

# Assessing the Environmental Impacts of Tourism

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In 2008, almost 925 million international tourist arrivals were counted worldwide. Even though a global activity of this scale can be assumed to have a substantial impact on the environment, its consequences have never been assessed and quantified. From a global perspective, tourism contributes to: changes in land cover and land use, energy use, biotic exchange and extinction of wild species, exchange and dispersion of diseases and changes in the perception and understanding of the environment. Unlike the socio-economic effects that have a well known set of macroeconomic indicators for quantitative measuring, the environmental impacts of tourism are difficult to assess quantitatively, being complex and often occurring over extended periods. At a time when public and private agencies recognise the importance of sustainable development, the environmental impacts of tourism are commanding increasing attention. Nature protected areas must be managed according to the principles of sustainable tourism in order to sustain and improve the resource on which tourism is being developed. In order to quantitatively assess the environmental impact of tourism, environmental indicators must be developed. When developing a new indicator, SMART principle must be followed. An indicator must be Specific, Measurable, Achievable, Realistic and Timely. Many environmental indicators have been accepted within the tourism industry. However while purporting to represent the environment, indicator research fails to evaluate the ecological impact of tourism. There are well-founded reasons for this failure, including the ambiguous character of science, which promises a regulatory regime for managing the environmental impact of tourism, but which cannot be delivered. The practical issues mean that any quantitative techniques seeking to assess environmental impacts are likely to be partial in scope. Therefore, indicators for assessment of environmental impacts of tourism are very often tailor-made and represent a combination of existing environmental indicators. This paper examines such indicators for quantitative impact assessment of environmental externalities connected with tourism activities. The paper considers the use of Ecological Footprint, Carrying Capacity, Sustainable Performance Index (SPI) and Indicators for the Sustainable Management.

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