



Trends in Causes and Impacts of Accidents in Indian Railway

S. B. Aher* and D. R. Tiwari¹

Indian Institute of Soil Science, Bhopal 462038, Madhya Pradesh, India

*¹Indira Gandhi National Open University Study Centre, Government Motilal Vigyan
Mahavidyalaya, Bhopal, 462 038, Madhya Pradesh, India*

KEYWORDS Collision. Derailment. Railway Disaster. Railway Accident

ABSTRACT Indian Railways is fully owned and operated by Ministry of Railways, Government of India. Like any other transportation system, it is technology intensive not only for ensuring high productivity of its assets but also for safety in train operations. But the safety on the railways is the end product of the coordination among all the factors. The recent rail accidents have drawn the attention of everyone in the country. Considering the facts, an analysis of accidents that occurred in Indian Railway during 2000-2016 (16 years) was carried out to study the trends in causes and impacts (both casualty and economic loss). A compressive examination of past 16 year data revealed that, the dominating accidents, derailment and level crossing mishaps together constituted ninety percent of total rail accidents in India. Out of the total accidents, eighty-five percent accidents were caused due to human error. Among the total people affected by railway accidents, twenty-seven percent lost their life while seventy-three percent got injured and IR faced a total loss of 86,486 crore INR. It means every fourth person affected by railway accidents lost his life. On an average, 0.76 persons got killed and caused a loss of Rs.31 crore per accident to Indian Railway in past 16 years. The total number of accidents and their causes in Indian Railway were found in decreasing trend over the years but the number of persons killed and economic loss associated per accident showed an increasing trend indicating an increase in severity of the railway accidents.