

ROAD ACCIDENTS DATA

KERALA STATE

ROAD ACCIDENTS & FATALITIES ANALYSIS REPORT 2020



KERALA ROAD SAFETY AUTHORITY

(Established under KRSA Act 2007 by Government of Kerala)

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1. YEAR 2020 ACCIDENT DATA

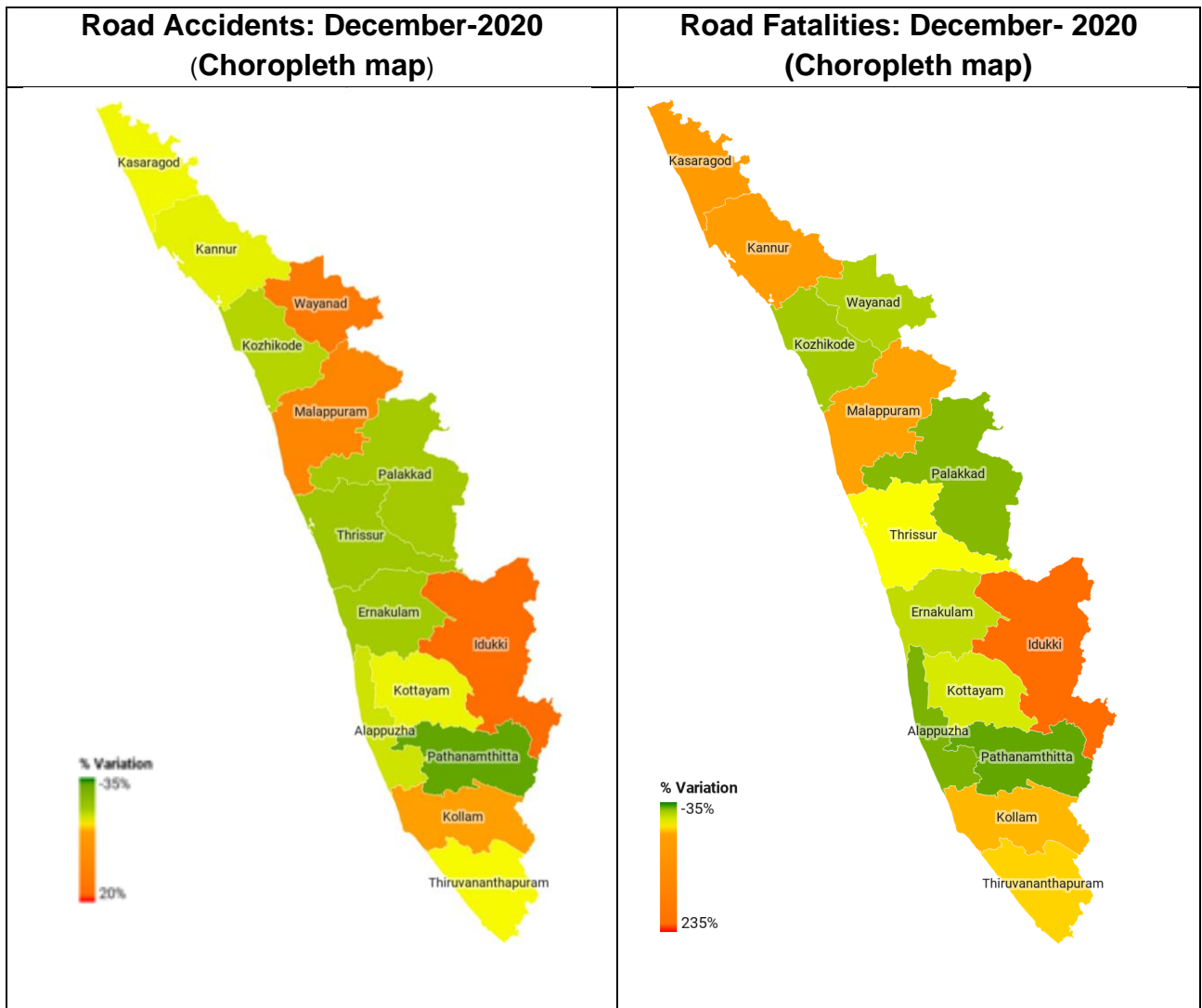
The decreased trend of road accident continued during December month as well, though fatality has increased slightly by 1.7%, and the decrease in accident is not as intense as in previous few months. Impact of COVID-19 on traffic movement pattern and accident data is no more visible during the month of December 2020. Table showing the comparative analysis of road accident during the month of December is shown below:

Table 1 : District-wise road safety performance during the month of December 2020

Comparison of road accidents & road fatalities between December 2019 and December 2020						
Districts	Number of Accident reported			Number of Fatality reported		
	December 2019	December 2020	% Variation from 2019	December 2019	December 2020	% Variation from 2019
Thiruvananthapuram	411	348	-15.3%	44	52	18.2%
Kollam	297	261	-12.1%	32	39	21.9%
Pathanamthitta	166	110	-33.7%	17	12	-29.4%
Alapuzha	337	277	-17.8%	36	27	-25.0%
Kottayam	298	251	-15.8%	21	21	0.0%
Ernakulam	526	414	-21.3%	50	46	-8.0%
Idukki	93	110	18.3%	3	10	233.3%
Thrissur	397	309	-22.2%	28	31	10.7%
Palakkad	195	154	-21.0%	39	30	-23.1%
Malappuram	193	201	4.1%	22	28	27.3%
Kozhikode	316	254	-19.6%	40	33	-17.5%
Wayanad	47	52	10.6%	7	6	-14.3%
Kannur	205	172	-16.1%	15	22	46.7%
Kasargode	84	71	-15.5%	6	9	50.0%
STATE Total	3565	2984	-16.3%	360	366	1.7%

* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data for last month is provisional

Figure 1 : Choropleth map of Road Accidents & Fatalities during December-2020



2. ACCIDENT REPORTED IN YEAR 2020

The accident statistics reported by SCRB for the year 2020, marked considerable reduction in road crashes and related fatalities. In actual figures, around 13,149 less road accidents and 1,488 less fatalities are reported in this year, compared to 2019. District-wise as well as Month-wise comparative analysis of road accident of year 2020 is carried out. Table showing the comparative analysis of road accidents is shown below:

Table 2 : District wise Accident Data Comparison - 2020

Comparison of road crashes & fatalities reported in 2020 with corresponding period in 2019
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Districts	Number of Accident reported			Number of Fatality reported		
	2019 (January - December)	2020 (January - December)	% Variation from 2019	2019 (January - December)	2020 (January - December)	% Variation from 2019
Thiruvananthapuram	5222	3558	-31.9%	547	371	-32.2%
Kollam	3518	2511	-28.6%	440	316	-28.2%
Pathanamthitta	1621	1159	-28.5%	170	109	-35.9%
Alapuzha	3632	2526	-30.5%	409	246	-39.9%
Kottayam	2951	2078	-29.6%	281	206	-26.7%
Ernakulam	6282	3953	-37.1%	492	322	-34.6%
Idukki	1118	904	-19.1%	106	79	-25.5%
Thrissur	4462	2899	-35.0%	413	267	-35.4%
Palakkad	2419	1706	-29.5%	397	268	-32.5%
Malappuram	2562	1790	-30.1%	364	249	-31.6%
Kozhikode	3450	2295	-33.5%	381	234	-38.6%
Wayanad	687	461	-32.9%	78	48	-38.5%
Kannur	2235	1530	-31.5%	243	165	-32.1%
Kasargode	952	592	-37.8%	119	72	-39.5%
STATE Total	41111	27962	-32.0%	4440	2952	-33.5%

* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data is provisional

Table 3 : Month wise Accident Data Comparison - 2020

Comparison of road crashes & fatalities reported in 2020 with corresponding period in 2019						
Month Under Consideration	Number of Accident reported			Number of Fatality reported		
	2019	2020	% Variation from 2019	2019	2020	% Variation from 2019
January	3886	3987	2.6%	459	398	-13.3%
February	3674	3735	1.7%	393	371	-5.6%
March	3466	2860	-17.5%	410	291	-29.0%
April	3335	439	-86.8%	421	52	-87.6%
May	3782	1381	-63.5%	444	147	-66.9%
June	3335	2011	-39.7%	355	212	-40.3%
July	3239	1775	-45.2%	299	164	-45.2%
August	2925	1779	-39.2%	287	242	-15.7%
September	3109	2046	-34.2%	330	181	-45.2%
October	3344	2346	-29.8%	352	261	-25.9%
November	3451	2619	-24.1%	330	267	-19.1%
December	3565	2984	-16.3%	360	366	1.7%
Total	41111	27962	-32.0%	4440	2952	-33.5%

* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data for last month is provisional

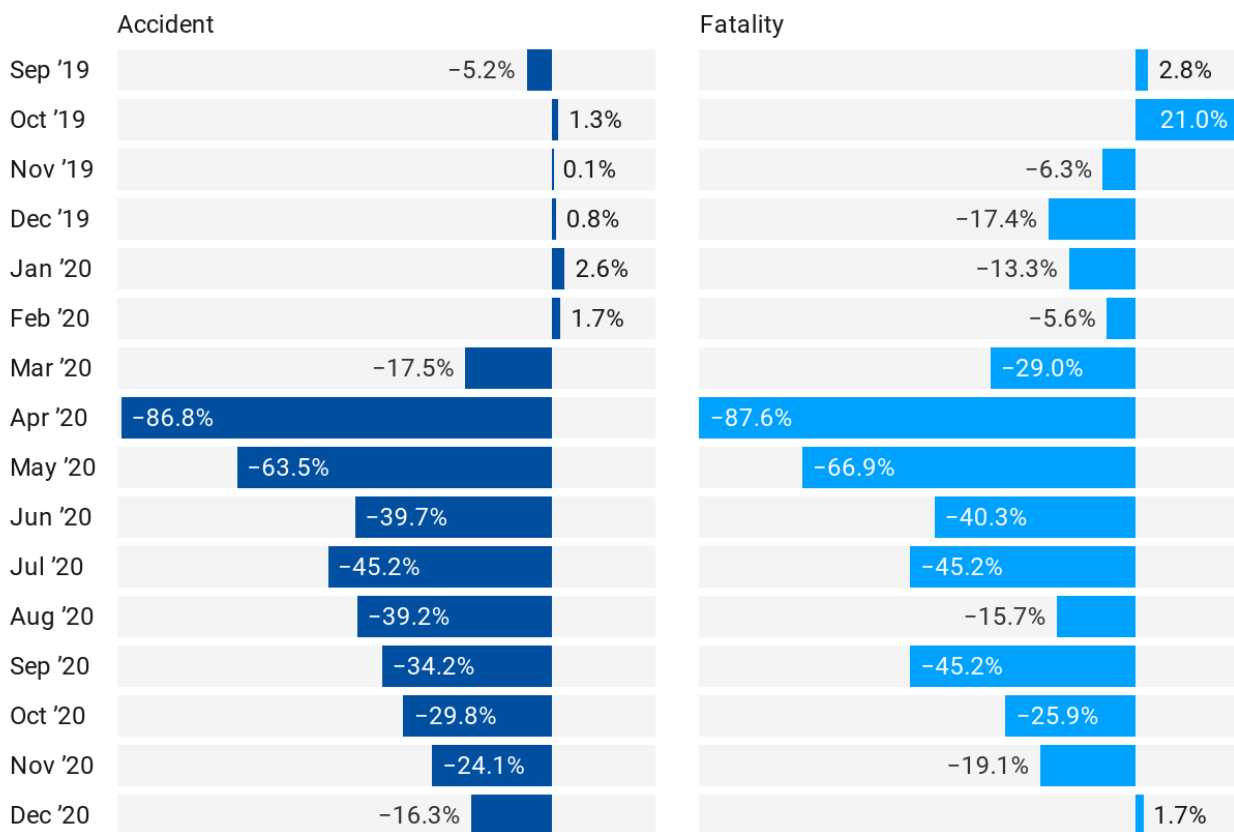
3. ACCIDENT TREND AFTER MOTOR VEHICLE ACT AMENDMENT

With the implementation of Amended Motor Vehicle Act, and fully fledged deployment of Safe Kerala Squad and together with various other supportive road safety measures; from

the last quarter of year 2019 onwards a considerable reduction in road crashes and especially road fatalities is observed. The reduced trend in road accident fatalities continued during first quarter of 2020. COVID-19 Lockdown and Unlock period also tremendously supported the course. Graph showing the variation in accident data reported in last 16 months is shown below:

Figure 2 : Graph showing variation in accident data during last 16 months

% variation in reported road accidents compared to corresponding month of previous year



* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data for last month is provisional

4. QUARTERLY ACCIDENT ANALYSIS

The first quarter of 2020 was mostly a regular period without the influence of COVID-19 related travel impacts. Almost two months of the second quarter was COVID-19 Lockdown period, which marked a great improvement in curtailing road accidents and fatalities. Last

month of second quarter was during COVID-19 Unlock phase. Third quarter was fully within COVID-19 Unlock phases, with widely varying travelling pattern and traffic modes. During third quarter, commuters and long trips had shown a shift in travel mode from public transport to private modes. This trend continued during Quarter four with COVID-19 Unlock protocols. The fourth quarter also showed reduction in road accidents in comparison with similar period in 2019. Tables below shows the quarterly comparison of accident data reported in four quarters of 2020:

Table 4 : Quarterly Accident Data Comparison for Q1 of 2020

Comparison of road crashes & fatalities reported in 2020 - Q1						
Month Under Consideration	Number of Accident reported			Number of Fatality reported		
	2019	2020	% Variation from 2019	2019	2020	% Variation from 2019
January	3886	3987	2.6%	459	398	-13.3%
February	3674	3735	1.7%	393	371	-5.6%
March	3466	2860	-17.5%	410	291	-29.0%
Total	11026	10582	-4.0%	1262	1060	-16.0%

* Data Source: SCRB. Compiled by: TSG KRSA.

Table 5 : Quarterly Accident Data Comparison for Q2 of 2020

Comparison of road crashes & fatalities reported in 2020 - Q2						
Month Under Consideration	Number of Accident reported			Number of Fatality reported		
	2019	2020	% Variation from 2019	2019	2020	% Variation from 2019
April	3335	439	-86.8%	421	52	-87.6%
May	3782	1381	-63.5%	444	147	-66.9%
June	3335	2011	-39.7%	355	212	-40.3%
Total	10452	3831	-63.3%	1220	411	-66.3%

* Data Source: SCRB. Compiled by: TSG KRSA.

Table 6 : Quarterly Accident Data Comparison for Q3 of 2020

Comparison of road crashes & fatalities reported in 2020 - Q3						
Month Under Consideration	Number of Accident reported			Number of Fatality reported		
	2019	2020	% Variation from 2019	2019	2020	% Variation from 2019
July	3239	1775	-45.2%	299	164	-45.2%
August	2925	1779	-39.2%	287	242	-15.7%
September	3109	2046	-34.2%	330	181	-45.2%
Total	9273	5600	-39.6%	916	587	-35.9%

* Data Source: SCRB. Compiled by: TSG KRSA.

Table 7 : Quarterly Accident Data Comparison for Q4 of 2020

Comparison of road crashes & fatalities reported in 2020 - Q4						
Month Under Consideration	Number of Accident reported			Number of Fatality reported		
	2019	2020	% Variation from 2019	2019	2020	% Variation from 2019
October	3344	2346	-29.8%	352	261	-25.9%
November	3451	2619	-24.1%	330	267	-19.1%
December	3565	2984	-16.3%	360	366	1.7%
Total	10360	7949	-23.3%	1042	894	-14.2%

* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data for December month is provisional.

5. COVID-19 IMPACT ON ROAD ACCIDENTS

During phase 1 & 2 of COVID-19 lockdown almost all modes of transportation including public transport and personal vehicle trips were restricted. Most offices and commercial endeavors remained closed during this period. Many offices adopted 'Work from Home' strategy which helps avoiding many trips. Essential and emergency travels were allowed during Phase 3. The Phase 4 saw gradual relaxations in private vehicle trips and many offices started functioning with limited staffs. Opening of commercial shops with time control also attracted day time traffic.

As per the data reported by State Crime Records Bureau (SCRB), during the first three months of year 2020, even before the lockdown saw a reduction 14% in road fatality, even though the accidents reported has increased marginally by 1%, compare to corresponding period of previous year. With various efforts in improving road safety in the State and enrolling of Safe Kerala Project made significant progress towards achieving road safety targets in the first quarter of 2020. Complimenting to the good work in upholding State's road safety goals, the restriction in vehicular traffic as well as walk trips during COVID-19 lockdown period helped in containing the upward accident trend & curtailing road fatalities.

The State Crime Records Bureau (SCRB) has forwarded the accident data reported during various phases of COVID-19 lockdown and corresponding period during previous year. The accident data provided by SCRB is tabulated and presented in below Tables.

Table 8 : Road accidents reported during Phase 1 to 4 of COVID-19 lockdown period

Road accidents and fatalities reported during Phase 1 to 4 of COVID-19 lockdown period in Kerala								
Covid-19 Lockdown Phases			Number of Accident reported			Number of Fatality reported		
Phase	Date (from-to)	No. of Days	Lockdown period	Corresponding period in 2019	% Variation from 2019	Lockdown period	Corresponding period in 2019	% Variation from 2019
I	25 th March - 14 th April	21	188	2312	-91.9%	28	277	-89.9%
II	15 th April to 3 rd May	19	384	2177	-82.4%	45	274	-83.6%
III	4 th May to 17 th May	14	502	1763	-71.5%	51	214	-76.2%
IV	18 th May to 31 st May	14	518	1451	-64.3%	69	161	-57.1%
Total		68	1592	7703	-79.3%	193	926	-79.2%

* Data Source: SCRB. Compiled by: TSG KRSA.

Table 9 : Road accidents reported during Phase 1 to 7 of COVID-19 Unlock period

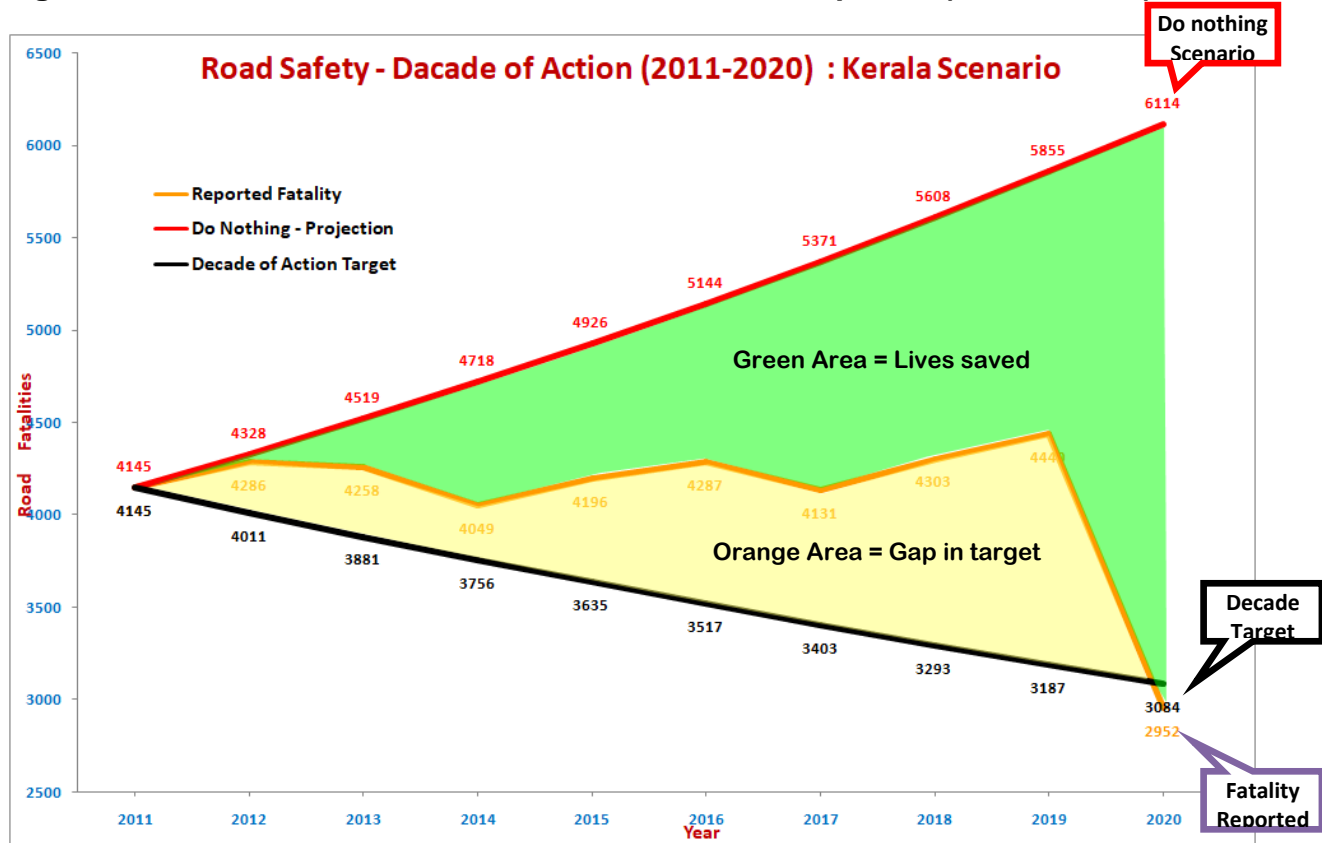
Road accidents and fatalities reported during Phase 1 to 7 of COVID-19 Unlock period in Kerala								
Covid-19 Unlock Phases			Number of Accident reported			Number of Fatality reported		
Phase	Date (from-to)	No. of Days	Unlock period	Corresponding period in 2019	% Variation from 2019	Unlock period	Corresponding period in 2019	% Variation from 2019
I	1 st June - 30 th June	30	2011	3335	-39.7%	212	355	-40.3%
II	1 st July - 31 st July	31	1775	3239	-45.2%	164	299	-45.2%
III	1 st Aug - 31 st Aug	31	1779	2925	-39.2%	242	287	-15.7%
IV	1 st Sep - 30 th Sep	30	1779	2925	-39.2%	242	287	-15.7%
V	1 st Oct - 31 st Oct	31	2346	3344	-29.8%	261	352	-25.9%
VI	1 st Nov - 30 th Nov	30	2619	3451	-24.1%	267	330	-19.1%
VII	1 st Dec - 31 st Dec	31	2984	3565	-16.3%	366	360	1.7%
Total		214	15293	22784	-32.9%	1754	2270	-22.7%

* Data Source: SCRB. Compiled by: TSG KRSA. Fatality data is provisional. Data upto December 2020

6. LIFE SAVED DURING DECADE OF ACTION

India being a signatory in Brasilia Declaration is committed to the UN's Decade of Action for Road Safety 2011-2020. Kerala playing the part, the target estimated for the State as per Decade of Action calculations is to save 14,814 Lives during the decade. The average annual growth rate of road fatalities during the decade (2011-2020) worldwide estimated by UN as approximately 4.4%. With decade action plan, around -3.2% targeted road fatality reduction across the world was planned to save 5 million lives across the world.

Figure 3 : Performance of Kerala in Decade of Action - period (2011 to 2020)



Above graph shows the performance of Kerala in reducing road fatality during Decade of Action period (2011 to 2020). Kerala achieved 65% of the target by saving 9681 lives. Table below shows the year wise Decade Action Plan target and the performance of Kerala State in achieving the decade of action fatality reduction.

Table 10 : Kerala State Performance during Decade of Action: 2011-2020

Year	Anticipated road Fatality without Decade of Action	Fatality reduction Target as per Decade of Action	Actual Reported Fatality	% of Target Achieved
2011	4145	4145	4145	0.0%
2012	4328	4011	4286	13.2%
2013	4519	3881	4258	40.9%
2014	4718	3756	4049	69.5%
2015	4926	3635	4196	56.5%
2016	5144	3517	4287	52.7%
2017	5371	3403	4131	63.0%
2018	5608	3293	4303	56.4%
2019	5855	3187	4440	53.0%
2020	6114	3084	2952	104.4%
Total	50728	35913	41047	65.3%

With considerable reduction in road accidents and fatality during 2020, Kerala has achieved the yearly target.

7. SUMMARY

During December 2020, the pattern of road accident reduction witnessed in last few months continued with a total of 581 fewer accidents. But road fatalities had gone up slightly by losing 6 more lives this month than corresponding period in previous year. Overall road safety performance of State during the year 2020 was remarkable by saving 1488 lives on road and with 13149 less number of accidents, compared to previous year. This helped the State in overall reduction of 32% in road accidents and 33.5% in road fatalities in year 2020.