The application of ANP-ZOGP in public investment decision making on recreational bicycle routes – case of Hsinchu Technopolis in Taiwan

張馨文, 解鴻年, 湯珮涓
Leisure and Recreation Management
Tourism
hwchang@chu.edu.tw

Abstract

Bicycle tourism and recreational cycling have increasingly gained their importance in the hierarchical order of development in Taiwan. Bicycle is not only a green transportation mood but also an attraction in scenic area. Bicycle facilities have become one of the major recreational attractions for many cities and counties. The relationship between tourism, recreation and green transportation development is an inseparable one that affects not only the local economy, but also nation-wide competitiveness in many counties.

The authors plan and design 27 cycling routes on behalf of Hsinchu county government. It will cost 150 millions New Taiwan Dollars to complete the project. Therefore, it became a planning issue for local government to decide the construction priority. It is necessary for the local government to evaluate and select the adaptive planning priority due to the limited budget and resource allocation. The Analytic Network Process (ANP) and Zero One Goal Programming (ZOGP) are applied and the investment decision is suggested to local government.