Impact Assessment of a National Park Under the Auspices of Unesco

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ABSTRACT

Crete features many protected areas of exceptional natural beauty that attract thousands of visitors every season. Many local enterprises count on that touristic activity to increase their revenues. One of the most important and well known protected areas of Crete is the Samaria National Park. It was established in 1962 and since then it has earned various international distinctions. The aim of this study is to quantify the economic effects of the visitations at the Samaria National Park, on the whole region of Chania and to identify the profile of the visitor.

KEYWORDS

ANOVA, Economic Impact, Impact Assessment, Multiple Correspondence Analysis, National Park, Park-Generated Income, Tourism, UNESCO

INTRODUCTION – LITERATURE REVIEW

The first modern attempt to create a protected area was in 1832 in the United States, where the president Andrew Jackson passed legislation which reserved an area around Hot Springs in Arkansas to protect the natural thermal springs found there. The first official National Park in the world however was established 40 years later in 1872 as the Yellowstone National Park (Eagles and McCool, 2002). In the following years and especially in the 20th century, many organizations and governments around the globe took action to legally protect various areas of cultural and historical significance and beauty and preserve them unaltered for future generations. Many classifications of protected areas have been created (ed. Phillips, 1998). In 1948 the International Union for Conservation of Nature (IUCN) was established by 18 governments, 7 international and 107 national nature conservation organizations. The IUCN defines a protected area as a “clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values”. The initial aim regarding the protected areas was their total protection and conservation excluding any human activity within their boundaries. That however created problems with the local population whose activities were linked with the areas over the ages. A change of that initial aim was inevitable which led to the present view regarding a protected area which is considered to be closely interconnected to the surrounding areas on the ecological, economical, cultural and political levels, rather than being a completely isolated unit. They are not accessible only to scientific research but are associated with a wide range of human activities, and the active participation of the local population regarding the sustainable management.
of natural resources and cultural values is encouraged by the policy makers (Scoullos, 2013). They also attract thousands of visitors that want to experience nature in its purest form, with minimal human intervention (Hornoiu et al., 2014).

Tourism in Greece is considered to be one of the country’s heavy industries contributing 17.3% of the GDP for 2014 according to the association of Greek touristic enterprises (SETE, 2015). A considerable number of the visitors are attracted by the various protected areas of the country. This study focuses on the most recognized and famous protected area of Crete, the Samaria National Park. It is a specially protected area around the Samaria gorge. The management of the National Park of Samaria is a shared responsibility of the forestry service of Chania and a special Management Body of the park which was established in 2003. Over the years it has earned various international distinctions. Some of them are the Unesco Biosphere Reserve in 1981, the Diploma of Protected areas from the Council of Europe in 1979 and the title of Biogenetic Reserve. It also has earned a national diploma for natural protection and is an area protected by the Barcelona convention and an important bird area of Greece, as well as a declared place of especial natural beauty and a wild life refuge. It belongs to the European Union’s Natura 2000 network and in general is the place with the most important international distinctions in Greece (ed. Papavasileiou, 2008).

In foreign countries the economic value of their National Parks because of the visitations that they attract has long been realized by the authorities. Annual monitoring of National Park visitations is already being implemented and its economic impact is being estimated using various approaches. The researchers have identified the significant value of these areas. That value is present as direct and indirect economic impacts both for the local economies around the parks and the national economy as well. The “direct economic impact” is the primary impact caused by the direct spending of the visitors on the economy. The “indirect economic impact” is caused by the multiplier effects due to the interconnected nature of the various sectors of the economy (Hardner, J. & McKenney, 2006). The visitors of the protected natural areas, appear to greatly appreciate their natural value. That is indicated by the fact that they are willing to spend a considerable amount of money to access them (van der Straaten, 1995).

In the United States the National Park Service (NPS) was established in 1916 by the federal government and is responsible for the management of 401 across the country (including the National Parks). Both researchers and policymakers in the United States have long identified the economic importance of the U.S. National Parks and they consider them to be significant economic assets for the local and the national economies. The National Park Service extensively monitors the visitation at each area within its jurisdiction every year for the past 26 years. Its researchers gather information about park visits, spending averages using visitor surveys, and local and national level economic multipliers. For 14 years up to 2011 utilized the Money Generation Model version 2, developed by Daniel Stynes and Dennis Propst based on the original Money Generation Model by Ken Hornback, to estimate the total economic impact from the spending associated with the visits to the National Parks for the local area around the park but also for the whole state and the nation in general for every calendar year (United States Department of the Interior, 2011). From the 2012 analysis onwards the Money Generation Model was replaced by the Visitor Spending Effects model (VSE) which was developed by the NPS in collaboration with the U.S. Geological Survey. It retained the basic processes of the Money Generation Model 2 but improves considerably the accuracy of the analysis (United States Department of the interior, 2014). The economy is a complex system of interactions between producers and consumers both within the same economic subsector and also between different subsectors. This also applies on tourism at the U.S. national parks. The VSE model currently in use by the NPS, and the MGM2 before it, try to capture all those effects in order to accurately describe the total effect of National Park visitation on the economy (United States, Department of the Interior, 2012). The
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