UNIVERSITI TEKNOLOGI MARA

A FRAMEWORK OF TREE PROTECTION (ACT 172) IMPLEMENTATION FOR CONSTRUCTION PROJECTS

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ABSTRACT

Cases in Malaysia where urban trees are felled during construction projects (CP) without consent of the authorities, despite the existence of tree protection legislative provisions (TPLP) that could prevent such unfortunate circumstances, have raised questions doubting the implementation of the written law, and what the affecting factors are. Through a literature review involving websites of local planning authorities (LPAs) in developed countries, 5 categories of TPLP were identified: 1) Tree Felling Prohibition, 2) Significant Tree Register Establishment, 3) Conservation Area Designation, 4) Tree Preservation Order (TPO), and 5) Tree Protection Planning Conditions, and the TPLP concepts were described. Moreover, by applying public policy implementation science, a conceptual framework for implementing TPLP in construction projects were proposed. The framework features four key components of factors affecting the implementation: 1) Protected Tree List, 2) Planning Application Procedures, 3) Publicity, and 4) Enforcement Plan. This conceptual implementation framework was envisaged applicable for Malaysian situation and to be able to facilitate Malaysian LPAs in identifying factors critical to their success implementing TPLP in construction projects. To fulfil this research aim, following four research objectives were established, namely, to identify tree protection provisions in the legislations of local authorities for administration and planning in Malaysia, to assess the status quo of implementation of Malaysian tree protection legislation provisions in construction projects, to evaluate the adequateness of the processes of formulating TPO Rules (Act 172) and making it adopted, and to establish the Malaysian framework. This research adopted a qualitative research design with the support of content analysis in the form of thematic network on the written law, publication and official documents, and websites review of local governments. Validation of the conceptual framework was achieved through semi-structured interviews and a questionnaire survey during a focus group discussion. It was found that the framework is also valid for Malaysian situation, and the success factors identified were similar to those in the developed countries. Moreover, several critical success factors which are lacking in all Malaysian LPAs were revealed, for examples, "TPOs are made and the trees are listed", "Standard guidelines on TP procedures in CP are existing", and "Enforcement Plan pertaining to TP in CP is prepared and executed". This research, through its newly described TPLP concepts, would contributes significantly towards better understanding on matters related to urban tree protection. The better understanding could help the planning agencies and LPAs to review each TPLP from time to time to maintain its relevance to the current situation. As far as the implementation of TPLP is concerned, the framework proposed by this research could become a strong foundation for future research to analyse and identify the success factors.

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