Mapping Crime against Women in India: Spatio-Temporal Analysis, 2001-2012

Ritvik Chauhan, Vijay Kumar Baraik

Abstract—Women are most vulnerable to crime despite occupying central position in shaping a society as the first teacher of children. In India too, having equal rights and constitutional safeguards, the incidences of crime against them are large and grave. In this context of crime against women, especially rape has been increasing over time. This paper explores the spatial and temporal aspects of crime against women in India with special reference to rape. It also examines the crime against women with its spatial, socio-economic and demographic associates using related data obtained from the National Crime Records Bureau India, Indian Census and other government sources of the Government of India. The simple statistical, choropleth mapping and other cartographic representation methods have been used to see the crime rates, spatiotemporal patterns of crime, and association of crime with its correlates. The major findings are visible spatial variations across the country and are also in the rising trends in terms of incidence and rates over the reference period. The study also indicates that the geographical associations are somewhat observed. However, selected indicators of socio-economic factors seem to have no significant bearing on crime against women at this level.

Keywords—Crime against women, crime mapping, trend analysis.

I. INTRODUCTION

WOMEN occupy a vital place in the society. They are considered the first architects and future builders of the society being the first teachers of children. However, women are at the most vulnerable position too all over the world. Crimes against women are spread across space, ethnic and socio-economic background, educational level, etc. The Report of the Committee on Crime Statistics of India says that globally, up to six out of every ten women experience some kind of physical and/or sexual violence in their lifetime [1]. The Indian culture glorifies women as Devi (goddesses) with immense power. However, they are victims of various types of crimes against women. Though the present status of women changed in last 60 years after independence in India, still the violence and crime do not seem to be decreasing. The women are guaranteed equality under the constitution with legal protection, yet the incidences recorded by government agency show the enormity and severity of crimes against them. There are various factors of crimes, where the crime has also got spatial associations.

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The study of crime has traditionally been done in the disciplines like law, sociology, psychology, etc., but the importance of place and spatial dimension came into existence in the study of crime after 1970's in view of the importance of geographical associations [2]. In India, the publication on crime with data came in 1953 by the National Crime Records Bureau but did not cover the crime against women, maybe due to under reporting or no reporting [3]. The crime record against women came up in the year 1973 with information on rape and immoral trafficking of women and girls [4]. Now there are many types of crimes against women reported and recorded like rape, cruelty by husband, relatives, family, society, dowry death, sexual harassment, molestation, etc. expanding the new horizon of research.

There have been researches on crime against women. Kahlon [5] has done the work on this theme taking Chandigarh as a case study, where she has used micro-level (police station wise) data to examine the aspects of space and time of crime against women. The study finds the relationship of crime with socio-economic and demographic profile, and police infrastructure of various localities. Parihar et al. [6] has worked on the crime against women in Haryana and made an attempt to find some socio-economic reasons for the increasing crime against women. It also indicates that economic development does not have bearing on minimizing crime against women. National Crime Records Bureau also brings the Crime Report with focus on crime against women [7]. Similarly, Bhai finds that high level of social development has also not been able to arrest the increasing crime against women in Kerala [8]. The study uses primary data of victims and others to study the crime against women, socio-economic background of the victims, life after the incidence, factors of crime against women and possible ways to reduce crimes against women. It finds that the crime is spread across all socio-economic backgrounds but the women of lower socioeconomic backgrounds register more compared to others. It highlights that the women in the age-group of 18-40 years are more vulnerable and most of the victims are less educated and wage labourers. Housewives have also been subjected to the crime next to wage labourer in terms of occupational profile of victims.

This research attempts to focus on spatio-temporal analysis of crime against women for the period 2001-2012 with special reference to rape by state level mapping and trend analysis. The study also explores the association of crimes categorized against women with various geographical and social-economic-demographic factors. This study is expected to come out with a basis for further research on spatial dimension

of crime for the better understanding.

II. OBJECTIVES

The objective of this paper is to study spatio-temporal pattern of crime against women for the period 2001-2012 with special reference to rape by state level mapping and trend analysis. The study also aims to examine the association of crimes categorized against women with various geographical and social-economic-demographic factors.

III. DATA AND METHODS

The study is based on the datasets provided by the National Crime Record Bureau (NCRB), India [9]. The NCRB has considered the general crimes specifically committed against women as crime against women. These crimes have been placed under two broad categories- the crimes under the Indian Penal Code (IPC) and the crimes under the Special & Local Laws (SLL). The crimes under IPC include rape, attempt to commit rape, kidnapping & abduction of women, dowry deaths, assault on woman with intent to outrage her modesty, insult to the modesty of women at office premises, cruelty by husband or his relatives, importation of girl from foreign country (up to 21 years of age) and abetment of suicide of women. The crimes under the special & local laws (SLL) are the dowry prohibition, the indecent representation of women, sati, domestic violence and immoral traffic. The indicators to examine socio-economic correlates have been obtained from various government sources, such as Census of India [10], data.gov.in [11], etc. Since the Census of India gives decennial data, the statewise population of other years like 2012 for the calculation of crime rates has been taken from the population projection published by the Census of India [12].

The methods followed for the study are the simple statistical and cartographic techniques. Statistical tools are used for calculating crime rates, growth trends and causal relationships of associated factors and crimes. Crime rates for women have been taken as crimes against women per lakh women population. The formula for obtaining crime rate is as:

Crime Rate for Crime Against Women = $\frac{Number \ of \ Crimes \ against \ Women}{Total \ Women \ Population} \times 100000$

To see the trend, simple growth rates have been computed in the absolute number of crimes and crime rates. Some visual methods and simple correlation have been used to examine the association. To illustrate visually, the choropleth mapping and other cartographic representations have been used to see the spatio-temporal patterns of crimes.

IV. SPATIAL PATTERN OF CRIME AGAINST WOMEN IN INDIA

There are marked spatial variations of crime against women across India. The variation may be inevitable due to a vast regional and socio-economic diversity at various levels in the country. This paper considers the state level units (next to

national level) for the purpose of studying spatial pattern. There are distinct physiographic divisions like mountainous, plains, plateau, deserts and coastal belts in the country. Similarly, there are economically well off regions along with lagging behind regions. There are very urbanized, industrialized and modern societies along with rural, agricultural and traditional societies including the indigenous population with particularly vulnerable tribal (primitive tribal) groups well distributed in the country with their known spatial locations. States also have their own specific physical and socio-economic characteristics and therefore that justifies the consideration as the geographical or spatial unit of study.

A. Total Crimes against Women

In terms of total incidence of crimes, large states have large incidences or numbers of crime also. The hill/mountainous states such as Jammu and Kashmir, Uttarakhand (Uttaranchal till December 2006), Himachal Pradesh; all the states of North Eastern India and the Union Territories including Goa have comparatively very small number of crime against women. These states located at mountain and north eastern part of the country maybe having comparatively better position of women in the society. There is a different social order in these states in terms of position of females, and that maybe attributed for such lower incidences of crimes against them. Uttar Pradesh reflects the very high number of crime distantly followed in the state of Maharashtra. Madhya Pradesh and Andhra Pradesh show similar number of incidences while, Tamilnadu, Rajasthan, Gujarat, Bihar, West Bengal, Karnataka, Kerala and Orissa cluster in another category (Table I). The crime rates are however not very similar to the number of incidences as the highest crime rate was recorded in Madhya Pradesh followed by Maharashtra, Daman and Diu, Haryana, Andhra Pradesh, Gujarat, Uttar Pradesh, Chhattisgarth, Rajasthan, Jammu and Kashmir and Delhi having the crime rate of 50 and above. The remarkable observation is that the despite highest number of crimes, Uttar Pradesh has sixth position; Daman and Diu has third highest rate of crime against women despite very small in number; Jammu and Kashmir has also got 10th position despite low number of crimes and located in the mountainous region. Kerala, despite having very high crime rate, ranks 12th in the crime against women reflecting the sensitivity towards women. Himachal Pradesh also reflects the same despite located in the mountainous region. The north eastern states of Manipur, Sikkim, Meghalaya and Nagaland have very low crime rates with 9.5, 9.5, 4.7 and 4 respectively, which show the position of females in their societies. The other north eastern states like Assam, Arunachal Pradesh, Tripura, and Mizoram have relatively higher crime rates than the other north eastern states but are placed below the average crime rates. The map shows some kind of contiguity in different levels of crime rates (Fig. 1).

The spatial patterns of crime rates against women have changed in 2012 (Fig. 1). The states with very high crime rates are in Tripura, Andhra Pradesh and Jammu and Kashmir. The high crime rates are found in the States of Orissa, Gujarat, Madhya Pradesh, Assam, Uttar Pradesh, West Bengal, Kerala

and Maharashtra. Moderate crime rates are in the states of Haryana, Karnataka, Chhattisgarh, Rajasthan, Delhi, Daman & Diu, Mizoram, Chandigarh, Jharkhand and Bihar. The low crime rates are in the states of Himachal Pradesh, Punjab, Tamil Nadu, Arunachal Pradesh, Goa, Andaman & Nicobar Islands and Uttarakhand. Very low crime rates are in the states of Sikkim, Meghalaya, Dadra & Nagar Haveli, Manipur and Nagaland. There is an observation that the high crime rates have shifted from Madhya Pradesh, Maharashtra, Daman & Diu, Haryana and Andhra Pradesh in 2001 to Tripura and Andhra Pradesh, and Jammu and Kashmir in 2012. The reason for shift of high crime rates against women need to be explored. There is not much reshuffle in the ranks of states in the study period in terms of the number of crimes. However, in terms of ranks in crime rates, there are major reshuffle in some of the states like Tripura jumped 19 states ahead in 2012 followed by West Bengal, Orissa and Assam and Karnataka with 17, 14 and 9 ranks jump. The other states with jumps of more than 5 ranks are Jammu & Kashmir, Mizoram and Jharkhand. In these states either crimes against women have gone up or the registration has gone up. There are states whose ranks have also gone down significantly like Daman & Diu, Tamil Nadu, Maharashtra, Himachal Pradesh, Arunachal Pradesh, Rajasthan, Chhattisgarh, Uttarakhand, Madhya Pradesh and Delhi. The first two of these states have dropped their positions by 14 and 10 ranks. The trend of crimes in various states during 2001-2012 is illustrated in Fig. 2.

Domestic violence in general and cruelty by husband or his relatives is the most prevalent crime against women (Fig. 3). It was 44.9% of total crime against women in 2001 rising to 50.1% in 2012. The next group of crime against women is of assault on women with intent to outrage her modesty with 17.3% share in 2001 and 14.4% in 2012. The percentage of rape and dowry death was 8.4 each in 2001. Both crimes declined in 2012 to 7.9% and 6.2% respectively. Dowry death seems to be declining more than rape. Kidnapping and abduction has risen sharply from 7.3% in 2001 to 12.4% in 2012. The immoral trafficking, insult to the modesty of women, indecent representation of women and importation of girls from foreign country have been seen to be declined from 5.3, 5.1, 0.3 and 0.1% in 2001 to 2.0, 2.8, 0.04 and 0.01% respectively. There has not been any case of Sati in both the years as it has been abolished long ago.

A. Crime Against Women (Rape)

In 2001, very high crime rates were observed in Mizoram, Madhya Pradesh, Chhattisgarh, Dadra & Nagar Haveli, Arunachal Pradesh and Tripura (Fig. 4). It is very important to explore the states of North Eastern India having very less number of crime against women are at the top in terms of rape. In the very low rates of crime against women (rape) were in the states of Tamil Nadu, Gujarat, Manipur, Karnataka and Daman & Diu. Roughly the same pattern existed in 2012 also. However, at the highest crime rate was marked in Mizoram, high crime rate emerged in Sikkim and very low crime rates were observed in Bihar and Manipur (Table II).

In terms of control of crime rates related to rape are also

remarkable in the states of Dadra and Nagar Haveli followed by Chandigarh, Bihar and Nagaland among all states of India (Fig. 5). However, there are states which have recorded quantum jump in the crime rates related to rape and jump in the ranks like Daman & Diu, Meghalaya, Sikkim, Goa and Andaman and Nicobar Islands- mainly the north eastern small states and Union Territories. It maybe because of the low base figure in the year 2001. Again in the number of crimes, there is not much reshuffle in the ranks of states.

V.TEMPORAL PATTERN

The total number of crime against women has continuously been rising since 2003, the year which observed a dip since 2001 (Fig. 6). Moreover, the sharp/vertical rise is seen since 2008. The rise in the number of crime has been to the tune of 61.9% in India during the period 2001 and 2010. This growth rate for the crime rate has been 37.9%. The crime rates are not very sharp in growth, though is in the increasing trend with a minor dip in 2003. The inference maybe made as increase in number of crime is somewhat proportionate to the population, but not the crime rate.

There has been continuous rise in the number and rates of crime related to rape during the study period except the years 2003 and 2008 where there was some decline (Fig. 7). The year 2003 witnessed the sharp decline. This year had decline in the number and rates of total crime against women and the reason still needs to be explored. There has also been sharp rise in the number and rates of crimes since the year 2008 unlike the total crime against women, which has a sharp rising trend in the total crime but has a flat like trend line of growth in rates.

VI. RELATION OF KNOWN OFFENDERS/OFFENDERS BACKGROUND

In the total number of rape cases of 20446 and 31117 in 2001 and 2012, the number of offenders known to the victims have been 13504 and 24470 in 2001 and 2012 (66.05 and 78.64%) respectively. The percentage of offenders known to the victim has been very high having the trend of steep rise. The largest share of offenders is of other known persons closely followed by neighbours. The other known persons (other than neighbours, relatives, parents/close family members) constitute more than half of the offenders. Their share marginally declined from 58.43% in 2001 to 57.25% in 2012 (Fig. 8). The second largest group of offenders is of neighbours who are more than 30.0% of total offenders. The percentage of neighbours increased marginally from 32.02 to 34.67 in this period. The percentage of relatives remained static to 6.30 and 6.48% during the period 2001-2012. Among the known offenders, 3.25% were parents or close family members in 2001, which declined to 1.61% in 2012.

VII. ASSOCIATIONS

There are some correlates of crimes related to women. In the study some of such socio-economic correlates have been obtained from various government sources, such as Census of

India, data.gov.in, etc. These non-psychological associates are discussed in the following sections with the help of some statistical basis.

A. Geographic

There is not definitive relation with geographic factors. However, the very low crime rates in some geographical conditions like that of hilly and mountainous regions, may be attributed to the physical factors. In the states having significant tribal populations like that of North Eastern India may also be associated with physical or geographical conditions. The spatial pattern of rape also indicates the human factors like the existence of very low crime rates related to rape in the states of Tamil Nadu, Gujarat, Manipur, Karnataka and the Union Territory of Daman & Diu.

B. Socio-economic

The relation of crime against women has also been statistically examined at preliminary level. The socio-

economic indicators considered are per capita income, poverty, literacy, infrastructure and household amenities. The relationship was also examined with the development index. However, no significant relationship was observed.

VIII.CONCLUSION

As discussed above, there are spatial variations in the crime against women. The spatiality is more visible in the crime related to rape. The crime against women is also in the rise in terms of incidences or numbers and rates. Though the crime incidences have very sharp increasing trend compared to the crime rates. However, the crime incidence and rates related to rape, both have similar growth trend during the year 2001-2012. The geographic associations are somewhat derivable but the associations with socio-economic indicators are not observed at this level of study.

APPENDIX TABLE I TOTAL CRIMES AGAINST WOMEN

								10	TIME C	CIVILD 1	MIND	1 11 011	LLIT											
Kerala Madhva	8076	8968	8726	9849	10669	11406	11210	11353	11132	13253	13964	13517	49.3	54.3	52.4	58.6	63.0	66.8	65.2	65.5	63.7	75.4	78.9	75.9
Pradesh	22308	25388	24089	27027	24254	23753	25990	26163	28262	27814	27818	29247	77.2	86.1	80.1	88.2	77.7	74.8	80.4	79.6	84.5	81.8	80.6	82.1
Maharashtra	30600	30106	29336	30432	34156	36197	36040	38390	41095	40377	39643	41048	65.8	63.8	61.2	62.5	69.1	72.1	70.8	74.3	78.5	76.0	73.7	75.3
Manipur	102	161	150	132	127	104	133	147	183	141	170	202	9.5	14.8	13.6	11.8	11.2	9.1	11.5	12.6	15.4	11.8	14.0	16.4
Meghalaya	54	80	82	96	106	158	130	161	178	228	258	271	4.7	6.9	7.0	8.1	8.8	13.0	10.5	12.9	14.1	17.8	19.9	20.7
Mizoram	138	155	173	79	85	138	152	177	165	194	149	215	32.2	35.6	39.2	17.7	18.8	30.1	32.8	37.7	34.7	40.3	30.6	43.6
Nagaland	38	49	30	36	37	64	58	68	72	66	49	75	4.0	5.1	3.1	3.7	3.7	6.4	5.7	6.6	6.9	6.3	4.6	6.9
Orissa	7455	7413	7805	7884	9524	10408	10424	10910	11346	16112	14122	17183	41.1	40.4	42.0	42.0	50.1	54.2	53.8	55.7	57.4	80.7	70.1	84.5
Punjab	4664	4724	4192	3642	3303	3882	4211	4233	4100	4646	4436	5048	41.0	41.0	35.9	30.8	27.6	32.1	34.4	34.2	32.7	36.7	34.7	39.1
Rajasthan	13831	13295	12692	14640	12838	14546	14548	14097	15455	15335	16764	17095	51.1	48.1	45.0	51.0	43.9	48.8	47.9	45.7	49.2	48.0	51.7	51.9
Sikkim	24	24	36	69	42	39	63	55	76	68	59	69	9.5	9.4	13.9	26.3	15.8	14.5	23.1	19.9	27.1	23.9	20.6	23.7
Tamil Nadu	14116	12756	11721	12750	12275	9483	11601	11345	9450	9649	9727	10913	45.5	40.7	37.1	40.0	38.2	29.3	35.5	34.5	28.5	28.9	29.0	35.2
Tripura Uttar	590	558	878	983	1308	1272	1107	1774	2727	2127	2676	1946	37.9	35.4	54.9	60.7	79.8	76.6	65.8	104.2	158.2	122.0	151.6	109.0
Pradesh	42283	35542	23433	32979	32720	34720	48291	57874	63332	58330	72153	77745	53.8	44.3	28.6	39.5	38.5	40.0	54.7	64.3	69.1	62.5	76.0	80.5
Uttaranchal West	1436	1750	1827	2660	1648	2176	2711	1690	2064	1750	1344	1420	34.5	41.3	42.4	60.8	37.0	48.1	59.1	36.3	43.6	36.4	27.6	28.8
Bengal A & N	11114	14160	15992	16613	19227	22398	22175	24328	20671	26549	26320	34023	28.7	36.1	40.2	41.2	47.1	54.3	53.1	57.7	48.5	61.7	60.6	77.5
Islands	34	30	36	44	32	49	80	85	126	131	86	73	20.9	18.2	21.3	25.3	17.7	26.1	40.8	41.5	58.6	58.5	36.9	30.3
Chandigarh Dadra &	174	196	206	331	306	352	290	216	158	138	128	268	44.2	49.0	50.0	77.0	68.0	74.7	58.6	41.4	28.7	23.8	21.1	42.4
Nagar Haveli	24	19	24	32	35	25	21	64	20	46	14	30	24.2	20.2	25.5	33.0	34.0	22.9	17.9	50.4	14.4	30.7	8.8	17.8
Daman &																								
Diu	42	14	10	15	17	28	57	51	38	51	55	45							64.8	57.3	41.8	54.8	57.9	46.4
Delhi	3124	3080	4789	5196	5853	6207	5648	3115	2753	3040	3475	3981	50.0	47.9	72.4	76.4	83.7	86.4	76.5	41.0	35.3	37.9	42.2	47.0

Source: NCRB data downloaded from data.gov.in on 16-12-2015 [13]

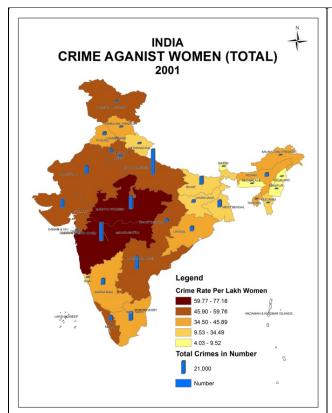
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TABLE II CRIMES AGAINST WOMEN-RAPE

			CRIMES	AGAIN								
State/UT				Nι	ımber o	of Incid	ences o		es			
State/ 01	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Andhra Pradesh	1150	1340	1237	1443	1415	1360	1436	1531	1487	1761	1758	1664
Arunachal Pradesh	51	61	35	56	38	40	57	37	60	49	47	47
Assam	928	1019	1188	1233	1406	1290	1477	1445	1644	1629	1470	1626
Bihar	1400	1304	1120	1157	1455	1451	1816	1464	1086	892	1185	1327
Chhattisgarh	1134	1214	1020	1144	1107	1211	1146	1108	1128	1198	1257	1214
Goa	14	12	36	48	34	20	25	41	56	50	34	61
Gujarat	401	378	356	481	501	539	503	529	610	617	621	647
Haryana	539	511	523	573	627	772	607	849	848	866	801	940
Himachal Pradesh	152	204	146	187	176	131	197	182	250	197	187	259
Jammu & Kashmir	222	203	266	271	248	301	331	234	303	266	349	388
Jharkhand	637	873	759	759	732	943	886	802	765	836	758	780
Karnataka	361	357	410	397	381	475	518	642	595	771	837	842
Kerala	712	600	517	562	506	666	555	623	694	659	1226	1259
Madhya Pradesh	3212	3926	3694	4181	3900	3878	4131	3875	4243	4387	4593	4822
Maharashtra	1886	1871	1856	1914	2227	2162	2097	2206	2075	2180	2533	2591
Manipur	17	18	19	29	12	20	12	19	22	22	24	46
Meghalaya	29	45	50	57	65	71	76	82	110	135	128	182
Mizoram	64	83	70	15	36	77	87	94	81	112	74	122
Nagaland	28	20	14	20	19	29	15	27	27	17	27	26
Orissa	887	820	839	906	838	1020	1026	1045	1119	1363	1224	1666
Punjab	459	538	574	563	553	618	709	663	681	766	598	895
Rajasthan	1147	937	928	995	1110	1085	1201	1211	1388	1343	1642	1807
Sikkim	6	2	7	3	8	17	30	24	19	21	25	29
Tamil Nadu	565	695	661	681	744	573	615	740	776	777	837	962
Tripura	139	141	135	190	157	167	165	210	336	320	258	202
Uttar Pradesh	2685	2050	1211	1942	1683	1770	2283	2825	2918	2580	3571	3593
Uttaranchal	82	142	154	226	225	233	171	108	138	171	149	184
West Bengal	1027	1279	1497	1661	2085	2045	2409	1790	1748	2395	1870	1963
A & N Islands	3	6	6	11	8	7	3	13	36	39	28	17
Chandigarh	32	28	32	27	43	27	24	27	38	44	27	34
Dadra & Nagar Haveli	10	3	1	12	6	5	5	8	5	3	4	5
Daman & Diu	0	0	6	2	1	2	4	0	1	1	0	10
Delhi	454	546	624	737	856	778	731	573	557	602	707	892
				(Crime F	Rate per	Lakh \	Womer	ı			
Andhra Pradesh	3.05	3.51	3.2	3.69	3.57	3.4	3.55	3.74	3.6	4.22	4.17	3.91
Arunachal Pradesh	9.85	11.62	6.58	10.39	6.96	7.23	10.18	6.53	10.47	8.45	8.01	7.91
Assam	7.21	7.78	8.93	9.13	10.26	9.28	10.48	10.11	11.35	11.1	9.89	10.8
Bihar	3.52	3.22	2.71	2.75	3.4	3.33	4.1	3.25	2.38	1.92	2.52	2.78
Chhattisgarh	10.95	11.51	9.51	10.49	9.99	10.77	10.04	9.56	9.6	10.05	10.4	9.79
Goa	2.12	1.82	5.41	7.06	4.88	2.79	3.39	5.37	7.08	6.11	4.04	7.08
Gujarat	1.65	1.53	1.42	1.89	1.94	2.06	1.89	1.96	2.23	2.23	2.22	2.28
Haryana	5.51	5.12	5.14	5.53	5.94	7.18	5.55	7.63	7.5	7.53	6.85	7.92
Himachal Pradesh	5.08	6.74	4.77	6.04	5.62	4.14	6.16	5.63	7.66	5.98	5.63	7.73
Jammu & Kashmir	4.64	4.18	5.38	5.39	4.86	5.81	6.29	4.38	5.59	4.83	6.26	6.86
Jharkhand	4.88	6.56	5.61	5.51	5.23	6.64	6.14	5.48	5.15	5.55	4.96	5.04
Karnataka	1.39	1.36	1.54	1.47	1.39	1.72	1.85	2.27	2.08	2.66	2.86	2.85
Kerala	4.35	3.63	3.1	3.35	2.99	3.9	3.23	3.59	3.97	3.75	6.92	7.07
Madhya Pradesh	11.11	13.31	12.29	13.65	12.5	12.21	12.78	11.78	12.69	12.91	13.3	13.54
Maharashtra	4.06	3.96	3.87	3.93	4.5	4.31	4.12	4.27	3.96	4.11	4.71	4.75
Manipur	1.59	1.66	1.73	2.6	1.06	1.75	1.04	1.62	1.85	1.83	1.98	3.74
Meghalaya	2.54	3.89	4.26	4.79	5.4	5.82	6.16	6.56	8.7	10.55	9.88	13.88
Mizoram	14.92	19.08	15.87	3.36	7.96	16.81	18.75	20	17.05	23.28	15.2	24.75
Nagaland	2.97	2.09	1.45	2.04	1.91	2.88	1.47	2.62	2.59	1.61	2.53	2.4
Orissa	4.89	4.47	4.52	4.82	4.41	5.31	5.29	5.34	5.66	6.83	6.08	8.19
Punjab	4.04	4.67	4.92	4.77	4.62	5.11	5.79	5.35	5.44	6.05	4.67	6.93
Rajasthan	4.23	3.39	3.29	3.46	3.79	3.64	3.96	3.92	4.42	4.21	5.06	5.49

C /IJT	Number of Incidences of Crimes											
State/UT	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Sikkim	2.38	0.78	2.7	1.15	3.01	6.32	10.99	8.7	6.79	7.39	8.71	9.97
Tamil Nadu	1.82	2.22	2.09	2.14	2.31	1.77	1.88	2.25	2.34	2.33	2.49	3.1
Tripura	8.93	8.94	8.44	11.73	9.57	10.05	9.81	12.33	19.49	18.35	14.62	11.31
Uttar Pradesh	3.41	2.56	1.48	2.33	1.98	2.04	2.58	3.14	3.18	2.76	3.76	3.72
Uttaranchal	1.97	3.35	3.58	5.16	5.06	5.15	3.72	2.32	2.92	3.56	3.06	3.73
West Bengal	2.65	3.26	3.76	4.12	5.11	4.96	5.77	4.24	4.1	5.57	4.3	4.47
A & N Islands	1.84	3.64	3.55	6.32	4.42	3.72	1.53	6.34	16.74	17.41	12.02	7.05
Chandigarh	8.12	7	7.77	6.28	9.56	5.73	4.85	5.17	6.91	7.6	4.46	5.38
Dadra & Nagar Haveli	10.1	3.19	1.06	12.37	5.83	4.59	4.27	6.3	3.6	2	2.5	2.96
Daman & Diu	0	0	8	2.53	1.22	2.35	4.55	0	1.1	1.08	0	10.31
Delhi	7.27	8.49	9.44	10.84	12.25	10.83	9.9	7.55	7.14	7.51	8.59	10.54

Source: NCRB data downloaded from data.gov.in on 16-12-2015 [13]



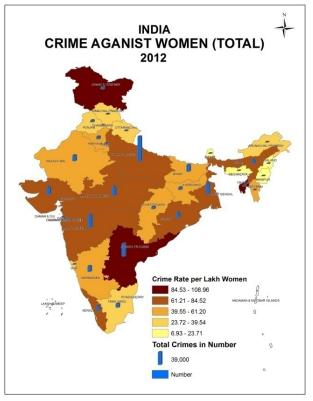


Fig. 1 Spatial Distribution of Total Crime against Women: Incidence and Rates, 2001-2012 (mapped using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [14]

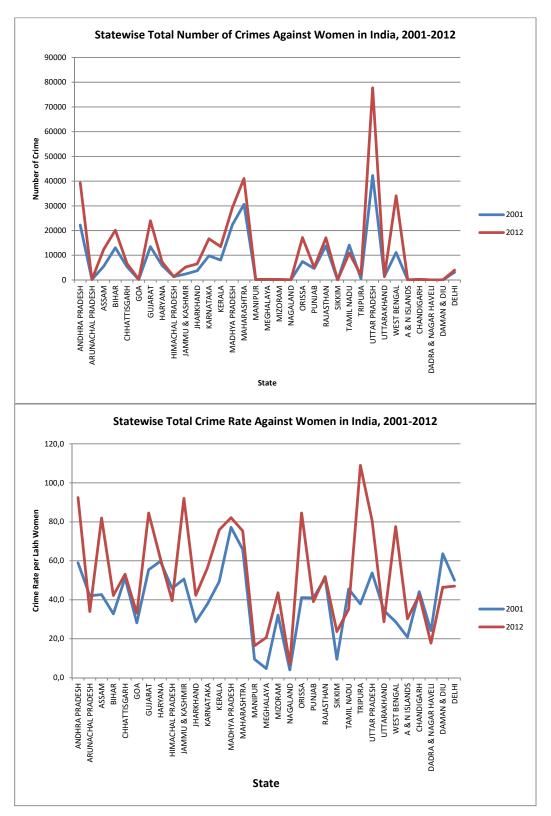


Fig. 2 Statewise Total Crime against Women: Incidence and Rates, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]

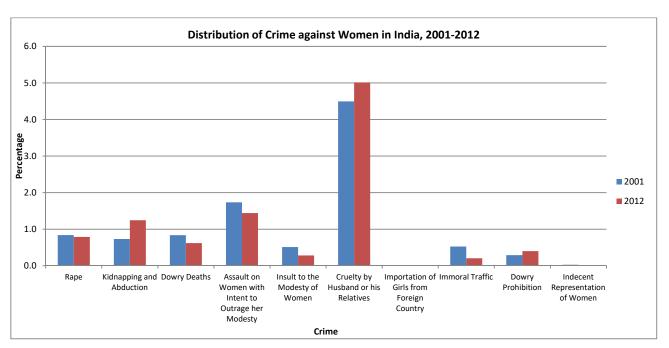


Fig. 3 Distribution of Crime against Women in India, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]

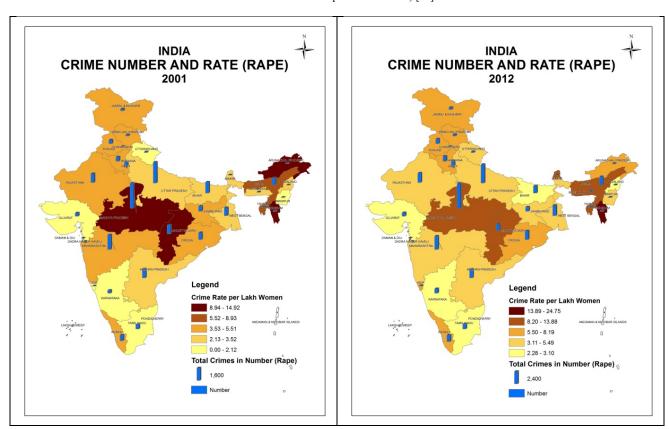


Fig. 4 Spatial distribution of Crime against Women (Rape): Incidence and Rates, 2001-2012 (mapped using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]

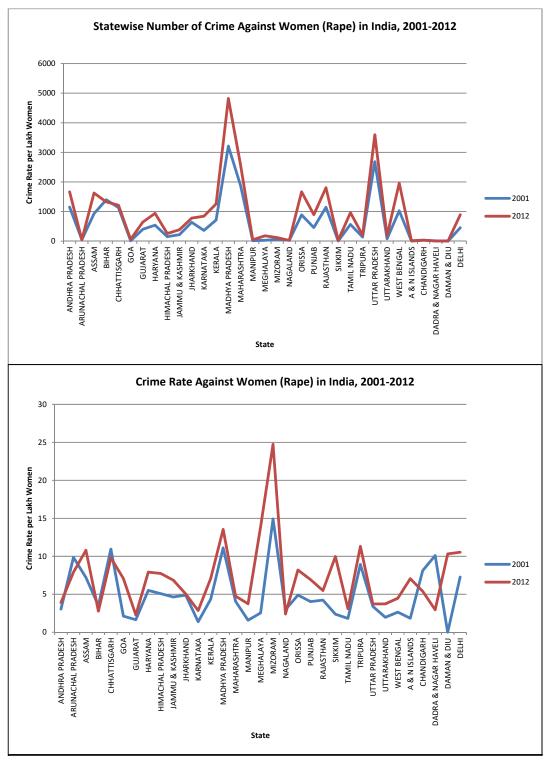


Fig. 5 Statewise Crime against Women (Rape): Incidence and Rates, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]

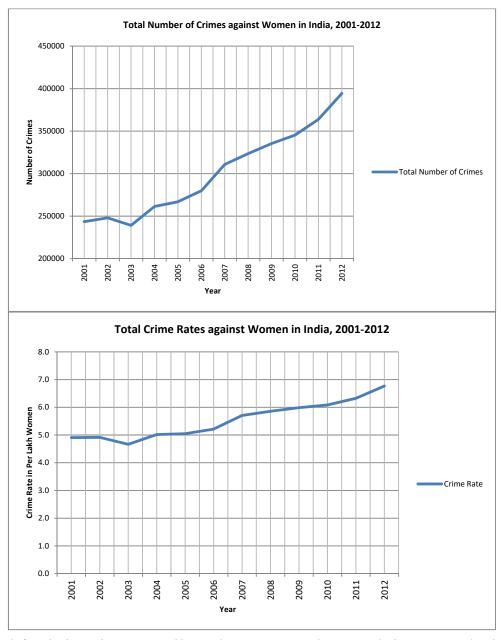


Fig. 6 Trend of Total Crime against Women: Incidence and Rates, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]

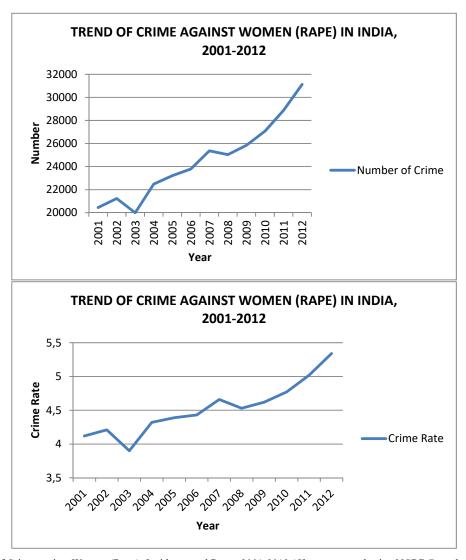
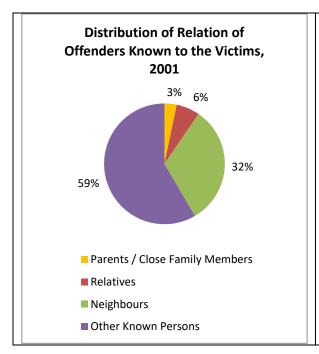


Fig. 7 Trend of Crime against Women (Rape): Incidence and Rates, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 16-12-2015 and computed crime rates) [15]



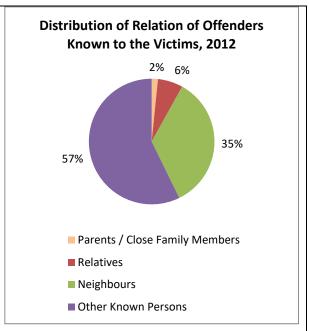


Fig. 8 Distribution of Relation of Offenders Known to the Victims, 2001-2012 (Charts prepared using NCRB Data downloaded from www.data.gov.in on 03-04-2016 and computed percentages) [16]

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- [14] NCRB Data downloaded from www.data.gov.in on 16-12-2015 and crime rates computed from it.
- [15] NCRB data downloaded from data.gov.in on 16-12-2015 and computed crime rates from it.
- [16] NCRB Data downloaded from www.data.gov.in on 03-04-2016 and computed percentages from it.