

SASTDes tool indicator database

SASTDes WP3.1-3.4 Report

SASTDes – Smart Assessment Sustainable Tourist Destinations

DISCOVER YOUR WORLD

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Wageningen, May 2022

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1 Introduction

1.1 Project SASTDes

Project SASTDes aims to resolve key issues in the sustainability assessment process of tourism destinations, with the objective to reduce the costs of assessments both in time and money, and to use the results of assessments for destination branding and marketing. The project's core research question is: 'How can sustainability assessments effectively and efficiently contribute to the sustainable development of tourism destinations and tourism products?'

The large growth in tourism not only brings economic progress, but also causes negative effects on destinations and beyond, environmentally, socio-culturally, and economically. The tourism industry has responded with a number of sustainable tourism initiatives. A much-used method is to subject tourism products to a sustainability assessment, frequently leading to a label. The goal here is to motivate destinations to perform more sustainably and to stimulate consumers to make more sustainable touristic choices. Until now, participation in sustainability assessments in tourism is limited. Hence the effect on consumer choices is also small.

Most assessments suffer from limited participation and interest from tourism businesses. Conducting assessments is too costly for them, costing too much time, and the added value is unclear to them. Moreover, the assessments hardly lead to behaviour changes among the relatively small group of end users interested in sustainability. Finally there is a problem with the content of the assessments: the impacts from transport to destinations is not accounted for, whereas these are often of great importance when determining the environmental impact of tourism trips.

1.2 Introduction to the database

Wageningen Environmental Research (WENR) delivered a database for all municipalities in Europe providing data about suitability indicators and data about environment, ecosystems, population, culture, tourism, land-use, and scenery. The database consists of an Excel database called 'TOTAL_SASTDES_Indicatoren_5_WENR_metadata_env themes added'¹ and a shape-file in a Geographical Information System (GIS) called 'Sastdes_Gis.shp'. The spatial coverage of the database is the continent of Europe with all separate countries, exclusive Russia, and Turkey. We used ArcGis as GIS.

In total seven people² from WENR worked on the file for about two years. Information about and access to data can be requested from martin.goossen@wur.nl.

¹ This Excel file is available for download on the Pure page of this report

² Martin Goossen, Henk Meeuwsen, Rob Smidt, Rini Schuiling, Hans Roelofsen, Igor Staritsky, Daphne Thomas

2 SASTDes Indicatoren_WENR data

The aim of the database is twofold; to make it easier for participants in the Green Destination Standard assessment and to deliver data for the SASTDES tool. The basic principle is that only open-source data is used. Of each indicator metadata is included such as year of collection, the unit of the data (ha, number, index) and a link to the original data provider.

2.1 Green Destination Standard

The indicators of the Green Destination Standard (GDS) are filled out automatically by linking it to internationally recognized databases. This only concerns the objective data of GDS with a total of 85 indicators. The Excel file consists of 78 indicators, so the Destination manager have to fill in themselves data of 7 indicators.

2.2 SASTDes tool

The file for the SASTDes tool aims to couple two sources of geospatial data; first a polygon shapefile is created with the shape of all tourism destinations, referred to as municipalities in Europe, supplied by the Global Administrative Area (GADM). There are several geographical levels from GADM in the file in which the municipality is the lowest geographical contour available. In total 90185 municipalities are in the file.

Secondly, a 'source' dataset that carries the source information that will be summarized for each municipality. The source information is used for the data for the 12 sustainability categories but also for the creation of a suitability index for the 130 tourist-recreational activities for each municipality.

The SASTDes tool consists of 314 geographical indicators of which 278 indicators are data found. Of these 314 indicators, 30 are administrative data, 74 environmental data of which from 2 indicators data are missing, and 210 Points of Interest data of which from 34 indicators data are missing. The data comes from various sources like Corine Land Cover, Openstreetmap, Geonames, European Environmental Agency, Eurostat.

Several methods are used for summarizing source data for each municipality depending on the format of the source like raster data, vector data, line data and scale. For example, if the source data is a continues raster (such as elevation), the mean value per municipality is summarized. Likewise, a point shapefile is summarized as number of points per municipality.



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