Marine and Island Ecotourism in the Pescadores Archipelago, TAIWAN

Chiung-Hsin Hsu1*, Ching-Ta Chuang2 and Shin-Chang Chen3

(Received, July 20, 2010; Accepted, August 22, 2010)

ABSTRACT

This study analyzes the potential and value for developing sustainable ecotourism in the Pescadores archipelago. Travel Cost Method (TCM) and Contingent Valuation Method (CVM) are applied to evaluate the recreational value and willingness-to-pay for residents and tourist. Empirical results show that island ecotourism generated about NT$249,800,130 (the benefit-cost ratio of Wang-An island is 1:2.42., and Magong island, Bai-Sha Ci-Mei are 1:0.34, 1:1.51 and 1:0.38 respectively). Interview results show residents and tourists agree that Pescadores archipelago have good geographical position and attracted sight-seeing resort to attract tourists. A mechanism for sustainable eco-tourism community development is constructed for a sustainable island ecotourism industry, and suggestions for the sustainable development, planning and management of island ecotourism in the Pescadores archipelago also provided.

Key words: Island ecotourism, Travel Cost Method, Contingent Valuation Method, Pescadores.

INTRODUCTION

Tourism industry is one of the world’s largest employers, accounting for about 11% of the global labor force. In Taiwan, it accounts for 650,000 workers or 6.9% of the labor force. At a global scale, tourist receipts amount to US$ 640 million and business benefits are about US$ 454.5 billion (WTO, 2002). The WTO also predicts that East Asia and the Pacific areas will become the second most important source of tourists in the world. Taiwan has shown particularly strong tourism growth, and marine ecotourism is expected to play a major role in the rapidly growing nature-based travel industry. However, marine eco-tourism resources of Taiwan have been underutilized due to insufficient tourism infrastructure and visitors have not been allowed to access many coastal areas due to military concerns. In recent years, the number of local tourists has increased with the majority choosing marine or island eco-tourism for diversified recreational activities. The Pescadores archipelago is selected as a case study since it is one of the most important nesting areas for green sea turtles and for establishing a marine protected area.

The Pescadores located between Mainland China and Taiwan, and consists of 64 islets and shorelines cover 320 kilometers, of which 20 are inhabited and 126.86 sq. km. (Fig. 1). Tropic of Cancer crosses one of its islets; Hu-Jing Yu. It is located in the sub-tropical monsoon climate zone with an annual temperature of 27°C. Maximum instantaneous wind speeds of its winter north-east monsoon can be faster than 22 meters per second (m/s), which is equivalent to the wind speed of an enormous typhoon. Annual rainfall is about 1,000 mm, which makes it the area with the least rainfall in Taiwan (Hong, 1992). The Pescadores is

1 Department of Tourism and Leisure Management, National Penghu Technology University, Penghu, Taiwan
2 Institute of Marine Affairs and Resource Management, National Taiwan Ocean University, Keelung, Taiwan
3 Department of Aquaculture, National Taiwan Ocean University, Keelung, Taiwan
* Corresponding author, E-mail: johnsun.hsu2@gmail.com