Social Implementation of Information Sharing Road Safety Measure in South-East Asia

Authors : Hiroki Kikuchi, Atsushi Fukuda, Hirokazu Akahane, Satoru Kobayakawa, Tuenjai Fukuda, Takeru Miyokawa Abstract : According to WHO reports, fatalities by road traffic accidents in many countries of South-East Asia region especially Thailand and Malaysia are increasing year by year. In order to overcome these serious problems, both governments are focusing on road safety measures. In response, the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) of Japan and Japan International Cooperation Agency (JICA) have begun active support based on the experiences to reduce the number of fatalities in road accidents in Japan in the past. However, even if the successful road safety measures in Japan is adopted in South-East Asian countries, it is not sure whether it will work well or not. So, it is necessary to clarify the issues and systematize the process for the implementation of road safety measures in South-East Asia. On the basis of the above, this study examined the applicability of "information sharing traffic safety measure" which is one of the successful road safety measures in Japan to the social implementation of road safety measures in South-East Asian countries. The "Information sharing traffic safety measure" is carried out traffic safety measures by stakeholders such as residents, administration, and experts jointly. In this study, we extracted the issues of implementation of road safety measures under local context firstly. This is clarifying the particular issues with its implementation in South-East Asian cities. Secondly, we considered how to implement road safety measures for solving particular issues based on the method of "information sharing traffic safety measure". In the implementation method, the location of the occurrence of a dangerous event was extracted based on the "HIYARI-HATTO" data which were obtained from the residents. This is because it is considered that the implementation of the information sharing traffic safety measure focusing on the location where the dangerous event occurs leads to the reduction of traffic accidents. Also, the target locations for the implementation of measures differ for each city. In Penang, we targeted the intersections[in the downtown, while in Suphan Buri, we targeted mainly traffic control on the intercity highway. Finally, we proposed a method for implementing traffic safety measures. For Penang, we proposed a measure to improve the signal phase and showed the effect of the measure on the micro traffic simulation. For Suphan Buri, we proposed the suitable measures for the danger points extracted by collecting the "HIYARI-HATTO" data of residents to the administration. In conclusion, in order to successfully implement the road safety measure based on the "information sharing traffic safety measure", the process for social implementation of the road safety measures should be consistent and carried out repeatedly. In particular, by clarifying specific issues based on local context in South-East Asian countries, the stakeholders, not only such as government sectors but also local citizens can share information regarding road safety and select appropriate countermeasures. Finally, we could propose this approach to the administration that had the authority.

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