

# Evaluating the Utilizations and Allocation of Recreational Resources at Waterfront

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## Abstract

The improvement of the economic level and the implementation for the policy of two days off per week in Taiwan, the demand for sightseeing and recreation has been raised in recent years. The development of recreational activities has already been imperative. But the environment of river bank is very sensitive and complicated, so the excessive development will cause the irrecoverable impact to the river bank. Take a broad view of the contemporary river bank problems in Taiwan, for example, the exhaustion of living resources, the damage of habitat, the change of topography are all lack of perfect planning for the land of river bank. It induces the limitless development behavior, therefore causes the irrecoverable damage, and produces many environmental problems conflicted with land and ecology. The recreational resources at river bank downstream Toucian River are used as the example to select the recreational alternative in this study. After referring to relevant domestic and international literatures, the types of recreational activities at river bank downstream Toucian River are divided into the stationary type and movable type. The detailed categories are sorted in accordance with the property of recreational activities, including the leisure recreation, knowledge exploration, scene appreciation, and physical adventure. Seven representative indices are obtained in accordance with the type of recreational activities downstream Toucian River and the assessment for development of recreational resources at river bank. After the assessment structure of recreational resources at river bank downstream Toucian River is established, the fuzzy AHP is employed to assess the most suitable alternative for development of recreational resources at river

bank downstream Toucian River. The study results can be used by relevant research institutes and government authorities as the reference for improving whole environment downstream Toucian River and proposing relevant decision in the future.

Keyword : Waterfront, Recreational Resources, Grey Relational Analysis(GRA), Fuzzy Analytic Hierarchy Process(FAHP)