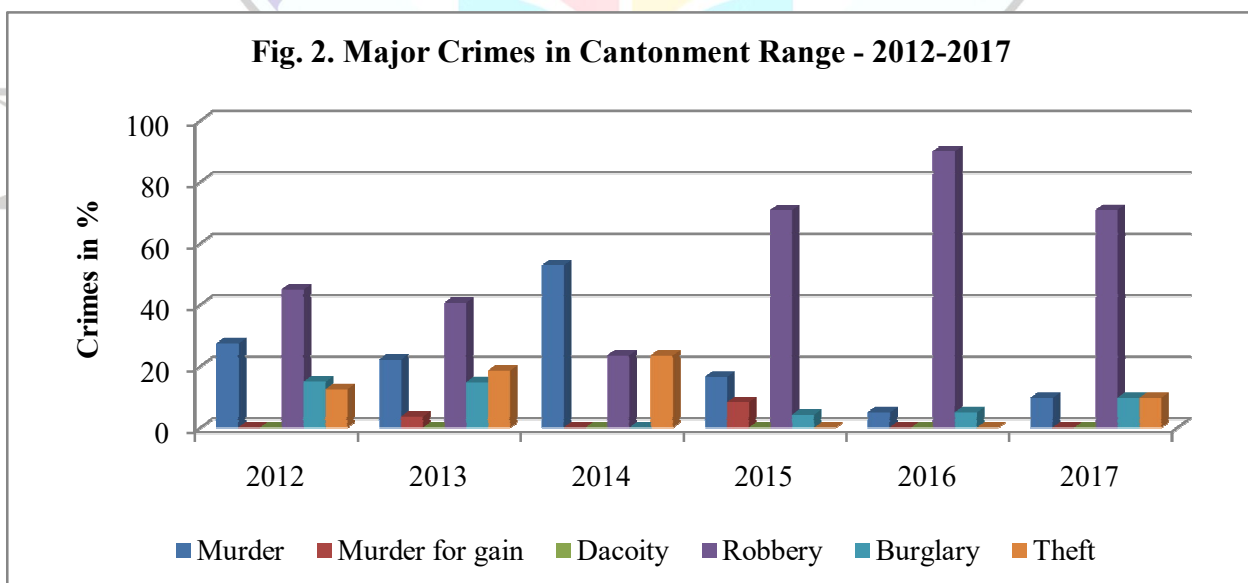
The total number of major crimes recorded in 2012 was 40 (25%). The robbery was the maximum in the range with 45% as related to other major crimes, which include murder (27.5%), burglary (15%) and theft (12.5%). In the year 2012, the range had no crime of Murder for gain and dacoity (Table 1& Fig. 2).

**CRIMES IN 2013:**

The total number of major crimes recorded in 2013 was 27(17%). The robbery had registered the highest crime rate in the range with 40.7% as related to other major crimes, in the year 2013, murder (22.2%), burglary (14.8%), theft (18.5%) and murder for gain (3.7) registered the lowest crime rate (1.0%) and the range was free from dacoity in the year 2013.

**CRIMES IN 2014:**

The total number of major crimes recorded in 2014 was 17 (11%). The murder had registered the maximum crime rate in the range with 52.9% robbery and theft had registered with the same percentage (35.4%). In 2014, the range did not experience any crimes of dacoity and murder for gain.



**CRIMES IN 2015:**

The total number of major crimes recorded in 2015 was 24 (15%). The robbery had registered the uppermost crime rate in the range with 70.8% as related to other major crimes, murder (16.6%), murder for gain (8.3%), burglary (4.2%) and theft and dacoity were (0.0%).

**CRIMES IN 2016:**

The total number of major crimes recorded in 2016 was 20 (13%). The robbery had registered the maximum crime rate in the range with 90 % as related to other major crimes; murder and burglary were with the same percentage (5%), In the year 2016, There was no record of dacoity, murder for gain and theft in Cantonment range.

**CRIMES IN 2017:**

The total number of major crimes recorded in 2017 was 31 (19%). The robbery had registered the uppermost crime rate in the range with 70.9 % as related to other major crimes; murder, burglary and theft were with the same percentage (9.7%). There was no record of murder for gain and dacoity in the same year.

**CRIME - WISE ANALYSIS OF CRIME AGAINST WOMEN:****RAPE:**

Rape is forced sexual intercourse against the will of the victim (Parrot 1988). Rape is a violent act, not just a sexual act. Sexual assault on women is a common phenomenon in our country. Under sexual assault come eve-teasing, child sex abuse, rape, marital rape, and domestic violence.

Of all crimes against women, rape is the most violent crime that is committed against women. According to Section 375 of the Indian Penal Code, rape denotes illegal intercourse carried out by a man with a woman without her lawful approval. Rape disgraces a woman's humility.

After the rape, a woman lives a pitiful life, which consists of fright, unhappiness, guilt, desire to commit suicide and social disgrace. In modern times, rape occurrences have enlarged manifold. According to data, two women are raped in the country every hour. Every ten hours a girl of 1-10 years is being raped in India.

After analysing the crime rape in Cantonment range from 2012-2017, it was found that the total rape cases were 10. 6% of all other crimes against women (Table 3). The highest rate of rape was registered in 2012, 2013, 2015 and 2016 which was 20% and the lowest recorded in 2014 and

2017 with 10% and the highest number 8 (80%) of rapes had been registered in AWPS Cantonment the lowest 2 (20%) in Cantonment police station (Table 4).

**Table 3. Crime-Wise Analysis of Crime Against Women in Cantonment Range**

Crime Against Women	2012		2013		2014		2015		2016		2017		Total	
	CAW – Total with %													
Rape	2	15.3	2	8.6	1	5.2	2	18.1	2	11.7	1	9	10	10.6
Kidnapping	5	38.4	1	4.3	0	0	1	9	1	5.8	1	9	9	9.6
Dowry Death	1	7.6	0	0	0	0	1	9	0	0	0	0	1	1.1
Molestation	2	15.3	6	26	6	31.5	1	9	2	11.7	1	9	18	19.1
Cruelty by Husband	3	23	10	43.4	9	47.3	6	54.5	8	47	1	9	37	39.4
Dowry Prohibition Act	0	0	3	13	0	0	0	0	1	5.8	1	9	5	5.3
POCSO Act	0	0	1	4.3	3	15.7	1	9	3	17.6	6	54.5	14	14.9
<b>Total</b>	<b>13</b>	<b>14</b>	<b>23</b>	<b>24</b>	<b>19</b>	<b>20</b>	<b>11</b>	<b>12</b>	<b>17</b>	<b>18</b>	<b>11</b>	<b>12</b>	<b>94</b>	<b>100</b>

**Table 4. Year – Wise Crime Against Women in Cantonment Range**

Name of the police Station	Rape								Dowry death								Molestation							
	2012	2013	2014	2015	2016	2017	Total	%	2012	2013	2014	2015	2016	2017	Total	%	2012	2013	2014	2015	2016	2017	Total	%
Cantonment	2	0	0	0	0	0	2	20	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3	17
Sessions Court	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	3	17
Edamalaipattipudur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	5.6
K.K. Nagar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	2	1	0	0	0	4	22
AWPS- Cantonment	0	2	1	2	2	1	8	80	0	0	0	0	0	0	0	0	0	2	4	0	1	0	7	39
<b>Total</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>10</b>	<b>100</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>100</b>	<b>2</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>18</b>	<b>100</b>
<b>In %</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>20</b>	<b>20</b>	<b>10</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>11</b>	<b>33</b>	<b>33</b>	<b>6</b>	<b>11</b>	<b>6</b>	<b>100</b>	<b>100</b>

Name of the police Station	Kidnapping – Women and Girls								Cruelty by Husbands								Dowry prohibition act							
	2012	2013	2014	2015	2016	2017	Total	%	2012	2013	2014	2015	2016	2017	Total	%	2012	2013	2014	2015	2016	2017	Total	%
Cantonment	0	0	0	0	0	1	1	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sessions Court	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Edamalaipattipudur	1	1	0	0	0	0	2	22.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K.K. Nagar	3	0	0	1	1	0	5	55.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AWPS- Cantonment	1	0	0	0	0	0	1	11.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>9</b>	<b>100</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>17</b>	<b>100</b>	<b>18</b>	<b>11</b>	<b>4</b>	<b>17</b>	<b>18</b>	<b>22</b>	<b>90</b>	<b>100</b>
<b>In %</b>	<b>56</b>	<b>11</b>	<b>0</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>100</b>	<b>100</b>	<b>29</b>	<b>29</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>100</b>	<b>100</b>	<b>20</b>	<b>12</b>	<b>4</b>	<b>19</b>	<b>20</b>	<b>24</b>	<b>100</b>	<b>100</b>

Name of the police Station	POCSO Act							
	2012	2013	2014	2015	2016	2017	Total	%
Cantonment	0	0	0	0	0	0	0	0
Sessions Court	0	0	0	0	0	0	0	0
Edamalaipattipudur	0	0	0	0	0	0	0	0
K.K. Nagar	0	0	0	0	0	0	0	0
AWPS- Cantonment	0	1	3	1	3	6	14	100
<b>Total</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>6</b>	<b>14</b>	<b>100</b>
<b>In %</b>	<b>0</b>	<b>7</b>	<b>21</b>	<b>7</b>	<b>21</b>	<b>43</b>	<b>100</b>	<b>100</b>

**KIDNAPPING:**

Kidnapping is carrying away a person by compulsion, intimidation, or deceitfulness, with the determination of causing him or her to be held up against his or her will. Kidnapping may be carried out for ransom or political or other purposes. After studying kidnapping cases against women in Cantonment range from 2012 to 2017, it was found that the total kidnapping cases were 9.6% out of all other offences against women in the study area. The maximum rate of kidnapping was recorded in



2012, which was 56% and the minimum with 1.1% in 2013, 2015, 2016 and 2017. It confirms that the range was almost free from the crime of kidnapping in 2014 and the highest number 5 (55.6%) of kidnappings had been registered in K. K. Nagar and the lowest 01 (11.1) in AWPS Cantonment and Cantonment police station.

#### **DOWRY DEATH:**

Most dowry deaths occur when young women cannot tolerate harassment, persecution, torture and suffering. Therefore, they commit suicide by hanging themselves or consuming poison. Dowry deaths also consist of bride burning where brides are drenched in kerosene and set on fire by the husband or his relatives (Teays 1991).

While comparing the crime of dowry death with other crimes against women of the study area from 2012 to 2017, the maximum rate of dowry death had been recorded in 2012, which was 100%. The range experienced no dowry death in the years 2013, 2014, 2015, 2016 and 2017. The highest number 01 (100%) of dowry deaths had been registered in K.K. Nagar police station only.

#### **MOLESTATION:**

Molestation is the crime of sexual acts including touching of private parts, exposure of genitalia, taking of pornographic pictures and stimulus of sexual acts by the molester or variation of these acts by paedophiles. It has been revealed that youngsters and middle-aged persons commit molestation. It is normally, committed within the peer group in schools and colleges, buses, railway stations, bus stands and at crowded places.

From the year, 2012 to 2017 of all the crimes committed against women in the study area, the maximum rate of molestation had been registered in 2013 and 2014 which was 33% and the minimum in 2015 and 2017 was 6%. Total molestation recorded was 19.1% of all other crimes against women, and the highest number 7 (39%) of molestations had been registered in AWPS Cantonment and the lowest 01 (5.6%) in Edamalaipattipudur.

#### **CRUELTY BY HUSBAND:**

Husband or a relative of the husband subjects a woman to cruelty. As per the law, whoever is the husband or the relative of the husband of a woman endangering her to cruelty shall be penalized with imprisonment for a term, which may extend to three years and shall be liable to a fine.

After analysing the crime against women in Cantonment range from 2012 to 2017, the total cases of cruelty by husband were 39.4% out of all other crimes against women in the study area. The maximum rate of cruelty by husband was recorded in 2013, which was 27% and the minimum was in 2017 with 3%. The highest number 37 (100%) of cruelty by husband had been registered in AWPS Cantonment only.

**DOWRY PROHIBITION ACT, 1961:**

In some cases, the dowry system leads to crime against women, varying from emotional abuse and injury to even death. The payment of dowry has long been forbidden under specific Indian laws counting the Dowry Prohibition Act, 1961 and then by sections 303B and 398A of the Indian Penal Code.

While comparing the Dowry Prohibition Act cases with other crime against women of the study area from 2012 to 2017, it was found that the maximum Dowry Prohibition Act cases had been recorded in 2013, with 60% and the minimum was in 2016 and 2017 with 20%. Total Dowry Prohibition Act cases were 5.3% of all other crimes against women. The range experienced no Dowry Prohibition Act cases in the years 2012, 2014 and 2015 and the highest number 5 (100) Dowry Prohibition Act cases had been registered in AWPS Cantonment only.

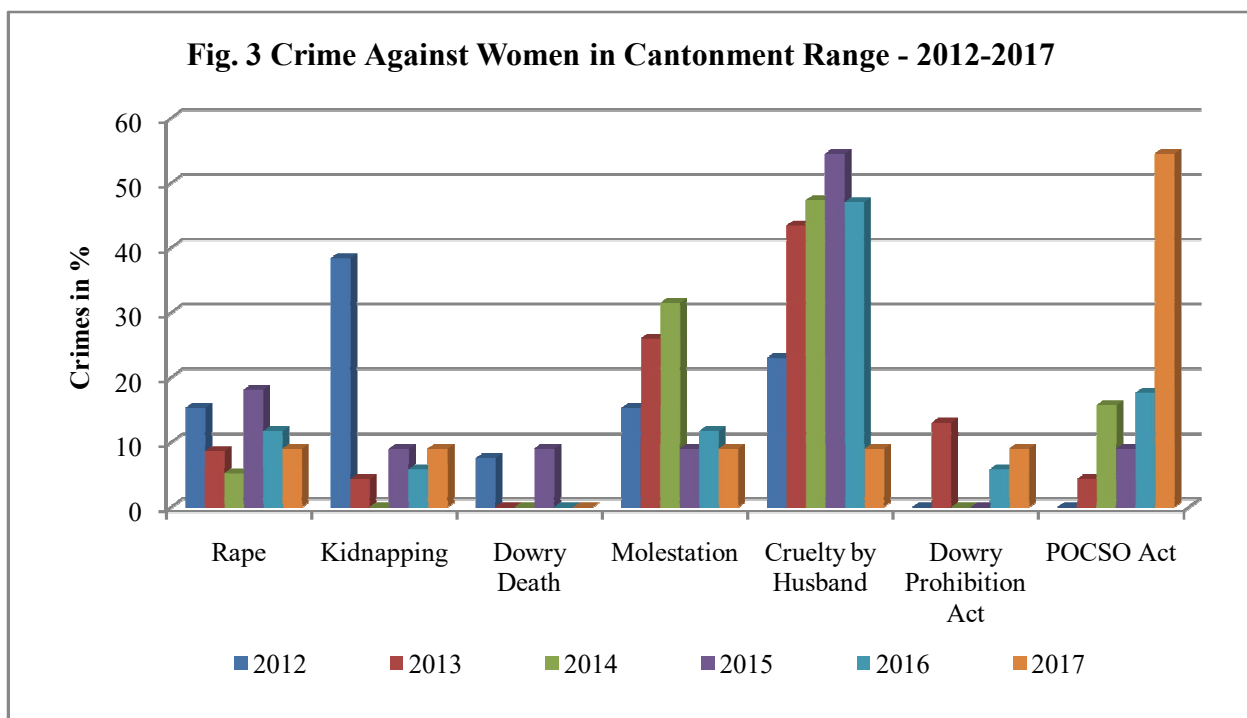
**POCSO ACT, 2012:**

The Protection of Children from Sexual Offences Act (POCSO Act) 2012 was established to protect children against offences like sexual abuse, sexual harassment and pornography. It was formed to provide a child-friendly system for trial underneath which the perpetrators could be punished. It may protect the interest of vulnerable children in times of distress and ensures their safety and dignity. The amendment aims to establish clarity regarding the aspects of child abuse and punishment thereof (PIB 2018).

From the year 2012 to 2017, the maximum rate of POCSO Act cases had been recorded in 2017, with 43% and the lowest in 2013 and 2015 with 7%. Total POCSO Act cases were 14.9% of all other crimes against women, and the highest number 14 (100) of POCSO Act cases had been registered in AWPS Cantonment only.

**YEAR-WISE ANALYSIS OF CRIME AGAINST WOMEN:****CRIMES IN 2012:**

The total number of crime against women recorded in 2012 was 13 (14%) kidnapping registered the maximum crime rate in the range with 38.4 % (Table 3& Fig. 3) as compared to other crimes against women, Cruelty by husband (23%), rape and molestation with the same percentage (15.3%) and dowry death recorded the least crime rate (7.6%). In the year 2012, Dowry Prohibition Act, 1961 and POCSO Act, 2012 were nil in the range.



**CRIMES IN 2013:**

The total number of crime against women recorded in 2013 was 23 (24%). Cruelty by husband had registered the highest crime rate in the range with 43.4% as related to other major crimes against women, rape (8.6%), molestation (26.1%) and Dowry Prohibition Act (13%). In the year 2013, kidnapping and POCSO Act case recorded the lowest crime rate (4.3%) and in the Cantonment range did not record any dowry death in the same year.

**CRIMES IN 2014**

The total number of crime against women recorded in 2014 was 19 (20%). Cruelty by husband had registered the maximum crime rate in the range with 47.3%, as related to other major crimes against women molestation (31.5%), POCSO Act (15.7%), kidnapping, dowry death and cases under Dowry Prohibition Act were nil. In the year 2015, rape recorded the lowest crime rate (5.2%) in the range.

**CRIMES IN 2015:**

The total number of crime against women recorded in 2015 was 11 (12%). Cruelty by husband had registered the maximum crime rate in the range with 54.5%, as related to other major crimes against women, rape (18.1%) and dowry death, molestation, kidnapping and POCSO Act cases were with the same percentage (9%). In the year 2014, there was no record of Dowry Prohibition Act 1961.

**CRIMES IN 2016:**

The total number of crime against women recorded in 2016 was 17 (18%). Cruelty by husband had registered the highest crime rate in the range with 47%, as compared to other major

crimes against women, rape and molestation with the same percentage (11.7%), POCSO Act (17.6%) kidnapping and Dowry Prohibition Act with the same percentage (5.8%). In the year 2016, the range did not register any dowry death crime.

### **CRIMES IN 2017:**

The total number of crime against women recorded in 2017 was 11 (12%), POCSO Act 2012 had recorded the maximum crime rate in the range with 54.5%, as related to other crimes against women, rape, molestation, kidnapping, Cruelty by husband and Dowry Prohibition Act were with the same percentage (9%). In the year 2017, the Cantonment range did not record dowry death.

### **POLICE STATION -WISE ANALYSIS OF CRIMES IN CANTONMENT RANGE:**

The maximum rate of murder had been registered in Cantonment police station with 35.3% followed by Edamalaipattipudur police station with 32.4% and the minimum rate of murder had been registered in Sessions Court police station with 14.7% (Table 2). The maximum murder for gain was recorded in Sessions Court, Edamalaipattipudur and K.K. Nagar police stations with 33.3%, while Cantonment police station and AWPS Cantonment did not record the crime murder for gain. The range was free from dacoity because this crime had not been recorded in any of the police stations of this range from the year 2012 to 2017. The highest rate of burglary had been recorded in K.K. Nagar police station with 53.3% and the lowest was in Cantonment police station with 20.0%. Sessions Court police station and AWPS Cantonment of this range did not record the crime burglary. The maximum rate of theft had been recorded in Cantonment and K.K. Nagar police stations with 41.2%, Edamalaipattipudur police station was the lowest with 17.6% and Sessions Court police station and AWPS Cantonment with 0.0%. The highest rate of robbery had been registered in K. K. Nagar police station with 42.2% and the lowest in Sessions Court police station with 12.2% and AWPS Cantonment recorded nil.

The highest percentage of rape had been registered in AWPS Cantonment with 80% followed by Cantonment police station with 20%. Edamalaipattipudur police station, Sessions Court police station and K.K. Nagar police station reported nil crimes of rape. Regarding the crime of dowry death, the maximum was recorded in K.K. Nagar police station with 100%, while other police stations Cantonment, Edamalaipattipudur, Sessions Court and AWPS Cantonment reported nil. The maximum number of kidnapping (women and girls) was recorded in K.K. Nagar police station with 55.6%, the minimum number of kidnapping (women and girls) was recorded in Cantonment police station and AWPS Cantonment with 11.1% (Table 4). Sessions Court police station reported no crime of kidnapping. The crime of molestation was the highest in AWPS Cantonment with 38.9% followed by K. K. Nagar with 22.2%. Cantonment and Sessions Court police stations reported the same percentage with 16.7% and the minimum was recorded in Edamalaipattipudur police station with 5.6%. Cruelty by husband, Dowry Prohibition Act and POCSO Act cases were reported 100%

in AWPS Cantonment and the other police stations Cantonment, Sessions Court, Edamalaipattipur and K.K. Nagar reported nil.

## CONCLUSION:

The total number of major crime in the Cantonment range was 159 for the years 2012 to 2017 and the range suffered maximum of crimes in the year 2012 (25%) and experienced a little peace in the year 2014 (11%). Murder was recorded at 21.4%, murder for gain was 1.9%, dacoity was 0.0%, burglary was 9.4%, theft was 10.7% and robbery was 56.6%. The range also suffered the maximum number of robbery, minimum of murder for gain and was free from dacoity. K.K. Nagar police station had recorded the maximum cases (60) and Session Court police station had recorded the lowest cases (17).

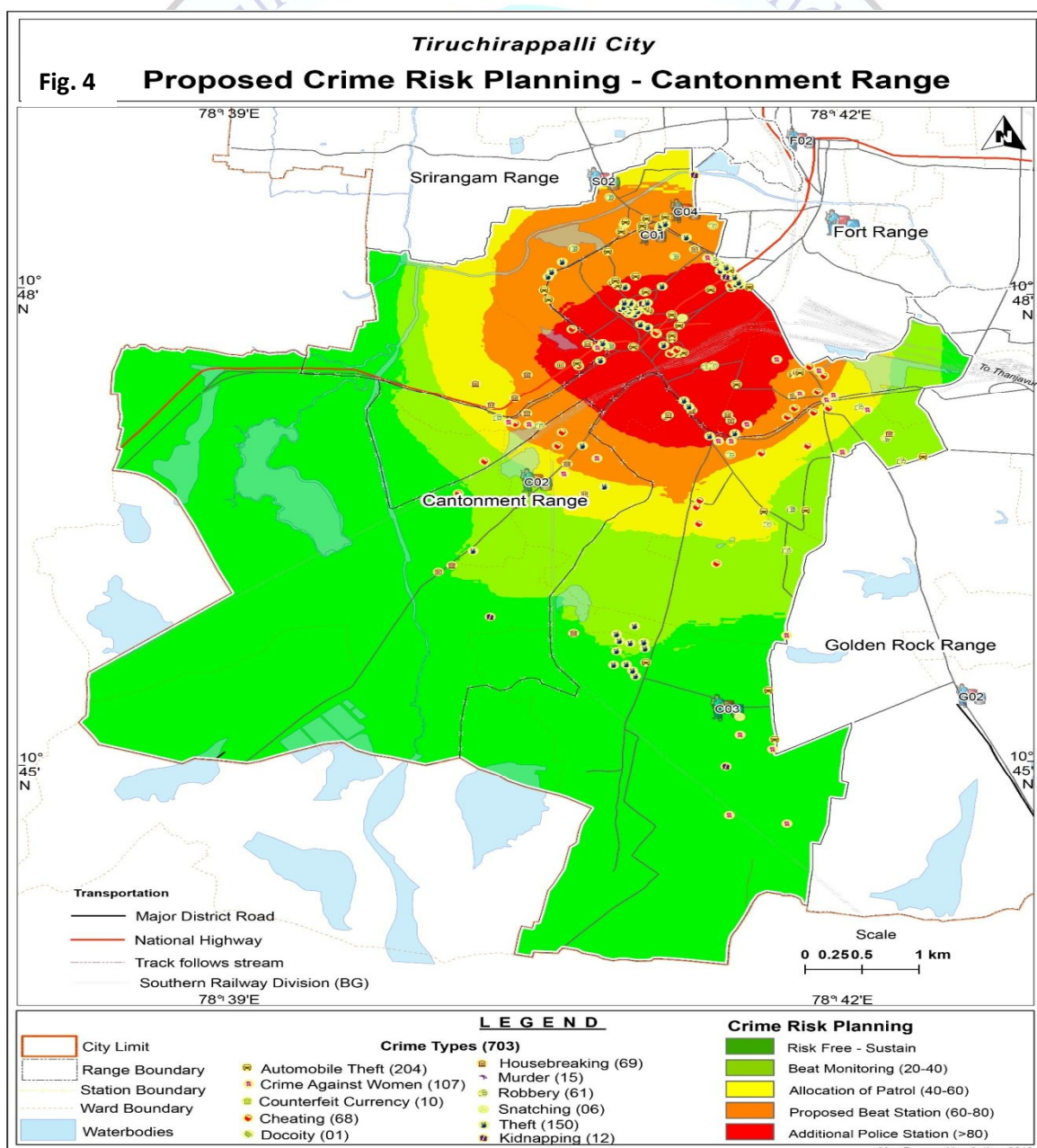
The total number of crime against women was 94 for the years 2012 to 2017. This range suffered maximum crime against women in the year 2013 which was 24% and the minimum in the year 2015 and 2017, which was 12%. No significant variation was observed between the years in the rate of different crime against women in Cantonment range. Rape was 10.6%, dowry death was 1.1%, molestation was 19.1%, kidnapping was 9.6%, cruelty by husband was 39.4%, Dowry Prohibition Act was 5.4% and POCSO Act was 14.9%. The range suffered maximum by cruelty by husband and minimum by dowry death. AWPS Cantonment had recorded the maximum cases (72) and Session Court and Edamalaipattipur police stations had recorded the minimum cases (3). Therefore, the study suggests that the number of police stations and their force be increased in proportion to the population along with high-end security system especially in the southwest of Cantonment and K. K. Nagar in the Cantonment range. The road network lying within these zones needs to be intensified and monitoring of the crimes would help in the prediction of the location of crimes. Hourly police patrolling during day and night and periodic visits by higher officials can be organized in the affected areas, which will eliminate fear psychosis among the people especially in shopping malls, banks, restaurants, schools, colleges, hospitals, commercial and residential areas and even in cinema theatres of the range. Helpline numbers should be displayed prominently in hospitals, schools, colleges, workplaces of women and in all other appropriate places. Women must carry a noise-making device, such as a whistle; use a non-lethal substance like chillies and peppers against the attackers and use other self-defence techniques. The spatial patterns of crime maps of the city must be prepared periodically and systematically so that the police officials are in a better position to know the crime-prone areas, their growth, location, direction and their trend and patterns and they should also closely work with intelligent groups of the department. The police department should apply photography, body scanners (at the airport and the railway stations) infra-red rays, electronic gadgets, Global Positioning System (GPS), Visual Positioning System (VPS) with the alarm system and Drone camera, advanced CCTVs consisting of microphones to record the audio along with video

cameras, to capture images/video of people’s moves and actions.

The proposed **RangeAction Plan for Crime Risk Reduction (RAP-CRR)** drawn in the context of crimes and station location using the Thiessen polygon method (Aurenhammer 1991; Byers 1996; Weisburd & McEwn 1998; Chainey & Ratcliffe 2005). The thematic maps show that the hotspots are found to be in the Northeast and Core of the range (Fig. 4). Therefore, the police departments should sustain risk-free areas, have beat monitoring about 20-40%, allocate patrol 40-60%, propose beat stations 60-80% and above 80% additional police stations will help to reduce crimes in the range.

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