Local economic impacts of national park visitation in Finland

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National parks and other nature protected areas are often well monitored when it comes to ecological issues, but their economic values have received less attention. However, a recent TEEB report (2009) emphasizes the need to measure, monitor and report the value of natural capital in order to produce information for decision-makers.

Information about economic impacts of national parks is needed especially in those countries where parks are funded by the state. The values and benefits of the national parks are well recognised by people visiting them but for citizens not interested in nature trips or nature values, national parks and nature protection areas may seem to be waste of public funds. The values attached to the national parks include non-use (e.g. heritage values) and use values (e.g. effects for well-being, recreation). Measuring all the values simultaneously is practically impossible, but a part of use-values can be reflected by the local economic impacts originating from park visitors' spending. That is to say, how the money spent by visitors shows in the local economy. The economic impacts should not be mixed with the concept of economic efficiency (benefit-cost) (see Alward et al. 1992).

Understanding the economic impacts of visitor spending is useful at local level where the information can be utilised in marketing, in establishing new enterprises and even in increasing general acceptance of national parks among interested parties in the locality. Economic impact information can also be used to measure the effectiveness of a national park's management in the economic sense, and in planning and justifying new investments and their allocation. Comparing economic impacts between different parks may also help to explain which factors affect the size of the impacts.

In Finland, the increased interest, need and demand for local economic impact information of national parks has resulted in a number of case studies. The methods applied have varied considerably, and so the results cannot often be compared. The methods have also been quite expensive and laborious to conduct which has hampered the annual follow-up of the impacts.

Based on this background, the Finnish Forest Research Institute and Metsähallitus (the national park authority) have developed a method for standardised estimation of local economic impacts (Huhtala et al. 2010). The method is based on the U.S. Money Generation Model 2 (Stynes et al. 2000) which is an Excel-application designed to estimate the economic impacts of national parks. The method requires three inputs which are multiplied for each park separately: number of visits, average spending of the visitors, and multipliers. The multipliers indicate how the visitor spending circulates and multiplies in the local economy.

For the Finnish application, the number of visits for each park and average spending is obtained from Metsähallitus's data base (ASTA) which contains data from standardised visitor monitoring. Standardised visitor monitoring is a prerequisite for comparable economic impact estimation between national parks and over time. It also enables the annual follow-up of the impacts in a cost-effective way.

Deriving the multipliers for each national park is considered to be too expensive compared to the benefits. Therefore the parks are classified into four groups based on the density of population in

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their hinterland, and average multipliers are calculated for these classes. The hinterland of each park is defined by adjacent municipalities and other municipalities if most of the services used by visitors to the park in question are located in them.

The method is currently Excel-based, but it will be integrated to a customer database in the near future. The method produces annual income and employment effects for each national park for which visitor survey data is available. For those national parks where visitor survey is unavailable, the economic impacts can be approximated by applying visitor spending data from similar types of national parks. The impacts per park range from an income of 0.1 to 14.2 mill. euros, and 1 to 183 man-years of employment. When all the Finnish national parks are summed, the respective figures are 70.1 mill. euros, and 893 man-years (Metsähallitus 2009). The reliability of the results is highly dependent on the quality of visitor monitoring.

An interesting question is to what extent the above impacts can be attributed to the national parks only. In Finland, visitors are asked whether the national park is their only or the most important destination, or a destination among others. The responses provide an assessment of the minimum impact - calculated from those visitors who have come to the area to visit only the national park.

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