

## RRSMP (Rajasthan Road Sector Modernization Project): Road Safety Education and Awareness Program

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### Abstract

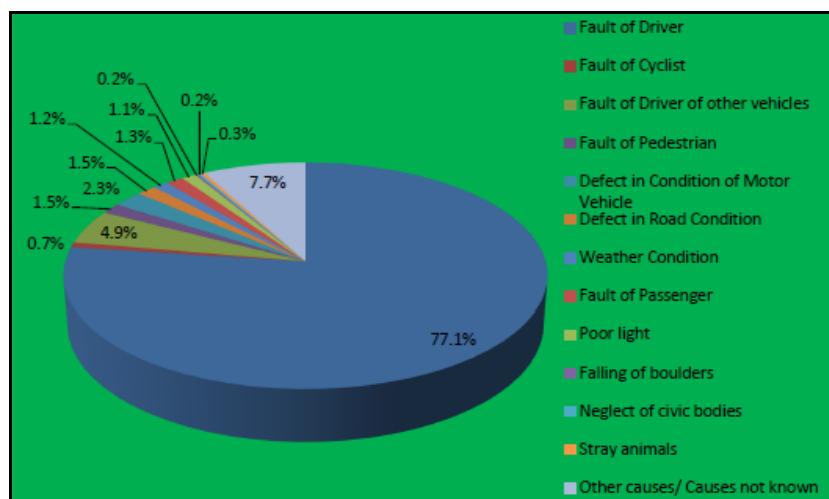
India which has a dubious distinction of being at the top for road crashes has observed certain initiatives in recent times to curb the growing menace on roads. To this effect, Rajasthan has initiated a comprehensive program to curb road crashes and resulting fatalities and injuries. The Rajasthan Road Sector Modernization Project (RRSMP), funded by the World Bank, is underway with the objectives of improving road connectivity, strengthening road sector management capacity and enhancing road safety. The road safety component is primarily focused on reducing the number of road fatalities and injuries through capacity building in road safety management. The Road safety education and awareness program under this component aims to educate the rural masses of the entire State. The objective of the program is to engage the rural community by helping them adopt safe driving practices and protect themselves from road traffic injuries (RTIs).

### Background

Deaths due to ‘Road Crashes’ in the country have seen an increasing trend with 146,133 fatalities in 2015 over 137,423 in 2013 (NCRB, 2014). **Rajasthan is ranked 5th in overall road traffic fatalities** amongst all the states of India (NCRB, 2014). Devising a statewide continuous program on road safety awareness and education, looking at the rising road fatalities and injuries, was felt as the need of the hour.

The Public Works Department (PWD) of the state government of Rajasthan has embarked upon an ambitious project i.e. Rajasthan Road Sector Modernization Project (RRSMP) funded by the World Bank, with the objective of improving rural connectivity, enhancing road safety and strengthening road sector management capacity of the state. This is aimed to be achieved through a three-pronged approach namely: (a) Rural Connectivity Improvement; (b) Road Sector Modernization and Performance Enhancement; and (c) Road Safety Management. The project would not only enhance the connectivity within the state, especially in rural areas, but overall strengthen the entire ecosystem in Road Safety Management in Rajasthan with the avowed objective of reducing the number of road fatalities and serious injuries from road crashes. The Road Safety Management component is an integrated approach which also includes road safety education and awareness campaign covering the entire rural population of the State.

In this massive outreach initiative, all stakeholders and various departments in the state government of Rajasthan and the community have been involved to work towards achieving this goal. There had been several studies undertaken in India to assess various parameters of road crashes. Ministry of Road Transport and Highways (MORTH), Government of India (GOI), 2015 in a study found the fault of the road users as one of the major reasons behind road crashes (Figure 1).



**Figure 1: Causes of road crashes - 2015 (Source: Ministry of Road Transport and Highways, Govt. of India, 2015)**

In India, road safety is being addressed vigorously by the MORTH and numerous other schemes have been initiated in this regard, including National Highway Accident Relief Service Scheme (NHARSS), setting up of institutes of driving training and research (IDTR), road safety audits, refresher training for heavy vehicle drivers amongst many others. The Government has been supporting its initiatives with extensive publicity campaigns on diverse media including radio, television, print media, outdoor and even online social networks.

Other community outreach programmes include Road Safety Week celebrations and activities, seminars and lectures by specialists in public and private sector organisations, exhibitions and road shows, all-India essay competition on road safety, publication of booklets on road signage, posters, etc. However, to a great extent these activities and campaigns were confined to the urban population. A recent report on road safety in India by National Institute of Mental Health and Neurosciences (NIMHANS) observed that "much of the debate on road safety is an urban phenomena whereas rural India is yet to be connected and engaged" (Gururaj & Gautham, 2017).

Considering the fact that 80% of road crashes and 88% of road accident deaths occur in rural areas during 2015 (Gururaj & Gautham, 2017) and 75% of the state's population is rural, the Rajasthan Government devised the plan to make inroads into the rural areas and sensitise the large chunk of population living in its villages. Various on-ground activities, with use of both modern and traditional media like street-theatre, film shows, school-level programmes with the support of the village-level administrative setup (*Gram Panchayats*) is being implemented as a part of this campaign.

This Road safety education and awareness campaign aims at involving the rural community of the entire state. The preparation of this program started in April 2016 and aims to commence by December 2018. The key objectives of this programme includes sensitizing the masses on:

- Importance of road safety and risks associated with unsafe driving
- Social, economic, psychological impact of road crash injuries and fatalities
- Good practices including use of helmet, seat belts, observing traffic rules, and understanding of traffic signs, etc.
- Road users' driving behavior, and how to adopt good road safety habits and develop healthy attitude.
- Real life case studies and interaction with audience
- How to be a Good Samaritan and extend a helping hand to road accident victims

- First-Aid and hands-on Training on pre-hospital first aid and trauma care including Cardio Pulmonary Resuscitation (CPR) for road accident victims
- Identifying and training road safety volunteers.

The article further highlights the methodology, sustainability and evaluation of the road safety education and awareness campaign.

## **Methodology**

The road safety education and awareness campaign has been designed so that it covers the entire state of Rajasthan which is the largest state in India in terms of its geographical area (Banthia, 2001). For the implementation of this program, besides the government officials, a team of active non-government organisations (NGOs) in road safety, were engaged after due diligence and evaluation. With vast geographical spread of Rajasthan, having six administrative divisions namely Ajmer, Bharatpur, Bikaner, Jaipur, Jodhpur, Kota and Udaipur (Divisions of Rajasthan, 2017), each division was selected as a zone to implement this programme.

Six NGOs were ultimately shortlisted with good experience, having sufficient manpower and resources to implement this campaign in each Zone. All the Information, Education and Communication (IEC) material to be used for the campaign including powerpoint presentations, video films, banners, posters and other material were audited and structured to ensure uniform delivery of the message. The content of the Information, Education and Communication (IEC) material included topics related to:

- The dire consequences of Overspeeding, Overloading, Overcrowding, Drunken driving
- Road Driving Behaviour: Distracted driving with the Use of Mobile while driving;
- Usage of safety devices, viz, helmets, seat belts, reflectors on non-motorised vehicles
- Knowledge on road signs and traffic rules
- Good samaritan practices; First Aid and Trauma care; Cardio pulmonary resuscitation (CPR)

For developing the material, the photographs and videos of local rajasthan people both rural and urban were taken so that the audience could relate to it. The communication material was developed in Hindi language. Some of the reference material on road safety used by Transport Department, Government of Rajasthan and Ministry of Road Transport and Highways, India was also included. The other prepared content on road safety was validated by Road Safety Cell team of Transport Department, Rajasthan.

The preparation of this campaign rolled out in April 2016 with training programme for every NGO's staff, followed by a pilot programme which every NGO conducted in its respective zone during October-November 2016. The pilot programme was closely monitored by the Project management consultancy (PMC) and post-event debriefing helped the team further streamline and update the IEC material for ease of understanding of the proposed message. The capacity building of NGOs coupled with periodic review and training is the strength of the programme. A perception survey by each NGO was also conducted in which challenges and modification required if any in preparation of the Model Awareness program (MAP) were identified. Under the supervision of PWD and PMC, a common MAP was prepared. The campaign in each of the zones was launched in April 2017 for dissemination of the the model awareness program.

The target audience for the campaign includes:

- Rural population
- School Children

- Drivers of heavy vehicles (truck, tractor, bus)

By December 2018 this massive awareness campaign intends to cover 9,914 Gram panchayat Head Quarters (HQs) (local self-government organisation at the village level) and 295 Panchayat samitis (local government at the intermediate level), 700 Schools and Truck/Bus drivers training program at 495 locations throughout the State. For sustainability of the programme, each NGO is also supposed to identify volunteers in every village and train them so that even after this program, they can continue to educate the people at their respective village/community.

The methodology of the campaign further consists of:

**IIa. Preparation of Model Awareness Program (MAP)**

- Scheduling of the event
- Mapping of the zone
- Timings and location of the event

**IIb. Implementation of the program**

- Team structure
- Training of Trainers
- Advance publicity
- Main event

**IIc. Monitoring**

***Preparation of Model Awareness Program (MAP)***

The model awareness program was prepared on the basis of the feedback from the pilot program. The information, education and communication material (IEC) was mutually prepared by the NGO's and standardized by the PMC and PWD. The education material for exhibition and distribution which included posters, banners, pamphlets and brochures were especially customized in local language on various road safety topics, emergency response system and pre-hospital trauma care for road accident victims. The audio/visual presentation was also made as per the target audience being addressed, i.e. the rural population, school children and bus/truck drivers. The presentation included various aspects of road safety, First Aid Trauma Care, Golden Hour and Good Samaritan practices. Documentary on road accident victim families and a road safety film, separate film for each district (33 districts) has also been produced for this purpose. The content of the material emphasizes on the emotional appeal among the masses so that they feel self-motivated to follow traffic rules.

The key road safety issues being addressed in the MAP were included on the basis of discussions with the stakeholder departments i.e. Public Works Department (PWD), Transport, Police, Health and Education Departments:

- Road safety scenario
- Overspeeding, Overloading, Overcrowding
- Road Driving Behaviour: Use of Mobile; Drunken driving
- Usage of safety devices, viz, helmets, seat belts, reflectors on non-motorised vehicles
- Knowledge on road signs and traffic rules
- Good samaritan practices; First Aid and Trauma care; Cardio pulmonary resuscitation (CPR)
- Road safety oath in their local language

In order to make this event educational and entertaining, street plays (*nukkad naatak* in local language), puppet shows (*katputli* in local language), road safety songs (adapted as per the folk

songs in local language) are also made as part of the event. In school programs, to promote road safety awareness through different mediums, debate and painting competitions on 'road safety theme' are being organized. Health check-up and eye check-up for the bus/truck drivers are also being arranged. Small tokens like road safety caps, t-shirts are given away as prizes to keep the audience hooked and motivated. The enhancement of the awareness through the program is also being assessed. It is done through pre and post assessment questionnaires distributed to the public. These are written questionnaires. However, to take care of the literacy issue, the team members assist the participants by reading out each question and corresponding response options to them. As the nature of the questionnaire is objective, the correct answer just needs to be tick marked. Hence, the literacy and the issue of being biased if at all are taken care of.

### ***Scheduling of the event***

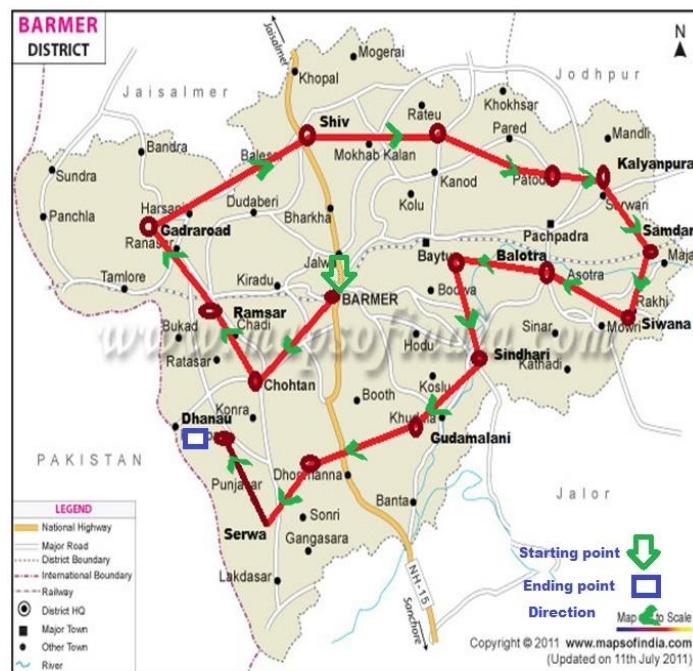
The scheduling of the event for the entire zone was done during the preparation of the MAP. Table 1 reflects a specimen of one of the zones sharing details of the schedule they will follow covering all the districts. The details of the location, contact details of individuals concerned and other stakeholders is also shared by respective NGOs a month prior to the actual event. Monthly progress report (MPR) by each NGO is also submitted duly to the PWD and PMC department.

***Table 1: Abstract of schedule for one-day program covering all of Panchayat Samiti and Gram Panchayat at each district in Jodhpur Zone***

S.No.	Name of District	Panchayat samiti*	Gram Panchayat**	Scheduled period (from-to)	Remarks
1	<b>Barmer</b>	17	489	1 April 2017 to 12 July 2017	One event to be conducted at each of the Panchayat Samiti and Gram Panchayat
2.	<b>Jodhpur</b>	16	466	15 July 2017 to 18 October 2017	
3	<b>Pali</b>	10	321	23 October 2017 to 23 October 2017	
4	<b>Jalore</b>	8	274	29 December 2017 to 16 Feb 2018	
5	<b>Sirohi</b>	5	162	22 February 2018 to 27 March 2018	
6	<b>Jaisalmer</b>	3	140	2 April 2018 to 27 April 2018	
<b>Panchayat samiti*</b> - local government at the intermediate level <b>Gram Panchayat**</b> - local self-government organisation at the village level					

### ***Mapping of every Zone***

The mapping of the zone is kept in a way that one-day campaign starts in one district and moves to the other district after completion of all of its Gram Panchayats and Panchayat Samitis. Usually after completion of one district, a 3-4 days rest period is kept for the teams. Figure 2 shows a specimen of the route finalization on a District level map marking the route of Panchayat Samiti (Jodhpur Zone).



**Figure 2: Specimen of route map of one district of Jodhpur zone**

### **Timings and location of the event**

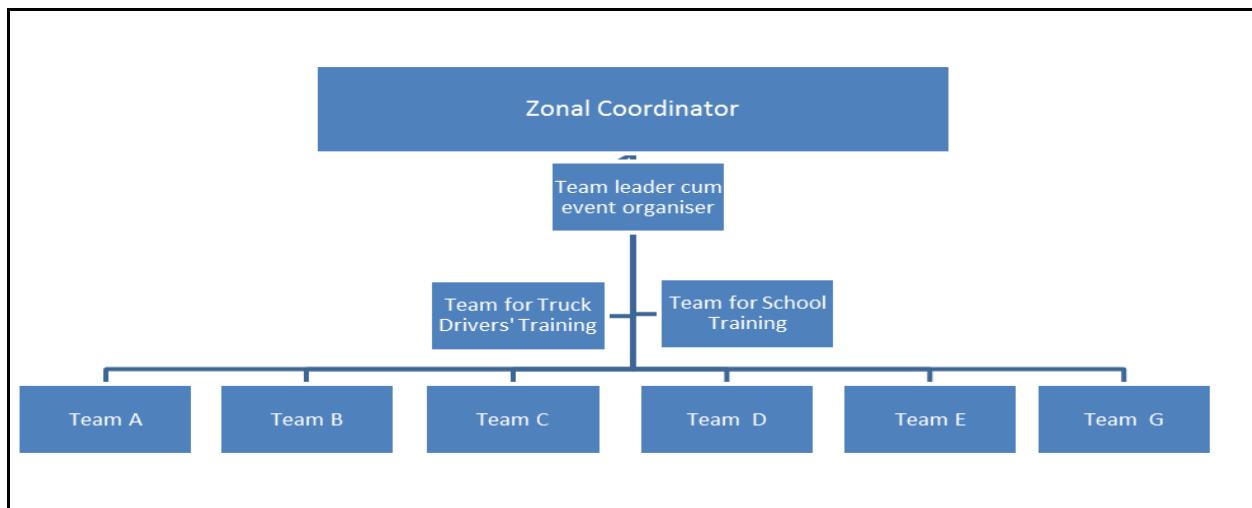
The timings of the event at *Gram panchayat* and *Panchayat samiti* (HQs) are kept looking at the feasibility of the villagers. During the pilot phase of the campaign, it was observed that maximum public gathering was possible during the evening. At morning, the villagers went to fields for work while womenfolk were busy with their household chores. It was only during the evening that they could take out time for outdoor activities. The event could not be managed in enclosed spaces, therefore, outdoor places like *village choupals* (raised platform under the banyan tree where community meetings are held), ground, temple or any other place where public gathering are frequent is chosen. For school children, the event is held during the school hours by coordination with the school authorities. Location for Truck/Bus driver training is also kept flexible and kept in agreement with the Truck/Bus driver unions preferably near the highways alongside eating and resting place for them (*dhabas* in local language).

### **Implementation**

The implementation of the campaign is being carried out by coordination of the entire team on and off field with the PWD, PMC and other stakeholder departments. Each NGO has a team stationed at zonal headquarters coordinating with their teams who are on field. The successful implementation of the program depends upon the team structure, training of trainers (TOT), advance publicity and the main event.

### **Team Structure**

The team structure comprises of a Team leader, road safety expert, first aid trauma management expert, senior social scientist, educationist, event organiser and media expert. Some NGOs also keep a back up team in order to replace any one team or team member in case needed. The field programs are being carried out with deployment of all the teams in one district at a given time. The teams on completion of one district further move on to the other Districts. There are separate teams for one day awareness program, training to truck drivers and school children. Figure 3 shows the Team structure of respective NGOs.



**Figure 3: Team structure of respective NGOs**

### **Training of Trainers (TOT)**

After the MAP was finalized, separate sessions by each NGO was kept for training of trainers. In this training program, the team members were trained on the presentation they had to deliver. This program which lasted from 5-10 days acquainted the members with the audio/visual presentation, street play script (*nukkad naatak*), logistics, coordination with the stakeholder departments, reporting process and like. After the end of the TOT, every team was asked to conduct a pilot run of the program in their respective zones. Train the Trainers programme was delivered by Zonal coordinator, team leaders of every NGO and by the trained PMC officials.

### **Advance publicity**

The success of the whole program in any Gram Panchayat or Panchayat Samiti (HQs) rests on how well the advance publicity the team does at their respective areas. The team meets the *Pradhan/ Sarpanch* (Head of Panchayat Samiti/Gram Panchayat) one month to fifteen days in advance of the event at their place. Their support and involvement help attract audience in large numbers. Concerned PWD officials of that area and other stakeholder departments are also communicated by the teams well in advance. A day prior to the actual event and on the day of the event, announcements in the village are done through loudspeakers and on vehicles carrying banners of the event. To attract the audience, at times, team members move around the streets beating drums, or playing popular music and performing dance inviting the village folk to the event. The media expert of the team takes care of the publicity in print and electronic media as they happen. These are regularly updated and shared with the PWD and PMC departments. The news goes a long way in informing, educating and attracting the audience at their respective Gram Panchayat and Panchayat Samiti head quarters.

### **Main event**

The main event of Gram panchayat, School or Bus/Truck driver training program follows as per the structured format given in the MAP. The teams taking care of the logistics, coordination with the stakeholders, advance publicity and carry out the main event. Program at Gram Panchayat/Panchayat Samiti Head Quarters is preceded by a volunteer training program. The teams equipped with screen, laptops, speakers and other related equipments give audio/visual presentation, display road safety exhibition, perform street plays and play documentary and film on road safety. Table 2 represents the status of Road Safety Education and Awareness Program ongoing at different zones as on 30<sup>th</sup> June 2017.

**Table 2: Status of Road Safety Education and Awareness Program as on 30-Jun-2017**

Summary of Training Programs Rajasthan									
S r. N o.	Zone	No. of Panchayat Samitis (PS)	No. of Gram Panchayats (GP) in Zone	No. of Gram Panchayats (GPs) Completed	No. of Schools to be trained	No. of Schools Completed	No. of Bus/Truck Trainings	No. of Bus/Truck Trainings Completed	Number of Volunteers Trained in Gram Panchayats (GPs)
1	Ajmer	41	1371	183	100	1	60	1	1644
2	Bharatpur	27	974	66	100	1	60	1	883
3	Bikaner	30	1133	74	100	1	60	1	792
4	Jaipur	52	1929	199	100	1	75	7	2312
5	Jodhpur	59	1853	348	100	1	90	1	4030
6	Kota	25	811	156	100	1	60	1	2428
7	Udaipur	61	1843	93	100	1	90	1	1088
Zone Total		295	9914	1119	700	7	495	13	13177

### ***Monitoring of the campaign***

The monitoring of every event is being done by PWD and PMC officials on daily basis. For the convenience of everyone, Whatsapp groups (instant messaging service application) for each zone has been created where details of every event along with photos and videos are updated daily. The team leader of every team on field sends the details in a standardized format. The PWD and PMC officials also visit the teams on field to check their status and performance. Verification of the event is done by the PWD officials of that area and the *Sarpanch/Pradhan* of the village. Through social media (facebook), performances of each NGO is also getting regularly updated and monitored.

### **Sustainability**

The campaign when initially tabled in front of the World Bank was said to be a 'very ambitious' project. It indeed is and the major challenge faced is the sustainability of this state-wide campaign. In order to address this, a volunteer training program is held at every Gram Panchayats and Panchayat Samiti (HQs) as described earlier in the methodology. When *Pradhan* and *Sarpanch* of respective Gram Panchayat and Panchayat Samiti are contacted, request is also made to suggest 15-20 names of villagers who are proactive and would like to get road safety training. List is shared and volunteers are trained on road safety and first aid and trauma care with hands-on training for CPR and pre-trauma care for road accident victim. After successful training, these volunteers are also acknowledged with a certificate. Details of each volunteer is recorded and kept intact by the NGO which is shared with other stakeholder departments especially the Transport Department of the State who is in parallel also running sessions on road safety in each district. This ensures that the training imparted is carried forward in one or the other manner by similar initiatives of other departments as well.

### **Evaluation of the program**

On completion of this program, around 15,000,000 people in villages and semi-urban areas, 100,000 school children and around 50,000 bus/truck drivers would have been sensitized. One of the significant aspect of this campaign is the selection and training of atleast 10-15 volunteers in each *Gram Panchayat* for the sustainability of this program resulting in more than 1,000,000 volunteers.

The evaluation of the campaign is being gauged though it is still under process. There are interesting discoveries and results are emerging. The womenfolk who are mostly seen in a

*ghoonghat* (veil) are coming out of their homes and participating in the programs. This is being made possible through the women team members who approach and encourage them to attend. In one of the events it was a pleasure to watch women in her 70s coming forward and learning the CPR method. In a way the women are also feeling empowered.

Other than participation of the women, this program has been majorly successful in removing the fear and hesitation among the masses at large on helping road accident victims. Earlier, many people were hesitant to come forward and help road accident victim due to the fear of being harassed by the police and medical staff. But with the recent "Good Samaritan Law" applicable all over India, the program has been successful in carrying forward this message to the masses who were earlier ignorant about it.

There were certain incidents where team members of NGOs witnessed a road accident and helped the victim to safety. Many volunteers join the team and help them in the preparation of the event, some of them even assist them in the next Gram Panchayat and Panchayat Samiti event. Children are so enthralled with this new knowledge and their active participation in the event is a treat to watch.

The documentary shown at every village of their respective districts leaves an everlasting impression on their minds. The documentary narrates the incident of families who lost their loved ones in a road crash. Road safety oath taken by every participant in the audience helps to reiterate the importance of road safety.

Objectively, the data collected through pre and post assessment questionnaires and baseline on-road observation study of the key issues is being done by each NGO. Observational survey is going on at every zone addressing certain impact measures on road like:

- Aggressive driving,
- Driving on wrong side,
- Helmet wearing,
- Overloading,
- Reflectors on vehicles,
- Seat belt wearing,
- Using Mobile phone while driving,
- Use of Zebra crossing and footpath,
- Behaviour of motorized vehicles giving way to pedestrians on a zebra crossing
- Wrong Overtaking

Presently baseline surveys are being carried out and impact survey assessment will be conducted after interval of six months. It is in the process, will be evaluated and concrete results shall show up.

## Conclusion

This program is a part of Indian government's commitment to 50 percent reduction in road crashes by 2020 (Press Trust of India, 2015). The Road Safety Education and Awareness Program of this enormous magnitude has not so far been attempted in the country, and would be a model for other states in the country to follow.

## Acknowledgements

The State Government of Rajasthan is indebted to the World Bank for funding this project. We also acknowledge the 24x7 efforts being put in by the team of each NGO as well as the Public Works Department (PWD), PMC officials who are working tirelessly to make this campaign a success and other stakeholders engaged in this project especially the Transport Department.

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