

Road Safety in India

Horst Wildemann
Tobias Engelmeier



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within their objective to promote road safety in India.

Horst Wildemann, Tobias Engelmeier

Road safety in India

An empirical survey

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Foreword

India is one of the fastest growing economies in the world. Despite the worldwide economic slowdown, the Indian economy - backed by strong domestic demand - has shown growth rates between 5 and 6 %. It is estimated that the growth rate will reach 8 % in 2010. To facilitate this growth, India needs to continue investing in and building strong and adequate infrastructure. This in turn is likely to create enormous potential for further growth in many industries, including the chemical industry.

With a population of 1.2 billion, India is the second most populous country in the world. By the middle to the 2020s, India is projected to overtake China. This will have a significant effect on the framework of mobility in the country. Motorization levels will significantly rise, causing an increase in the intensity of traffic on Indian roads. As the survey by TCW and BRIDGE TO INDIA shows, India is plagued by high and rapidly rising accident rates. To mitigate this alarming trend, urgent action is required not only by politicians, but also by the industry at large.

The industry can contribute to road safety by improving the quality of all vehicle components and introducing new safety-relevant technology. LANXESS for its part is in a position to significantly influence the quality of tyres by providing high-quality rubber. High-end rubber improves the grip, mileage, noise emission and rolling friction of a tyre. Grip and rolling friction are factors that can significantly limit the damage in an accident and in many cases, altogether prevent them.

The following paper by TCW and BRIDGE TO INDIA gives a thorough overview of the status of road safety in India. By comparing the Indian and German road traffic frameworks, it shows a way forward and the measures that need to be taken to make roads safer in India.

Leverkusen, 1st December 2010



Dr. Axel C. Heitmann
CEO LANXESS AG
Leverkusen

Preamble and Acknowledgements

Traffic injuries are a major public health problem across the world. They are among the main causes of death and injury. Every year, more than one million people die and millions more are injured because of road accidents. The economic burden on society arising directly and indirectly from road accidents is also tremendous.

Developing countries account for a significant portion of road accidents. At present, half of all road traffic deaths take place in low-income countries, though they account for only about 15% of all vehicles worldwide. These countries continue to grow economically with a consequent rise in motorization. This trend is likely to further boost accident rates.

India's accident numbers are alarming and the situation is worsening. Although traffic density is much lower in India as compared to Germany or China, there are more accidents on Indian roads. India urgently needs to introduce relevant measures to curb this trend. Germany, which has been particularly successful in improving road safety under conditions of rising motorization over the last 50 years, can in many ways provide a useful model for India.

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Horst Wildemann
Univ.-Prof. Dr. Dr. h. c. mult.
Technical University
Munich



Dr. Tobias Engelmeier
BRIDGE TO INDIA
New Delhi

The authors



Horst Wildemann
Univ.-Prof. Dr. Dr. h. c. mult.

Technical University of Munich and
Transfer Centrum GmbH & Co. KG
Munich



Dr. Tobias Engelmeier.
Managing Director
BRIDGE TO INDIA Private Limited
New Delhi



Ms. Julia-Kristin Jarausch
Dipl.-Kffr. Univ.
Transfer Centrum GmbH & Co. KG
Munich



Mr. Simon Lorenz
Dipl.-Kfm., MSc in Management,
Diplôme de Grande Ecole
Transfer Centrum GmbH & Co. KG
Munich

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Road safety in India

Injuries due to road traffic accidents are a major global problem. Solving this challenge requires concerted prevention efforts. The number of fatalities in worldwide road traffic crashes is estimated at almost 1.2 million per year. The number of injured people is estimated at 50 million. Road accidents are one of the world's largest contributors to injury problems, loss of lives and damage to property.¹

1 Causes of road accidents

Road accidents can occur due to various reasons and are seldom caused intentionally. Accidents occur due to a combination of different factors that can include the weather, road conditions, road users and the condition of the vehicle. These factors never act as isolated entities. Most common are the mistakes of the driver (86 %) followed by bad street conditions (5 %), mistakes of a pedestrian (4 %) as well as technical and maintenance defects (1 %). Thus, human error plays an important role in most road accidents. A deeper analysis of driver mistakes show that most accidents occur due to mistakes when turning, reversing, driving in and driving away (16 %). 15 % happen because the right of way was disregarded and 14 % due to speeding. Lack of distance and wrong street use caused 12 % and 7 % of accidents due to mistakes of the driver. 5 % of accidents due to mistakes of the driver involved alcohol.²

A multitude of factors can cause an accident. Tyre quality can have a significant impact on the outcome even in cases where the accident is not directly caused by a problem with the tyre. The extent to which tyre quality can play a role depends on the quality of the rubber and the mixture ratio used in the production process.

¹ World Health Organization (2009), p.1.

² Federal Office of Statistics, Germany (2009), p.3 et seq.