Sustainable management of the territory as a key element for tourism development

Central paper

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Summary: Throughout history, tourism development has been associated both with loss of authenticity of the urban (and non-urban) areas which tourists have been gradually discovering as users, and with their transformation due to the territory unstoppable, unsustainable occupation after the formation of the tourist products and destinations related to them. Aware of that negative image cast by the tourist activity both to the local population and possible visitors, public and private stakeholders involved in the sector have been creating plans and programmes to diminish the evil effects and to foster the synergies generated by tourism. The UNWTO itself, pushed by the 1992 Rio Conference, proposed its own Decalogue in Quebec to be followed in order to achieve a more sustainable tourist development. At the same time, after the Siem Reap Conference, cultural identity preservation – including the residents’ living space – has been a constant concern for the UNWTO, above all due to its consideration as an essential component of a tourist destination’s appeal.

In this line, several studies and indicators have been developed which have been increasingly adapted to the different areas on the basis of sustainability observatories both depending on institutions and promoted by NGOs. Tourism, mainly through its apparent version of the so-called “second home tourism”, has been pointed at as an important degrading agent for specific areas, especially coastal zones. Land management, with its cross-cutting, multidisciplinary essence, prevails as a key tool to redirect and boost the development of economic activities which, like the tourist activity, have the capacity of being sustainable in terms of environment and in terms of time. The Spanish experience, above all in Andalucia, can show good practice in making up territory related plans and programmes with clear examples of supporting sustainable tourist development and sector plans and programmes, like the one for the tourist sector, clearly tending to achieve territorial balance and sustainability.

However, as it was to be expected due to existing statistics, the indicators produced so far basically show tourism estimation in terms of volume and supply and demand characteristics or journeys, as the contents of this paper show. One of the challenges to overcome for the sustainable management of the tourist activity is the production of statistics and hence indicators reflecting territorial aspects which are not simply environmental like the ones included in the Public Bank of Environmental Indicators of the Spanish Ministry of the Environment and Rural and Marine Affairs.

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BACKGROUND. THE DIFFICULT BALANCE BETWEEN THE CREATION OF TOURIST PRODUCTS AND TERRITORY USE AND OCCUPATION

Since it became a massive phenomenon and almost a necessity, tourism has been related to environmental disruption and the permanent conquest of new areas, as well as being accused of degrading the local culture after transforming it into another product to be consumed by visitors.

Setting isolated cases apart, where this analysis can still be subscribed, experience shows that the agents operating the tourist sector, the same as in any other economic sector, look for differentiation of their products regarding their competitors within the same tourist destination or with other relatively nearby destinations which can be potentially alternative for their clients. The user’s perception of exclusivity on the supply side is one of the keys pursued by tourist business managers and destination management bodies.

Mostly being a service producing activity, the quality of the area where services are consumed, after the clients’ arrival on whichever means of transport, is part of tourists and travellers’ global evaluation. It is actually in the destination domain that the public sector authorities have their bigger responsibility, apart from the rules and regulations common to the different tourist products and services pursuant of their condition to conform the State at its different levels.

Furthermore, it being also an activity which is related to the image and enjoyment of time, tourist facilities try to offer the best areas which, paradoxically enough, can bring about a loss in the environmental and scenic attributes which could originally be one of the reasons for the tourists’ choice of that destination.

The thoughts expressed in this paper have been moved from the author’s position as the main responsible agent for the Andalusian territory management in a period of important legislative changes concerning urban and territorial planning which coincided with a boom cycle in the housing sector where the new annual supply of houses almost doubled home formation levels and the land reclassification proposals placed in the Urban Management General Plan Memos or Developments doubled the already occupied land on the coast. Approval of the Territory Management Plan for Andalucía in 2006, which made the proposals for the expansion of land and population conditional on the previous urban management and within a specific time limit, relieved the strain off the Andalusian territory, especially the coast right before the present housing and financial sector confidence crisis.

The potential tourist demand, both domestic and international, was put forward as an argument to justify the building activity boost until recently. Lack of preservation culture of the benefits brought about by territorial management and this matter’s deficiencies in its evaluation and management instruments showed the weaknesses of planning and managing a sustainable type of tourism based on accommodation and not on residence. Therefore, the challenge consists of improving the destination attribute global evaluation tools in order to be able to carry out comparative analyses on the opportunity costs represented by the different options of land occupation.

However, associating tourism with second home is not completely correct as Spain is a country with a low tendency toward a housing style other than property. In this field, Spain has one of the highest levels in housing property in Europe with near 85% of total. So much so, that

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2 Spain has one of the highest levels of housing property in Europe (83%). So much so, that housing consumption is the highest in the European Union: 31,4% - doubling the figure for the last decade. Furthermore, the percentage of household credit dedicated to housing accounts for 80% of households’ debt. Finally, we should remark that Spain is one of the few countries where the number of unoccupied houses is higher than that for rented houses.
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With the proliferation of the centres which study the economic, environmental and social circumstances of tourism in Spain, once the importance of the sector was recognised and it became a university degree, all types of statistics, indicators and evaluations have been produced both at Faculties and public Observatories as well as those generated on the request of the sector itself. Concerning the aims of this paper and as regards the aforementioned opportunity costs, Exceltur commissioned a well known and controversial study on the environmental, economic and employment impacts generated by the occupation model prevailing on the Spanish Mediterranean coast. One of its objectives was to compare the occupation model economic consistency in 26 coastal tourist towns in all the autonomous regions, where there were significant volumes and differences between regulated and non-regulated supply, not necessarily illegal, the latter being related to the mistakenly called second home tourism.

As it is known, results were meaningful. If the ratio is compared by different crossed variables, the most consuming model in the territory and that with poor professionalism in terms of tourism management does not necessarily provide significant economic benefits, but just the opposite:

<table>
<thead>
<tr>
<th>Variable/ratio</th>
<th>Ratio (Regulated/Non-regulated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy (no. nights/year)</td>
<td>3</td>
</tr>
<tr>
<td>Average expenditure per person</td>
<td>2.5</td>
</tr>
<tr>
<td>Average expenditure at destination</td>
<td>2.2</td>
</tr>
<tr>
<td>Daily average expenditure</td>
<td>1.5</td>
</tr>
<tr>
<td>Daily average expenditure distribution</td>
<td></td>
</tr>
<tr>
<td>- Transport</td>
<td>2.2</td>
</tr>
<tr>
<td>- Food purchase</td>
<td>0.5</td>
</tr>
<tr>
<td>- Purchase other than food</td>
<td>2.7</td>
</tr>
<tr>
<td>- Meals (bars/restaurants)</td>
<td>1.9</td>
</tr>
<tr>
<td>- Organised visits</td>
<td>7</td>
</tr>
<tr>
<td>- Leisure (disco, culture)</td>
<td>1.5</td>
</tr>
<tr>
<td>- Leisure (sports activities)</td>
<td>3.7</td>
</tr>
<tr>
<td>- Other expenditure</td>
<td>1.4</td>
</tr>
<tr>
<td>Foreign tourist daily expenditure</td>
<td>2.3</td>
</tr>
<tr>
<td>Economic activity generated by unit</td>
<td>7</td>
</tr>
<tr>
<td>Total Gross Added Value</td>
<td>11</td>
</tr>
<tr>
<td>Direct employment per 1,000 units</td>
<td>10</td>
</tr>
<tr>
<td>Employment multiplier</td>
<td>1.5/1.1</td>
</tr>
<tr>
<td>Total Gross Added Value generated by tourist expenditure vs. Construction of tourist units</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Source: Estimations based on Exceltur (2005)

Nevertheless, there are a number of economists, like Sebastián (2006), who partially question the conclusions which can be drawn from these results by putting forward the argument that the expenditure result and its distribution are not significant between visitors who stay in their own previously acquired houses and those who stay in hotels. Besides, he asserts that the flow of this type of tourists does not reduce the quality of tourism in Spain and provides important opportunities for the future, above all because of the demand loyalty to the destinations where their house is situated. He gets to these conclusions from exploiting the data from EGATUR\(^3\) about the expenditure incurred by foreign visitors with

\(^3\) Tourist Expenditure Survey.
their own house whom he associates with low cost company users (as this service is used by 75% of housing owners). Facing such assertions, we should point out that data is extrapolated for all over Spain – and not only for coastal towns as is the case of Exceltur – and that the author does not take into account expenditure on journey and accommodation and he includes the investment in housing within tourist expenditure. What is more, his assertion about not reducing the quality of tourism is just based on expenditure data, not crossing other variables such as environmental and scenic costs generated by a settlement policy mostly dispersed or isolated away from traditional urban centres.

Apart from this type of controversies, which have been constant over the last decade, the fact is that the traditional tourist area – the coast in the case of Spain – has gone through important transformations, as is stated by the Observatory for Sustainability in Spain (2007) and the 2007 report on Environment in Andalucia. The former considers, after the Corine Land Cover project, that occupation of the Mediterranean coast in the domains affected by the 1998 Act of Coasts has continued growing: around 10% within the first 100 metres, with a transformed space which already occupies 36.5% of total. For the evolution within the next 200 and 500 metres, growth has been bigger: 11.3 and 13.3 respectively with a proportion of artificially transformed space of more than 40% for both strips. In Andalucia the figure is smaller: 25% within the 500-metre strip, due to the existence of coastal national parks and natural parks: Huelva 12% and Almería 20% even though the Málaga coast goes amply higher than 50% of transformed land. We should point out here the strong tendency to the occupation of the coastal hinterland territory: transformation into infrastructure and built surface within the strip between 5 and 10 kms. from the coast has multiplied by around eight times in the last 50 years.

These significant figures in the transformation of coastal areas are partly a consequence of the slowness in establishing the demarcation of the sea-land public domain foreseen in the Act of Coasts. The intentions of the relevant Ministry are addressed to increasing 23% its practical functionality at the end of this year, so there would only be 300 out of the 10,000 kilometres of coast left to be determined. However, part of the work previously done should be revised to adapt it to the negative scenario presented on the coastal strip by certain scientific studies about the climate change.

**TOURISM AS AN OPPORTUNITY FOR SUSTAINABLE DEVELOPMENT.**

**THE TOURIST ACTIVITY TRANSVERSALITY**

Tourism is an industry which is constantly reinventing itself as it responds to the social changes affecting demand continuously. One of the most significant changes in the last 15 years has been the increase in environmental awareness, which has been heightened recently due to the media consequences of the climate change. Environmental sustainability is by now an intrinsic condition which should be present in every tourist product or destination. The early Futures and TurEspaña Tourism Excellence plans, in cooperation with the young Spanish Autonomous Regions at that time, aimed at restructuring mature destinations on the basis of some of those parameters to keep their competitiveness in a changing tourist market without losing their “sun & beach” appeal.

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4 Around 10% within the first 100 metres, with a transformed space which already occupies 36.5% of total. In the case of the evolution within the next 200 and 500 metres, growth has been bigger: 11.3 and 13.3 respectively with a proportion of artificially transformed space of more than 40% for both strips.

5 25% within the 500-metre strip, due to the existence of coastal national parks and natural parks: Huelva 12% and Almería 20% even though the Málaga coast goes amply higher than 50% of transformed land.
Aware of that negative image cast by the tourist activity both to the local population and possible visitors, public and private stakeholders involved in the sector have been creating plans and programmes to diminish the evil effects and to foster the synergies generated by tourism\textsuperscript{6}.

The growth in urban and cultural tourism over the last decade arises as a great opportunity for a country which has a built and natural heritage catalogued by the most important international institutions in the world\textsuperscript{7}. The UNESCO’s Spanish heritage town network estimates that these sites receive around 20 million visits every year. As well, it is estimated that 53\% of foreigners who visited Spain carried out some type of cultural activity. These figures were unthinkable only 15 years ago, when the passive coastal tourism image prevailed. Clearly, the origin of tourists – over 90\% from Europe and 75\% from Germany, Great Britain and France – makes it easy for these trends to consolidate as they have a deeper knowledge of the diversified supply of products and destinations under – or not – the brand of Spain and they are demanding with environmental conditions.

\textsuperscript{6} The UNWTO itself, pushed by the 1992 Rio Conference and right at the beginning of the second Earth Summit, proposed its own recommendations in Quebec in 2002 in order to achieve a more sustainable tourist development. At the same time, after the Siem Reap Conference in 2000, cultural identity preservation – including the residents’ living space – has been a constant concern for the UNWTO, above all due to its consideration as an essential component of a tourist destination’s appeal.

\textsuperscript{7} 150 parks (14 national parks); 38 Biosphere Reserves, 2000 Natura Network Area 2000/ Habitat Directive: 563 SPA areas (1st country in Europe) and 1430 SAC areas – former SCI – (21\% of total in Europe). Visits to the natural heritage are more than 11 million. The UNESCO’s Spanish heritage town network estimates that these sites receive around 20 million visits every year. As well, it is estimated that 53\% of foreigners who visited Spain carried out some type of cultural activity. These figures were unthinkable only 15 years ago, when the passive coastal tourism image prevailed. Clearly, the origin of tourists – over 90\% from Europe and 75\% from Germany, Great Britain and France – makes it easy for these trends to consolidate as they have a deeper knowledge of the diversified supply of products and destinations under the brand of Spain – or not – and they are demanding with environmental conditions.
The compactness of some coastal tourist destinations is not necessarily negative as long as it can be redirected with urban and cultural tourism attributes.

For instance, the Western Costa del Sol, with its more than 400,000 officially registered inhabitants, not including the floating population, estimated in one third of the registered population, is the most paradigmatic case of this phenomenon. Its great quantitative and qualitative traditional supply has been gradually enriched by typically urban supply and activities, although adapted in its location to those of a discontinuous lineal big city. Overcoming the deficiencies in facilities and infrastructure during its short but intense life is part of the challenges posed by the sub-regional Territory Management Plan approved in 2006 after a complex and strained making, discussion and approval process. The estimated investment was more than four billion Euros, 80% aimed at articulation systems – including the high speed train –. Almost in a parallel way, in 2007 the Regional Government Tourism
Department, with an investment of more than 300 million Euros for a similar domain, approved the Qualifica Plan addressed to the economic stakeholders’ participation in the destination transformation to keep its leading position in the international ranking.

The reinforcement of existing centralities and the creation of new ones on the basis of the Opportunity Areas redesign a setting which is more aligned with the 21st century tourist demand needs combining the attributes of an immediately accessible compact city system with scenic and natural heritage protected and visitable elements.

After the evolution of urban and cultural tourism, we can state that an average compact city is the one that can offer its historic or artificially created heritage with a symbolic tendency. Furthermore, the compact city's own physical characteristics make it become more sustainable in time due to the scale economies that it generates and because it also increases the residents’ quality of life as their services and public areas improve. The image of a city’s quality of life – measured either by the United Nations Habitat project attributes and indicators or the European Union Audit – favours its tourist promotion.

The almost idealised view of the city that the great thinker María Zambrano had, which she summarised in her exile in San Juan, Puerto Rico nearly 50 years ago, shows both tangible and intangible attributes which turn (or can turn) cities into unbeatable tourist destinations:

“… a city is … architecture, speech, religious and profane traditions, customs, style and even cuisine: a whole world which contains everything; a system of life, a privileged place, light of its own, a landscape.

…. And a city is also a murmuring that resounds in squares and streets; silence which stays in places where nothing can break it; a tone in its inhabitants’ voices and a special cadence in their speech; the height of its buildings and a way of standing on a place of its own…”. (The city, a historical creation. San Juan, 1962).

For this and other reasons, the physical shape in the development of new settlements, that is, the relationships between territorial planning and tourist planning and programming must be very close. In spite of the proliferation of the so-called “no places”, many of which have been directly promoted and indirectly fostered by vacational and seasonal tourism settlements, the destination is still reluctant to be virtual and its appeal is directly proportional to its complexity and diversity, an attribute which is taken for granted in a city if it can interleave and structure its diversity within a tourist supply system.

Concerning the image of a unifying destination – or sub-national as is stated in this conference – such as the Andalucía brand, this systemic conception is also valid as the importance of its tourist routes and itineraries, either conceived as products or not, will be firstly valued by the travellers after experiencing the services related to comfort and enjoyment of the visit (accessibility) which, in the case of urban tourism, are the ones which residents experience every day. Estimations of these flows are already contemplated and analysed by the TSAs. One of the working lines for assessing a multiple destination quality (urban, cultural and natural heritage) consists of the interaction between the service provider, the more or less loyal user and the resident who is proud of the habitat.

The above considerations introduce the local variable referred to in the previous thoughts and recommendations by the UNWTO in order to promote a type of sustainable tourism and whose first premise was to achieve the local population’s cooperation after they were convinced of its economic and environmental benefits.
As experience keeps proving, especially in areas protected by environmental or territorial legislation, this thought is still very important owing to the periodical rejection of the figures which restrict the use of areas which are part of wider environmental systems.

Tourism, as an economic and spatial activity, must comply with the principles of sustainable development, that is: zero irreversibility, sustainable collection, sustainable emptying, sustainable emission, sustainable selection of technologies (also avoiding the rise in dependence levels), and caution. However, social generalisation and acceptance of the economic evaluation of the environment is still to be achieved, as any goods without a price do not have a market.

The exclusivity of enjoying products related to protected areas such as landscapes and nature, intrinsic in the tourist function, makes it necessary to develop the estimation tools suggested by the environment economy to avoid the local population’s frontal rejection. In this way, payment for environmental services begins to spread as an economic compensation tool, or also as productive activity opportunity cost compensation. However, there are few examples of markets with revealed preferences where both salaries and hedonic prices prevail.

**TERRITORIAL PLANNING AS A TOOL FOR TOURIST DEVELOPMENT. THE EXAMPLES OF SPAIN AND ANDALUCÍA**

Relationships between tourist and spatial planning – either urban or territorial – are old. The creation of tourist destinations which are not related to travellers and pilgrims of a more or less ancient past has had its specific planning component (such as National Tourist interest centres or tourist revitalisation poles in the case of Spain), always urban planning though as this is the one which regulates land occupation schemes. Tourism is, as has been seen, an important land consumer although, curiously enough in some cases, it does not occupy the land and implicitly or explicitly generates landscapes and gives quality to the tourist product or destination.

The Spanish legislation on the land proposed two figures in 1975: the National Management Plan and the Coordination Territorial Development Plans, the latter at the supra-municipal level. Both ceased to be operative in 1978 with the rise of the Autonomous Region State, blessed by the Spanish Constitution, whose article 148.1 promulgated territorial management as exclusive authority of the new administrations. Besides, it was given the status, like urbanism, of a public function. In this sense, the territory was understood as a resource and as an opportunity for human development.

The present reform of the Statutes of Autonomy of Spain has confirmed that role; as an example, the Andalucía Statute was approved in 2007, and its article 56.5 states that “…Exclusive competence corresponds to Andalucía concerning territory management, including in any way establishing and regulating territorial planning guidelines and figures, prevention on infrastructure and facility allocation, territorial balance promotion and proper environmental protection…”. All Spanish Autonomous Governments have gradually approved Acts and regulations referred to territory management, with different titles, since 1983 on until 2004.

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8 This expressly stated importance of territory management at a regional, and also sub-regional, level had already had precedents in post-war Europe with the emergence of Welfare States in the main European countries. The territory coverage with the implementation of Territory Management is total in Germany and Switzerland and very high in France, Italy and the United Kingdom.
This expressly stated importance of territory management at a regional, and also sub-regional, level had already had precedents in post-war Europe with the emergence of Welfare States in the main European countries. The territory coverage with the implementation of Territory Management is total in Germany and Switzerland and very high in France, Italy and the United Kingdom.

The important fact, for the purposes of this paper, is to remember that Territory Management is the competence reference framework and, hence an obligation, of sector policies with territorial incidence, as is the case of tourism, and of urban planning, providing the necessary territorial criteria to achieve the objectives of land rational use and a balanced development of the territory in accordance with sustainability, cohesion and competitiveness requirements.

Eight Spanish Autonomous Regions have approved a territorial instrument at regional level – or sub-national level if we follow the terminology used in this conference, although it is not politically appropriate for the Spanish case. In Andalucía, the Regional Territory Management Plan (Plan de Ordenación Territorial Regional – POTA) came to light in 2006 after more than ten years’ preliminaries where the spatial aspects related to the most booming industry, tourism, were a constant reference. It was so for plans for specific domains such as the Bay of Cádiz or Doñana in the eighties, The Territory Management Basis or The Coast Regional Guidelines both in 1990, or the different initiatives which were taken since the appearance of the Land Use Plan in 1994, above all the number of territorial plans at a sub-regional level. At present (2008) all the plans corresponding to the Andalusian coast have already been formulated (14) and also to the ones corresponding to the big urban areas (9), some of them embrace both categories, therefore totalling 18. Out of these, 11 have been finally approved or are in the last phases before approval, and the rest will during the present political term. If we include those of the inner area of the region, more than 40% of the Andalusian municipalities, around half of its territory, and more than 80% of its population are under this powerful planning figure, which makes it the most active figure in this field in Spain. The learning that can be drawn from this experience whose setting is one of the most important tourist destinations in the world, Andalucía with its different brands, can be relevant to think about the tourist activity territorial management.
Regional Structural Plan (POTA)

With these references on space use, the first Comprehensive Tourism Plan in Andalucía (Plan Integral de Turismo en Andalucía – DIA) designed a territorial strategy for the creation and reinforcement of its tourist products. Approved in 1992, right before the first Earth Summit in Rio, its generic objective was “the increase of social, economic and environmental profitability of tourism in Andalucía through its productive quality”. As reminded by the Sustainability Evaluation Report of Tourism in Andalucía issued by the Tourism Planning General Direction, the DIA Plan also mentioned the existence of three basic requirements in terms of environment which should necessarily be combined:

- To create the conditions for a harmonic development of human activity, ensuring as good living and working conditions as possible for the inhabitants of any area.
- To preserve the environment against that human activity to prevent the production of negative impacts in its surrounding which damage the natural heritage of contemporaries and descendants, and
- To channel the access to natural areas with a higher interest for the general public, understanding this demand as the tourists’ right to leisure and to the discovery of the territories unknown to them.

The Sustainable Tourism General Plan of Andalucía 2008-2011, which replaces the Tourism general Plan approved in 2003 in accordance with the 1999 Act of Tourism, already includes the territorial analysis in its diagnosis and proposals, establishing a number of guidelines addressed to the “territorial balance of the tourist space and the correct integration of this activity in the whole territory” and it considers that “these guidelines are completely in line with the principles inspiring this Plan concerning the preservation and revitalisation of the territorial heritage” and this is why it understands that “this Plan is an efficient tool for the development of the tourist-territorial contents of the POTA itself”.

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The chart below that summarised the strategies of the Regional Plan emphasised, for instance, as a key feature for tourism, the landscape and it is integrated in the regional Plan.

This coordination example amongst different departments of a Government is not at all a trivial anecdote. The natural tendency of territorial management is usually controversial as most persons in charge of a specific area or sector consider theirs as a cross-cutting sector for the economic activity and social impact of a community, region or country. Due to their importance in the economic and employment activity, the tourist sector public and private agents have been claiming their influence, in some cases leadership, in policy design affecting the use of tourist space. They consider that the normative power of territorial, planning and environmental policies can slow down tourist flows and the creation of new products.

An expert in territorial and town-planning development, on-site of plans and projects of one of the most important tourist destinations, the Costa del Sol, architect Salvador Moreno Peralta (2005) asserts that, apart from punishable cases and aspects, crowding in the Mediterranean coast has not been due to the lack of regulated planning of its space, but precisely to the strict fulfilment of the urban guidelines which were already designed – and still are – “in order to match the needs of a presumably unlimited demand, therefore the truly dynamic sector was the housing sector, for which tourism was an instrumental alibi”.

Keeping on with this thought about the relationship between urban and tourist planning, we can state that the Urban Management General Plan, the whole municipality being its reference territory, is still the framework where the sector policies governing a town merge temporally and spatially but “… it is not enough as a vehicle, scenario or faithful representation of the tourist function which towns want to exercise, because its normative scope is much narrower than what is demanded by the complexity of urban phenomena derived from globalisation and, of course, from the present trends in tourism…”.
The most innovative tourist sector has always claimed that, in tourist areas and towns, general plans should be more flexible in their contents, project selectivity and functionality and transparency in their management. In that way, there could be scenarios with possibilities of creating new products, in other words, plans made for tourism promotion rather than for simple urban control.

Traditionally, there has also existed lack of tune between the needs of the tourist sector to increase its supply and diversification with another two domains which preserve the historical heritage of a community such as the environmental and the cultural domains. The fame gained by tourism as causing damage and degradation of heritage resources, as was mentioned in the first section above, has been progressively transformed, because of good management in some cases, into the consideration of tourism as the best guarantor of their preservation and conservation.

From the early studies and applications on the carrying capacity of catalogued areas, analysis and management tools have been developed which facilitate the function of the tourism and travel industry as the one granted by the importance of heritage, mainly because of the generalised visits which are respectful with the setting.

Transversality of sub-regional territorial planning is precisely what makes it easy to omnicomprehensively analyse the destination, as inter-municipal management plans contemplated in the Act of Land could incur in similar deficiencies. Territorial planning is more flexible in its guidelines (the new tendency guidelines are more numerous and the strategic space protectors are norms which account for minimum representation in the legal document of a territorial plan). On the other hand, the strategic character of territorial management in the medium and long term makes it easy to design products at tourist destinations more accordingly with the opportunities offered by the changing characteristics of the tourist demand in a very competitive and globalised tourist market.

Another benefit offered by territory management plans over other sector planning figures in terms of action coordination is that both its formulation and approval are carried out by the Autonomous Community Government Council, so the tune in the design and projects that come from it is, in principle, guaranteed because the investment commitment and the responsible departments for its start-up are allocated in the different annual items of the Community budget.

According to the law they depend on, territorial management plans comprise few aspects, of great importance though, also for the tourist sector:

- Settlement system
- Communication and transport system
- Free space and equipment system
- Territorial infrastructures and services
- Territory protection and risk prevention.

In other words, these plans also articulate and structure tourist destinations taking into account that accessibility to the tourist products is a key for a tourist destination’s success. The quality in infrastructures, both of transport and basic services, is an essential condition for the enjoyment of a potentially tourist territory as the relationship domains get closer (urban areas, free space system, protected areas…) to their future products created and run by companies of the sector.

One of the most interesting tools of the tourist sector, introduced in the last sub-regional plans approved in Andalucía, is the one related to the territory protective measures with the aim of, amongst other aims, preserving and giving value to the landscape, essential
for a destination’s quality; and the so-called Opportunity Areas which look for the implementation of economic activities which are sustainable in the territory and sustained in time. In the main tourist areas, such as the Andalusian coasts, prevalence of tourism as a preferential activity is clear.

**Structural Plan for Greater Malaga**

![Structural Plan for Greater Malaga](image1)

**Structural Plan for Axarquía**

![Structural Plan for Axarquía](image2)
Sustainable management of the territory as a key element for tourism development

Structural Plan for Costa del Sol

The aforementioned advantage of the sub-regional territory management plans concerning their flexibility and potential strategic conception is tarnished, however, by the virtually inexistent set of management and follow-up own tools. In many cases, urban tools are still used for its execution. However, the present working line deal with such concepts as "territorial equity", which introduces elements which give the possibility of balancing "benefits and burdens" derived from the territorial management of a specific domain in terms of the compensation in posing partial plans in a specific municipality. For example, the introduction of the landscape as an essential variable for destination quality upgrade needs that kind of tools for its feasibility.

MEASUREMENT OF TOURISM IMPACT ON THE TERRITORY. ECONOMIC, ENVIRONMENTAL, SCENIC AND SOCIO-CULTURAL ASPECTS

Tourism, like any other economic activity, requires visibility for its proper private and public management. Information and importance of the quality of products offered by competitors is basic to get into a sector which apparently presents good results and perspectives after analysing the characteristics and volume of the revealed or potential demand and contrasting it with the hypothetical profit and loss account. At the same time, the degree of regulation and the role of the public sector in the promotion and defence of the respective economic activity are analysed and evaluated.

This simple scheme applicable to any sector has its certain level of nuance for an industry producing service which is consumed in the same place as it is produced.

Thus, the first stable statistics on tourism referred to numbers about journeys, accommodation and catering. The place appeal and the image about it, about its heritage and attributes were variables which were given after the travel decision had been made. Its economic dimension estimation, therefore, was the origin of the different regional, national and international body departments specialised in its calculation. But this industry was growing on the basis of a human activity, travel organised individually or collectively since the origins of human kind. Consequently, the second step, and this conference is an evidence of it, was to disaggregate the information to estimate the figures which actually belong to the sector and those which are shared with another or other economic activities.
The last recommendation document about tourism statistics approved by the United Nations Statistics Division in February this year, shows, as this conference does, the great advances in disaggregating traveller flows and types and their modes of transport and the different segments of incoming supply, apart from knowing their impact on the economy in terms of employment, investment and expenditure. Tourism Satellite Accounts make this task easier and some of the conclusions drawn from here will also improve their significance and functionality for decision making in both private and public management.

But, as shown by the mere presence of this session in the programme, the most important conceptual developments are occurring in the evaluation of the space where tourist activities take place: the destination. The aforementioned document itself, UNSC and UNWTO recommend (chapter 8, section D) going forward in the environmental quantifying of the tourist activity, considering it a priority.

Their reasoning uses some of the arguments put forward in this session, that is, to maintain the appeal of the setting, transformed or not by human action, assuming the fact, as was mentioned in the first section above, that tourism can also contribute to the irreversible damage of fragile natural systems with the construction of inappropriate resorts with the characteristics of the inherited heritage or making pressure with the external effects (wastage, pollution, deforestation…) which are produced by all human activity and which, in the case of tourism, reduces the feasibility of the destination itself in the medium term.

In its recommendation, recognising beforehand how difficult the task is, the UNSC itself advocates some type of integration between Tourism Satellite Accounts and the System of Environmental and Economic Accounting (SEEA) in order to determine “the cost of degradation” that tourism can generate in the present capital. As the tourist activity is also based on evaluating perceptions, the recommendation is addressed to the integration of variables from qualitative analyses.

From the first global conference on the environment, which was held in Stockholm in 1972, to the most recent Earth Summits, recommendations have been issued on environmental statistics from the Body’s specialised department, the UNSD. Parallel in time with them, both institutional and NGO promoted sustainability Observatories have developed environmental studies and indicators adapted to different areas and territories. Four working lines stood out: estimation of natural resources and heritage, measurement of point of no return in the evolution of the resources and the proper response, cross-cutting ecologic analysis; and dissemination and awareness work through the mass media. Consequently, the four big common sections for the production of statistics and indicators for the high number of public and private institutions as well as NGOs would be:

- Climate change,
- Nature and biodiversity
- Environment, health and quality of life, and
- Sustainable management of natural resources and wastages

Due to deficiencies in the quality of basic information and for the sake of improving its homogenisation and comparability, the UNSD biannually compiles, from a questionnaire which is sent to different countries, statistics on the quantity, quality and management of the hydrologic resources and wastage treatment. For a more general knowledge of the state of the environment, this data is supplemented with that provided by the famous Climate Change Commission.

As well with a long tradition in environmental statistics arisen with the first energy crisis in 1973, the European Union has made similar developments which can be found in environmental statistics and indicators produced by Eurostat, reviewed in 2007, monitoring
the European Union Sustainable Development Strategy (SDS). To align also with the conclusions of the Lisbon Summit, indicators are grouped into ten broad sections where aspects related to innovation, employment, social inclusion and governance stand together with those related to resource use and consumption patterns and emission generation.

From this global scale of analysis by countries, to which we could add the environmental statistics related to productivity and efficient handling of basic materials and produced by OECD, the study domains are decreasing.

In Spain, the Ministry of the Environment has created a Public Bank of Environmental Indicators (Banco Público de Indicadores Ambientales – BPIA), as an open project based on existing statistics and indicators since 1996. The indicators (chosen according to the common criteria for their use: relevant, available, updatable and interpretable) are grouped into 14 families where the importance of the natural resources is compatible with its sustainable use by part of the specific economic sectors among which we find tourism. Once again, quantifying related to the sector is made on the basis of room-nights and number of visitors. Especially tourists in protected areas, such as density of foreign tourists on the coast or the equivalent tourist population in proportion with the resident population.

The periodical report on the state of the environment in Andalucía (the last one in 2007) is the most extensive, including, besides the evolution of natural resources, the quality of the areas with more pressure and appeal for the tourist sector, such as those protected or the coast, and evaluation and management of the natural environment and environmental quality.

Summing up, concerning tourism, environmental statistics and indicators are relevant, although slightly insufficient, as they contribute to better know the modifications in the environment which is used and enjoyed by visitors as well as residents.

One important innovation in planning economic activities, logically including tourism, is the incorporation of the European Union Directive 2001/42/EC to national legislations. This Directive refers to the obligation to produce a Strategic Environmental Evaluation for all plans and programmes to be approved after its effect in each country. For Spain, the date is the 21st of July, 2006.

This is an important opportunity to reconsider the existing set of indicators and the adaptation to the new requirements.

This situation has directly affected the approval of the Sustainable Tourism General Plan of Andalucía 2008-2011. The environmental document which was approved at the same time corresponding to the Plan itself promotes follow-up statistics on land occupation in tourist municipalities through an inventory; and the tourist interest infrastructures (golf, marinas, equestrian facilities); and three types of indicators:

<table>
<thead>
<tr>
<th>Flow/impact indicators</th>
<th>Condition/quality indicators</th>
<th>Response indicators</th>
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<tr>
<td><strong>Human pressure</strong></td>
<td><strong>Residential quality of life</strong></td>
<td><strong>Urban planning</strong></td>
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<tr>
<td>- Beaches</td>
<td>- Perceived quality Tourist surveys</td>
<td>- Housing growth in tourist municipalities</td>
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<tr>
<td>- Protected areas</td>
<td></td>
<td>- Surface classified for tourist use by domains</td>
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<tr>
<td>- Built heritage</td>
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<tr>
<td><strong>Changes in land use</strong></td>
<td><strong>Water resources</strong></td>
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<tr>
<td>- Housing with potential tourist use</td>
<td>- Balance by basins</td>
<td>- Inventory of tourist municipalities with Agenda 21</td>
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<tr>
<td>- Occupied surface establishments on the coast</td>
<td></td>
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<td>- Idem rural environment</td>
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<tr>
<td>Flow/impact indicators</td>
<td>Condition/quality indicators</td>
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<tr>
<td><strong>Energy consumption</strong></td>
<td><strong>Quality of coastal and continental water</strong></td>
<td><strong>Business and municipal measures</strong></td>
</tr>
<tr>
<td>- Regulated establishments</td>
<td>- Quality of coastal water</td>
<td>- Environmental Management Systems (EMAS or ISO 14002) implemented in tourism companies</td>
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<tr>
<td>- Journeys</td>
<td></td>
<td>- Implemented Quality Management Systems</td>
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<td></td>
<td></td>
<td>- Establishments which incorporate measures for water saving and use efficiency</td>
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<td></td>
<td></td>
<td>- Municipalities declared Sustainable Tourist Municipality (EC 761/2001 EMAS Regulation)</td>
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<tr>
<td><strong>Water consumption</strong></td>
<td></td>
<td><strong>Social community actions</strong></td>
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<td>- Second homes</td>
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<td>- Awareness campaigns</td>
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<td>- Same day tourist</td>
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<td>- Coastal inhabitant and day</td>
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<td>- Reuse in tourist establishments</td>
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<tr>
<td><strong>Wastage generation</strong></td>
<td></td>
<td><strong>Waste water treatment</strong></td>
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<tr>
<td>- Tourist and day generation</td>
<td></td>
<td>- Municipalities, establishments, golf courses</td>
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<tr>
<td><strong>Air pollution</strong></td>
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<td>- Greenhouse effect gas emission tourist and day</td>
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<td><strong>Urban solid wastage:</strong></td>
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<tr>
<td>- Municipalities selective collection</td>
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<tr>
<td>- Establishments with selective collection</td>
<td></td>
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<tr>
<td>- Establishments with reduction and treatment measures</td>
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<tr>
<td><strong>Energy</strong></td>
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<tr>
<td>- Establishments with energy self-supply</td>
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<td></td>
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<tr>
<td>- Establishments with saving and efficiency measures</td>
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<tr>
<td>- Municipalities with saving, efficiency and self-supply measures</td>
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<tr>
<td><strong>Coast conservation</strong></td>
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<tr>
<td>- Municipalities which have integrated tourist activities in the environment</td>
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<td></td>
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<tr>
<td>- Municipalities with certified beach AENOR flag (ISO 14001)</td>
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As we can note from the above chart, the information obtained from this set of indicators is a relevant development in destination management and the permanent adaptation to the demand's new requirements. Therefore, impact indicators would more neatly separate the controversy posed in the first section of this paper about land use by the tourist activity and its responsibility for the sustainable consumption and reuse of basic resources such as water and energy, as well as show us the scale of external effects generated by wastages and the generation of greenhouse effect gases. Let us not forget here the estimation to obtain the carrying capacity threshold of the historical, built or natural – protected or not – heritage, such as beaches.

Besides, visitors' perception of residential quality of life in the most frequent domains which are used by tourists would also mean a step forward on the existing perception statistics. Concerning the response indicators which revolve around the acquired commitments of both public and private agents directly related to the tourist sector with the environment, the mere quantification of municipalities which adopt an Agenda 21,
understood in the sense of Río recommendations and, above all, those from Aalborg, that is, the document which collects all the complex and interrelated environmental aspects such as those reflected in the third column of the table, does not ensure its fulfilment. This does not include implementation of the 14000 family ISO quality certifications, as they are revocable in the case they are not fulfilled in the future.

This set of indicators, more related to the environment – due to the SEA own characteristics – is logically supplemented by the more classical statistics of economic impact on tourist volume, origin and expenditure or income and employment, … which make it easier to control and follow up the plan.

As a development from the tourist planning perspective, the intention to produce new statistics is introduced in order to analyse the activity related to identifying products, such as room-nights linked with products based on nature, culture or landscape, as well as the delivery of surveys tourists’ evaluation of the quality in terms of landscape and natural heritage.

The landscape, in its dimension of enjoyment and value, is lately becoming the emerging element for analysing tourist destination quality evaluation. What was a reasonable intuition of some scholars and tourist operators a many years ago, today we have the necessary background, not sufficient though, for homogenising the variables in order to get a better destination management, and to establish comparative analyses amongst them.

The European Landscape Convention, promoted in 1994, approved in Florence in 2000 and ratified by Spain in 2007, defines the landscape as “any area in the territory, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”. The indicators which have been developed by different institutions comprise several aspects, such as geographic and geomorphologic, economic, cultural and social aspects.

As an example in Andalucía, the Landscape Study Centre, an institution fostered by the Government Department of Civil Works and Transport when it assumed the responsibility for Territory Management, on the basis of an agreement with all the Andalusian Universities, uses a classification for the potential indicator estimation which has been useful, among other more strictly academic purposes, to provide some basic landscape indicators for their use in the reports on the Environmental Situation annually issued by the relevant Government Department. They can be summarised in four indexes which are structured into five categories (from very high to very low)

- Absolute richness index  
  (Number of physionomic units represented in the different domains).

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9 Megastructure of relief and climate: (with 21 sub-categories) mountainous regions (3); countrysides (4); high plains and steppe deserts (3); valleys, lowlands and marshes (4); coastal (5); cities and artificial areas (2). Mesostructures. Landscape areas: Relief degrees, uses, climate and relative situation. Subdivided into 4 aggregation degrees according to their representation scale (from 1:400.000 to 1:20.000). Therefore, for the total Autonomous Region there would be 40 levels and for the last scale, 162 landscape domains, with 27 subtypes according to the Corine Land Cover project information: Natural landscapes (12): conifers, holm-oak woods, cork-oak woods, marshes, Agricultural landscapes (9): olive trees, rice fields, vineyards, … Urban and artificial landscapes (2): urban and periurban; mines, salt mines, reservoirs.

10 As an example of the aggregated result for Andalucia, the evolution (1956-2000), expressed in terms of increase or decrease of the percentage representation from the total, would be as follows for broad groups: natural/forest landscapes -7,8; agricultural +5,9; and artificial urban +1,8. That is, taking the case of the last category, it would go from representing 0,8% of the total to 2,6% in the last 50 years. Clearly enough, the more down in domains (e.g. the coast), the more significantly the figure varies
- **Landscape diversity index**  
  (Number and area extension of the different physiognomic units by each landscape domain; Shannon Index).

- **Landscape naturality or natural richness index**  
  (Summation of occupied area percentage in each domain by natural physiognomic and geomorphologic units, excluding those units which can alter the landscape naturality analysis).

- **Landscape fragmentation index**  
  (Number of sites corresponding to the different physiognomic units existing in the different landscape domains by each 1.000 hectares).

Including this type of analysis in the set of indicators is important because of the reasons mentioned so far, but also because the image of some destinations and products related to them can be promoted. There is a wide range of tourist products whose names are related with place names or geographic or botanical names: Parque de los Alcornocales (Cork Oak Park), Marismas de Doñana (Doñana Marshes), Desierto de Tabernas (Tabernas Desert), Ruta del Olivar (Olive Tree Route)... so their success depends a lot on their natural heritage evaluation.

Because of this last reason, attention should be paid to the developments carried out in terms of the landscape economic evaluation, as, still according to the definition given by the European Landscape Convention, that is, following the concept “perceived by people”, the landscape can become, and in fact it is in many cases, an economic asset. Economic asset, understood, as both use value and exchange value, as people “pay for seeing” the landscape from a specific observation point, this being either natural, a tourist establishment or a private residence...).

Summing up, the landscape is an external element and it works as a genuine public asset with which benefits should be identified so that the State will take part when measures should be taken to correct the market failures which appear when commercial pressure is made on it.

A landscape is attractive as long as its biological and cultural components are combined with those related to the experience lived, which is achieved through the population's continuous education and the cultural changes which modify or reinforce its perception and evaluation. From the economic principle by means of which anything without value does not have a price in the market, the landscape evaluation will be a consequence of its capacity to satisfy needs (or demands).

Therefore, the economic discussion on the environment in general and particularly on the landscape revolves around concepts such as opportunity costs, revealed preferences, Conjoint Choice Experiments11 hedonic prices or defensive expenditures, that is, the price which citizens, tourists or the public administration are ready to pay for preserving the landscape, the cultural heritage or the environment. The already classical French foundation l’Observatoire du Litoral, or the Spanish Ministry of the Environment’s recent policy on the coast preservation, may be some of the many examples of this practice.

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11 See Louviére, Campbell, et al.
There are a lot of actions and elements which reduce the aesthetic value of a landscape (uncultivated land, horticulture, electric corridors, buildings-crowding, paved routes/big roads...), but, as environmental economy points out, multiobjective and multivariate analyses can contribute to the opportunity cost estimation for its improvement of the landscape, assuming maintenance of agrarian or estate owners' income.

Finally, the landscape social indicators related to the sense of belonging to a place are mainly qualitative, as they are based on surveys from the local population, and from civic and cultural associations both those defending universal values and those devoted to the defence of some local identifying aspects and elements.

From these considerations, assumption of the landscape as culture aligns it with the three dimensions acquired by the latter concerning development: the social dimension (sense of belonging); the environmental dimension (ecosystems), and the economic dimension (welfare). In this domain, tourism becomes, as assumed by the UNWTO or WWF-Adena (2008), the main means for the heritage evaluation and preservation.

**AS A SUMMARY. THE CHALLENGES FOR MANAGING THE TOURIST SPACE. STATISTICS AND TERRITORIAL INDICATORS PRODUCTION.**

Territorial impact has been traditionally identified with environmental impact (e.g. ecological traces) but, as has been stated throughout this paper, it covers many other aspects, mainly those related to the local system articulation, whose main components are the demographic and productive settlements and the infrastructure network – transports, energy, water cycle – so that flows between the different nodes can work smoothly.

In an area in search of tourism, it is the quality of those "nodes" that stands as a condition for success in a destination.

In this line, there already exist examples of territorial indicators for a specific area, the city, and they try to measure the quality of life in an urban domain. Their results are of paramount importance for establishing comparative analyses amongst cities. There are elements in some of the used indicators which can make management easier to increase an urban destination appeal, such as the sufficient degree of compactness which bring services nearer; the quality of silence; the city's complexity; the quality of the air; the ecological trace, etc.

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12 F. Maragon and T. Tempesta (2007), for example, have made an estimation for Italy of the non-monetary resource contingent (CVM), that is, “out of the market”, such as the landscape, with an interesting outcome as the benefits for landscape conservation would account for 1.290 million Euro/year, the cost of agro-environmental measures to maintain it being 830 million Euros/year.

13 There are several instances, such as the ones referring to Loire Valley or Dordogne, which can be seen in Luginbuhl’s works (2007), who clearly explains the well known conflict in the tourist industry between conservation and exploitation of natural resources with tourist purposes.

14 As an example, the Land Use Act for Andalucía (1994) includes, in its appendix, 15 planning activities and 13 singular intervention activities, many of which are related to the tourist sector, submitted to a perceptive report to evaluate predictable incidences on the territory, especially those referred to: (art. 35): City systems; (...) transport system basic infrastructures, telecommunications and energy; (...) educational, health, cultural and social service facilities; land uses and economic activity allocation; and basic natural resource use, management and conservation.

15 Like the European Union Urban Audit., which has come from 100 indicators and 58 big European cities up to 338 and 542 cities along its way.
In turn, the Public bank of Environmental Indicators of the Spanish Ministry of the Environment and Rural and Marine Affairs uses indicators which are similar to those mentioned for the case of the European Union programme, also adding those which permit us to evaluate the evolution of land occupation, especially the land sensitive for fitting specific tourist products in those domains beyond the cities and the typology of their users\(^{16}\)…

Therefore, the challenge lies on homogenising impact and opportunity data at a municipal scale and mainly of those tourist destinations which normally have a supra-municipal consideration.

As a first step, coherently with the whole exercise of indicator design, the analysis should be segmented by type of tourism (nautical, rural, sports, urban, cultural, coastal,…) in order to understand each one’s territorial characteristics and requirements and the combination of several types of tourism on the basis of each destination’s actual potential, as some spatial demands of specific types of tourism may be contradictory. To that purpose, the use of georeferenced statistics is a basic tool\(^{17}\) to spatially assign quantifiable attributes which make a tourist destination attractive to visit or for fun.

Fortunately, the present situation has gone forward regarding the situation posed by an expert and a specialist in the spatial aspects of tourism: Fernando Vera, who, during a conference organised as well by the UNWTO in Madrid in 2004, pointed out the following problems for the construction of sustainable tourism indicators at the destination:

- Lack of strategic vision oriented toward sustainability which fosters the creation of new territorial and tourist information systems.
- Noticeable limitations of statistics information with local breakdown from both a quantitative and qualitative point of view.
- Lack of coordination in the different municipal areas (urban planning, environment, tourism,…).
- Under-utilisation of the possibilities of obtaining synergies by means of statistical use of administrative acts and processes (building permit granting, commercial census, environmental sanctions, etc…).
- Scarce use of IT possibilities to systematise data with statistical value.

At a sub-national level, as is the case of the Spanish Autonomous Regions, they are in the process of overcoming part of these problems suggested for the local scale, due to the fact that many responsibilities affecting the tourist sector lie on the region. This is so thanks to the cooperation of the Economy, Tourism, Environment, Culture, Agriculture and Fishing and Territory Management departments. All of them have sector planning with impacts on the territory and on many Autonomous Regions, territorial planning at a global or sub-regional level where fitting may be possible apart from the legislative obligation of policy coordination.

\(^{16}\) occupation, desertification, erosion within the first km of coast; within the first 10 kms; number of foreigners per km of coast; tourist population in proportion with residents.

\(^{17}\) It would involve going forward in the production of specific software for the couple Tourism-Environment for the creation, management, analysis and representation of spatial data referred to, for example: hypothetical scenarios; changes in the territory throughout time; development of a basic resource inventory for their potential transformation into tourist products of a business character; allocation of new development impacts; and support systems for sustainable tourism.
As a conclusion, a working line that can give a response to the complex production of territorial-tourist indicators, at the required spatial level, would be to understand territory as a system in principle\(^{18}\). This conception would make it easier to interrelate many of the aspects mentioned in this paper.

Under this perspective, territorial sustainability would be directly proportional to the organisational complexity of the territory. A heterogeneous, interconnected territory would ensure the system stability, apart from making it easier to create specific tourist products which meet the requirements of active tourism which is prevailing in today's market and whose degree of demand is increasingly high.

Territorial efficiency, under this conception, would involve the economic good use of the territorial matrix\(^{19}\), which would meet human necessities keeping the ecological condition. In this way, many pressures on potential alternative uses of the territory could be relieved when opportunity costs were part of this comprehensive evaluation. The model would provide the possibility of weighting different territorial actions from a quantitative and cartographic point of view in terms of plans and projects. In this way, the discussion tourism-territory would be recovered in a very different social, economic and environmental context.

\(^{18}\) The system understood as “the set of related elements which make up a functional structure with emerging properties” (Marull 2007, Ruelda 2000 and 2006…).

\(^{19}\) The territorial matrix would be the space/time basis resulting from the physical medium, the biological component, their functional relationships and the transformations brought about by human activity in the system expressed in specific forms of landscape (Marull, op. cit).
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