

Building the Mediterranean future together

# WORKING DOCUMENT

June 2016



## Tourism and sustainability in the Mediterranean: key facts and trends



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# Acronyms and abbreviations

IOYFP	10 Year Framework of Programmes
3S	Sea, sand and sun
B&B	Bed and Breakfast
CoP	Conference of the Parties
COSME	Programme for the Competitiveness of enterprises and SMEs 2014-2020
CRI-MED	Coastal Risk Index – Mediterranean Scale
DMO	Destination Management Organization
EC	European Commission
ECST	European Charter for Sustainable Tourism in Protected Areas
ENPI	European Neighborhood Policy Instrument
ETIS	European Tourism Indicator System
EU	European Union
GDP	Gross Domestic Product
GEF	Global Environmental Facility
GHG	Greenhouse gas
GSTC	Global Sustainable Tourism Council's
GTZ	German Agency for Technical Cooperation
GVA	Gross Value Added
ICAO	International Civil Aviation Organization
ICZM	Integrated Coastal Zone Management
IPPC	Intergovernmental Panel on Climate Change
ITA	International Tourist Arrival
MAP	Mediterranean Action Plan
MEDDE	Ministère de l'Ecologie, du Développement Durable et de l'Energie
MEET	Mediterranean Experience of Eco-Tourism
MENA	Middle East and North Africa
MICE	Meetings, Incentives, Conferencing, Exhibitions
MSSD	Mediterranean Strategy for Sustainable Development
NZEB	Nearly Zero Energy Hotels
OME	Observatoire Méditerranéen de l'Energie
PAP/RAC	Priority Actions Programme / Regional Activity Centre
PEGASO	People for Ecosystem-based Governance in Assessing Sustainable
PPP	Public-Private Partnership
PPPIRC	Public-Private Partnership in Infrastructure Resource Center
SEMCs	Southern and Eastern Mediterranean Countries
SMEs	Small and Medium Enterprises
TRNC	Turkish Republic of Northern Cyprus
UK	United Kingdom

UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNWTO	United Nations World Tourism Organization
USAID	United States Agency for International Development
USD	United States dollar
WB	World Bank
WMO	World Meteorological Organization
WTTC	World Travel & Tourism Council
WWF	World Wildlife Fund

# Introduction

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Tourism is an essential economic sector for the Mediterranean countries since it is the world's leading tourism destination in terms of both international and domestic tourism, with more than 300 million international tourist arrivals (ITA) representing 30% of total world tourists for 2014: half of these arrivals are in coastal areas. ITAs have grown from 58 million in 1970 to nearly 314 million in 2014, with a forecast of 500 million ITAs by 2030. The top five destinations in the Mediterranean representing almost 83% of the region's total international arrivals in 2014 are France (83.7 million), Spain (65), Italy (48.5), Turkey (40) and Greece (22). Tourism in the Mediterranean region is highly concentrated, both spatially and seasonally, with most visits occurring during the summer months. Coastal tourism is the largest sea-related economic activity in the Mediterranean region with 11.3% of the regional GDP.

Nowadays at least three simultaneous crises are affecting Mediterranean tourism: conflicts and political turnover, terrorism and insecurity, and accelerated migration. The impact of these crises is mainly affecting Southern and Eastern Mediterranean Countries (SEMCs): in the Middle East the Egyptian turmoil and Syrian crisis are affecting Jordan and Lebanon tourism, while at the opposite Israel and Palestine registered an increase of ITAs; on the other side, in the Southern area Tunisia registered a fall in international arrivals as well as in tourism revenues (2010-2014) whereas in Morocco and Algeria ITAs have increased.

The consequence of these crises is the so-called "connected vessels effect": the fact that since some traditional destinations among southern Mediterranean countries appear to be not completely secure, a significant segment of their flows are diverted towards similar destinations in Northern Mediterranean.

The main Mediterranean tourism products – "3S" (sea, sand and sun), cruise, cultural tourism, MICE (Meetings, Incentives, Conferences, and Events), nature-based tourism, rural tourism and ecotourism – refer to old and new trends of the tourism demand, involving a wider range of public and private stakeholders that participate to the management of the destinations. For each tourism product the specific issues affecting the sustainability of the Mediterranean region have been identified.

The tourism industry has become a major sector for the global economy since the second half of the 20th century and is rapidly growing at a tremendous annual rate. The capacity of tourism to generate foreign currencies revenue and absorb unemployment has created a political and social legitimacy of it. But, at the same time, it is worldwide agreed that there is a strong link between the economic growth of tourism and the huge socio-economic transformation of tourism destinations: such interaction seems to become more and more dangerous for the state of the environment and the quality of life of local populations.

Generally speaking, tourism impacts, which are different according to countries or regional features, are classified in three main clusters: economic, socio-cultural and physical (natural and built). Whereas environmental and economic indicators of tourism are suited for objective measurement, the socio-cultural impacts are often highly qualitative and subjective in nature. For these reasons, in the current work the social and cultural aspects have been treated in a distinctive way, in order to have detailed impacts and related issues to be tackled with, even if in some cases the social and cultural aspects of an impact are very close. Therefore, taking in consideration the current situation of tourism in the Mediterranean region and its weaknesses in relation with the sustainability, a list of relevant issues has been identified and clustered in five chapters, four of them being sustainability-related components (environment, society, economy and culture) and a fifth one concerning governance.

In fact any strategy for improving the sustainability of tourism can be implemented properly only if solving the main problem of tourism that is, still nowadays, related to the governance: public sector and economic actors are not able to integrate the different needs in one comprehensive framework, i.e. there is no global "tourism governing system" (involving public and private sector), not at international level (EU and Mediterranean) nor at national level – at least as far as the Mediterranean countries are concerned.

In the last decade, the so called "DMO (Destination Management Organization)" approach has started to be spread in some Mediterranean destinations, at least at municipal level, thus improving the capacity of governance by local stakeholders. But very rarely such governance frameworks are focusing their mission on the development of sustainable tourism, because usually the main "mover" of these cooperation schemes is the pure economic return in terms of arrivals and overnights, instead of the renew of the tourism pattern. Therefore, there is the need to develop a new methodological approach in governing tourism, where the quality – and not just the quantity – is the leading factor.

## SOURCES AND METHODOLOGY

Drawing a picture about the state of the art and trends of the sustainable tourism activities in the Mediterranean required a huge desk analysis starting by the official sources and indicators, including the studies and researches realized during the last 20 years by the main international research institutes, agencies and public bodies such as UNWTO, WTTC, UNEP, WWF, Plan Bleu, the European Union, etc.

To finalize and updated overview, it has been also useful integrating the official sources with various data coming from newspapers, web articles, project reports, etc.

All the identified issues have been discussed and agreed with Julien Le Tellier and Tom Tambaktis (Plan Bleu) and Jérémie Fosse (Eco-union).

# Sustainable tourism in the Mediterranean: an overview

Starting from the most updated (and available) official data, a general overview on tourism and “tourisms” (products, clusters of countries, destinations topologies, etc.) as existing in the Mediterranean is carried out, aiming to identify the main challenges the tourism faces in relation with sustainability.

## MEDITERRANEAN TOURISM: STATE OF THE ART

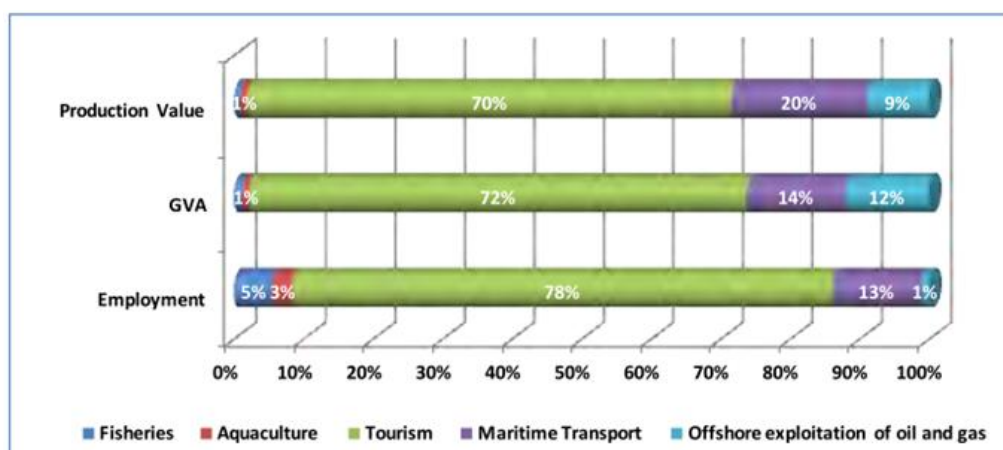
For the scope of this work, the Mediterranean consists of 22 countries<sup>1</sup> in Europe, Middle East and Africa, sharing a similar climate, geography, coastline, as well as historical and cultural links.

Demographic growth, urbanization and the development of the tourism sector explain the importance of coastal development in the Mediterranean basin. Around 487 million people live in Mediterranean countries (2013<sup>2</sup>). From 2000 to 2013, the Mediterranean population increased by 17%. Population is more concentrated in Northern and Eastern Mediterranean countries (such as Spain, France, Italy, Turkey and Egypt), some of them recording also the highest population density<sup>3</sup>. Population density of course is higher in shoreline areas: around one-third of the population of Mediterranean countries live on the coast.

Tourism is a major pillar of Mediterranean economies, offering consistent employment (11,5% of the total employment in 2014<sup>4</sup>) and opportunities for development. For the Mediterranean basin, tourism is vital for many countries: considering exclusively the main sectors of coastal areas economy, tourism represents over 70% in terms of Production Value and GVA (Gross Value Added) and almost 80% of direct regional jobs (Figure 1<sup>5</sup>).

Tourism in the Mediterranean region is highly concentrated, both spatially and seasonally, with most visits occurring during the summer months. Coastal tourism is the largest sea-related economic activity in the Mediterranean region<sup>6</sup> with 11.3% of the regional GDP. Over time, Mediterranean destinations have developed a unique blend of tourism products as a complement to the traditional sun and sea, covering health, sports, nature, business, as well as cruise and culture.

Figure 1: Distribution of the main socioeconomic indicators of some economic sectors



Source: Plan Bleu, 2014

<sup>1</sup> Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, State of Palestine, Syrian Arab Republic, Tunisia, Turkey

<sup>2</sup> United Nations, Department of Economic and Social Affairs, Population Division, 2014. World Urbanization Prospects: The 2014 Revision, CD-ROM Edition.[online] Available at: <http://esa.un.org/unpd/wup/CD-ROM/>

<sup>3</sup> PERSEUS, 2013. Preliminary identification of pressures of the coastal seas in socio-economic terms. Gap analysis on data and knowledge. Deliverable Nr. 2.2. [pdf] Available at: <http://esa.un.org/unpd/wup/CD-ROM/>

<sup>4</sup> WTTC, 2015, Economic impact of Travel & Tourism in the Mediterranean.

<sup>5</sup> Plan Bleu (2014). Economic and social analysis of the uses of the coastal and marine waters in the Mediterranean, characterization and impacts of the Fisheries, Aquaculture, Tourism and recreational activities, Maritime transport and Offshore extraction of oil and gas sectors. Technical Report. Plan Bleu, Valbonne.

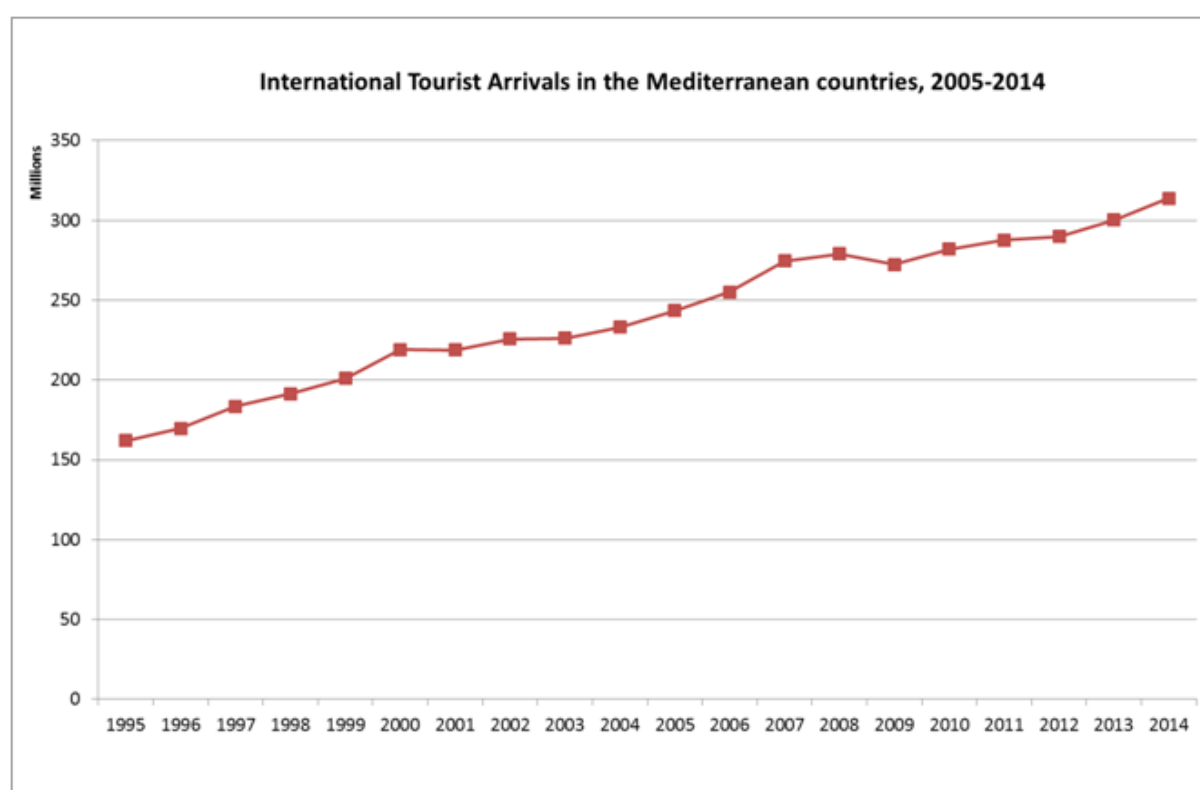
<sup>6</sup> Pianté C., Ody D., 2015. Blue Growth in the Mediterranean Sea: the Challenge of Good Environmental Status. MedTrends Project. WWF-France. 192 pages.

## The tourism demand in the Mediterranean

Over the last years, international arrivals in the Mediterranean countries correspond approximately to one third of the world's international tourism<sup>7</sup>. Thanks to its unique combination of mild climate, rich history and culture, exceptional natural resources and proximity to major source markets, Mediterranean is the world's leading tourism destination in terms of both international and domestic tourism with more than 300 million international tourist arrivals (ITA) representing 30% of total world tourists for 2014. Half of these arrivals are in coastal areas.

Tourism is an essential economic income for Mediterranean countries<sup>8</sup>, thanks to climate, cultural heritage and the long tradition of tourism activities in most of these countries<sup>9</sup>, which explain the success of the Mediterranean region as the first destination in the world.

Figure 2: Mediterranean-related ITAs trend 2005-2014



Source: own work based on UNWTO Data, 2016

ITAs have grown from 58 million in 1970 to nearly 314 million in 2014, with a forecast of 500 million ITAs by 2030<sup>10</sup>. The tourism sector is extensively developed in the Northern Mediterranean countries such as Spain, France and Italy and has witnessed an important growth rate in Southern and Eastern Mediterranean countries such as Morocco, Tunisia, Egypt and Turkey over the last decades, until the Arab spring and the terrorist attacks that reduced drastically the tourism flows especially in Tunisia and Egypt.

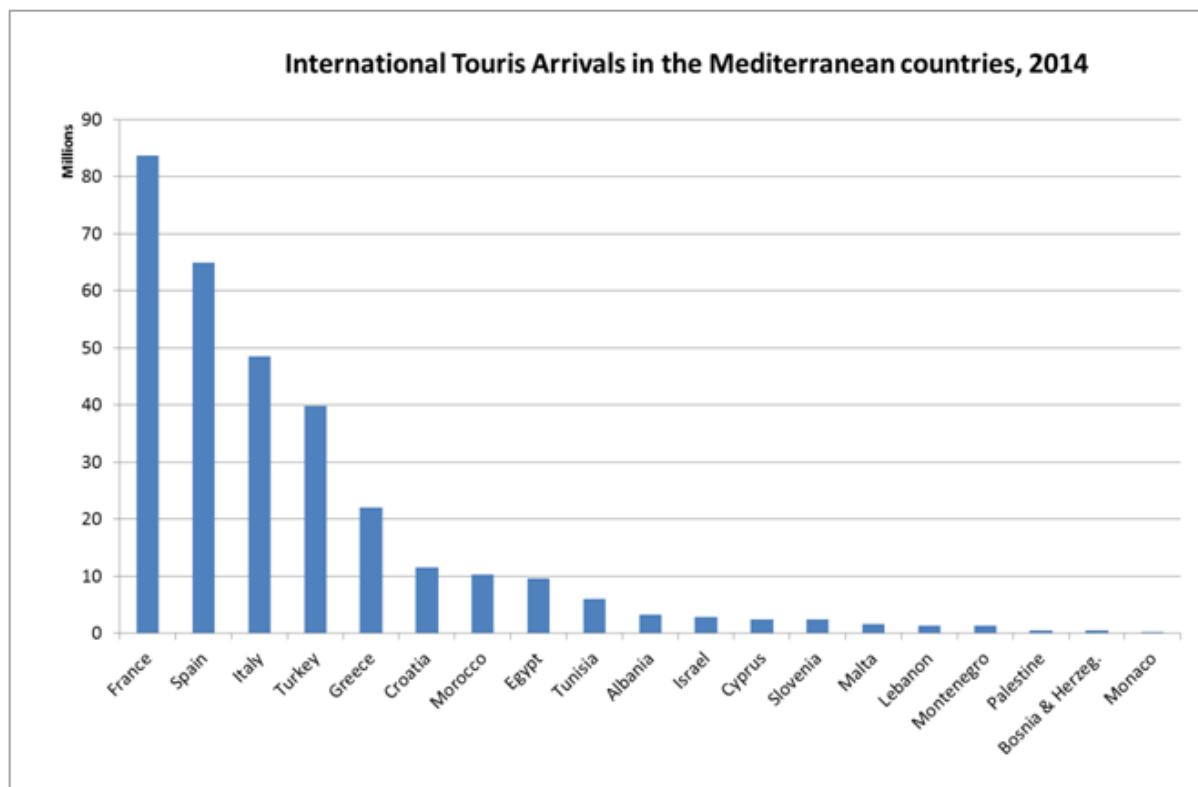
<sup>7</sup> Plan Bleu, 2014. Economic and social analysis of the uses of the coastal and marine waters in the Mediterranean, characterization and impacts of the Fisheries, Aquaculture, Tourism and recreational activities, Maritime transport and Offshore extraction of oil and gas sectors. [pdf] Technical Report, Plan Bleu, Valbonne. Available at: [http://planbleu.org/sites/default/files/publications/esa\\_ven\\_en.pdf](http://planbleu.org/sites/default/files/publications/esa_ven_en.pdf)

<sup>8</sup> European Commission, 2012. Blue Growth, Scenarios and drivers for sustainable growth from the Oceans, Seas and Coasts. Third interim report. [pdf] Ecorys, Deltare, Oceanic Development for DG MARE. Call for Tenders No MARE/2010/01. Rotterdam/Brussels. Available at: [http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/blue\\_growth\\_third\\_interim\\_report\\_en.pdf](http://ec.europa.eu/maritimeaffairs/documentation/studies/documents/blue_growth_third_interim_report_en.pdf)

<sup>9</sup> EUNETMAR, 2014. Study to support the development of sea basin cooperation in the Mediterranean, Adriatic and Ionian, and the Black Sea. [pdf] MARE/2012/07 – Ref No 2 [pdf] Available at: <https://webgate.ec.europa.eu/maritimeforum/sites/maritimeforum/files/Task%205-Report4-Annex.pdf>

<sup>10</sup> UNWTO, 2011, Tourism in the Mediterranean.

Figure 3: 2014 ITAs country-related ranking



Source: own work based on UNWTO Data, 2016

The top five destinations in the Mediterranean represent almost 83% of the region's total international arrivals in 2014: France (83.7 million), Spain (65), Italy (48.5), Turkey (40) and Greece (22).

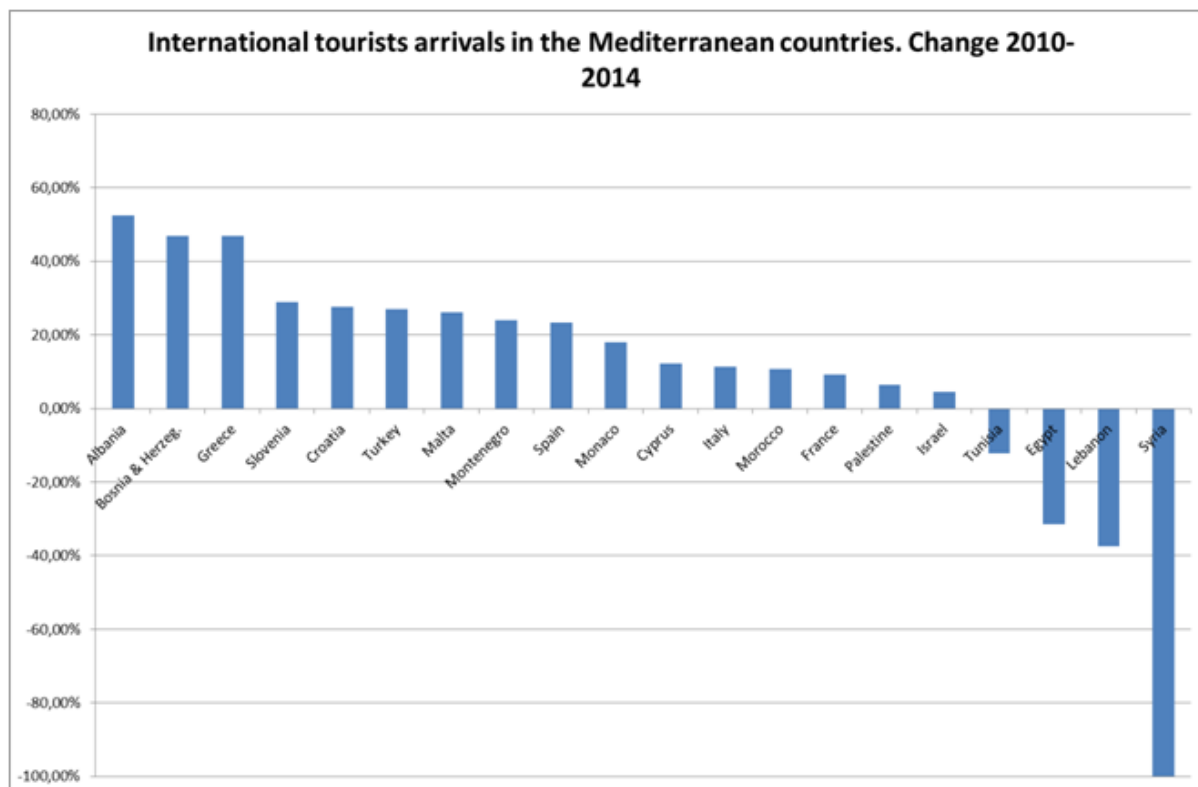
Nowadays at least three simultaneous crises are affecting Mediterranean tourism: conflicts and political turnover; terrorism and insecurity, and accelerated migration<sup>11</sup>. The impact of these crises is mainly affecting Southern and Eastern Mediterranean Countries (SEMCs), as follows:

- Southern East: Egyptian revolution and Syrian crisis affected Egypt and Lebanon while at the opposite Israel and Palestine registered an increase of ITAs
- Southern West: Tunisia registered a fall in international arrivals (2010-2014), and a drop in international tourism revenues (while in Morocco and Algeria ITAs have increased).

Figure 4 shows the impact of the three crisis mentioned above on ITAs trends per each country, through a comparison between 2010 and 2014 data.

<sup>11</sup> Satta A., Towards sustainable tourism in the Mediterranean: situation and challenges at a regional level. MedPAN Regional Experience Sharing, Workshop, Cabras (Italy), 24-26 November 2015.

Figure 4: Change 2010-2014 in ITAs per country



Source: own work based on UNWTO Data, 2016

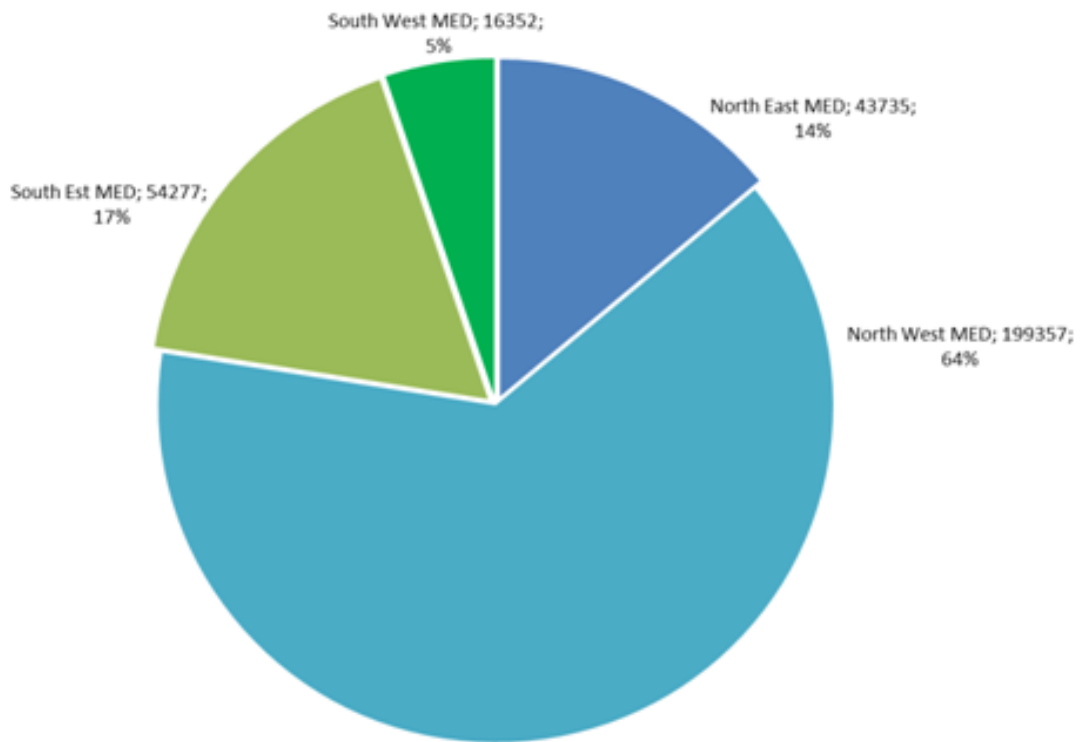
## Zoom on sub-regional clusters

It is possible to divide the Mediterranean basin into four distinct geographical groups:

- Northern Western Mediterranean countries, where the development of tourism is already well advanced (Spain, France, Italy, Malta and Monaco) and ITAs represent more than a half of total ITA in Mediterranean countries.
- North Eastern Mediterranean countries, which are living a proper “boom” and appear as emerging destinations or renewal (Albania, Bosnia and Herzegovina, Croatia, Montenegro, Slovenia,), plus Greece and Cyprus which possess a well advanced tourism industry.
- South Western Mediterranean countries that follow different economic dynamics: Tunisia is strongly impacted by a difficult security environment, on the other hand, Morocco, which is living a constant growth, is less impacted. Algeria and Libya are also part of this cluster but data are not available since 2009.
- South Eastern Mediterranean countries (Egypt, Israel, Palestine, Lebanon, and Turkey) show two different situations: a constant decrease in the tourism in the last five years (Egypt and Lebanon), due to the internal issues, and a significant increase for Turkey (+27%), although the recent internal events will slow down such increase, and moderated for Palestine (+6,5%) and Israel (+4,4%). Since 2012, no data are available for Syria, which registered a growing performance in the decade 2000-2010 (+307%).

Figure 5: ITAs distribution per regional cluster

### International tourist arrivals for Mediterranean Macroarea, 2014



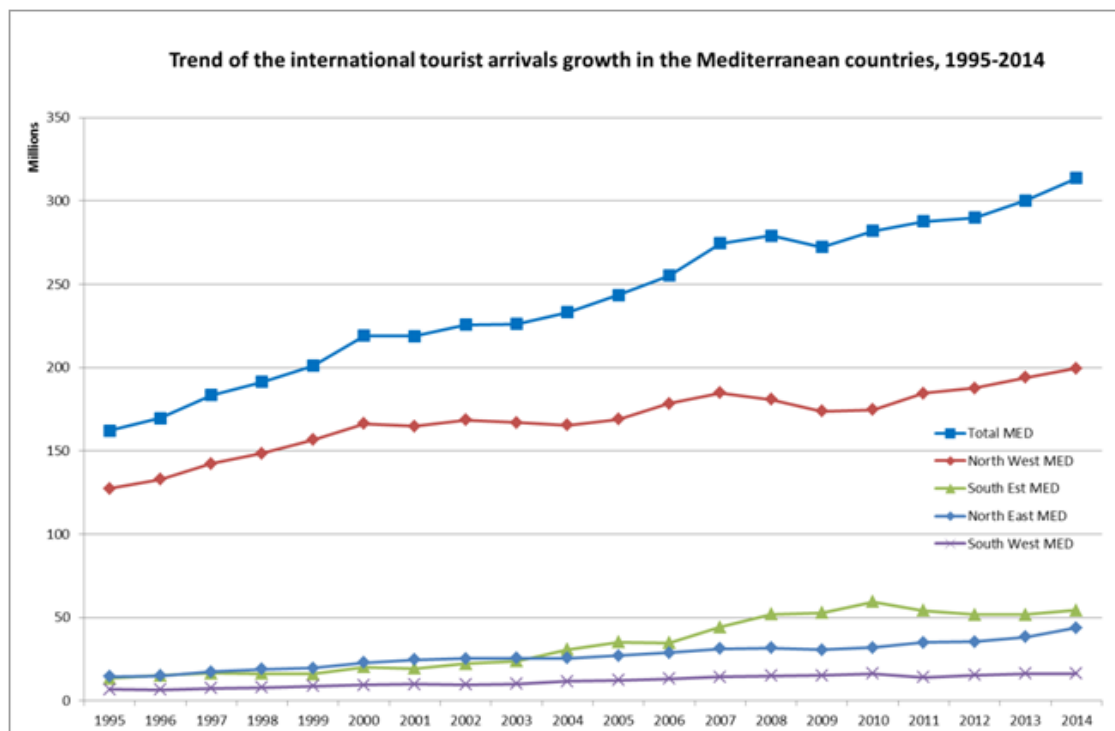
Source: own work based on UNWTO Data, 2016

Data show that the Northern countries received in 2014 a total of 78% of the tourism flows, thanks to the presence of the “top” tourism destinations: France, Spain, Italy and Greece.

If we look at the trend of the last 20 years, the figures are as follows (Figure 5). Although the Mediterranean countries as a whole shows a constant growth, the trend in South-Western countries has no relevant increase, while South-Eastern countries have been suffering a decrease since 2010. Even North-Eastern countries are growing pretty slowly. Consequently, the gap in the results (ITAs) between “mature” and “new” countries in the tourism offer is increasing; this is due not only to security-related issues, but probably also to new challenges (France, for example is the country with the highest number of accredited Ecolabels establishments with 352 out of a total of over 600 in the whole of Europe<sup>12</sup>) in the global tourism market, to whom the “skilled” countries are more capable to find innovative solutions, while “new” countries are following “old-fashion” models.

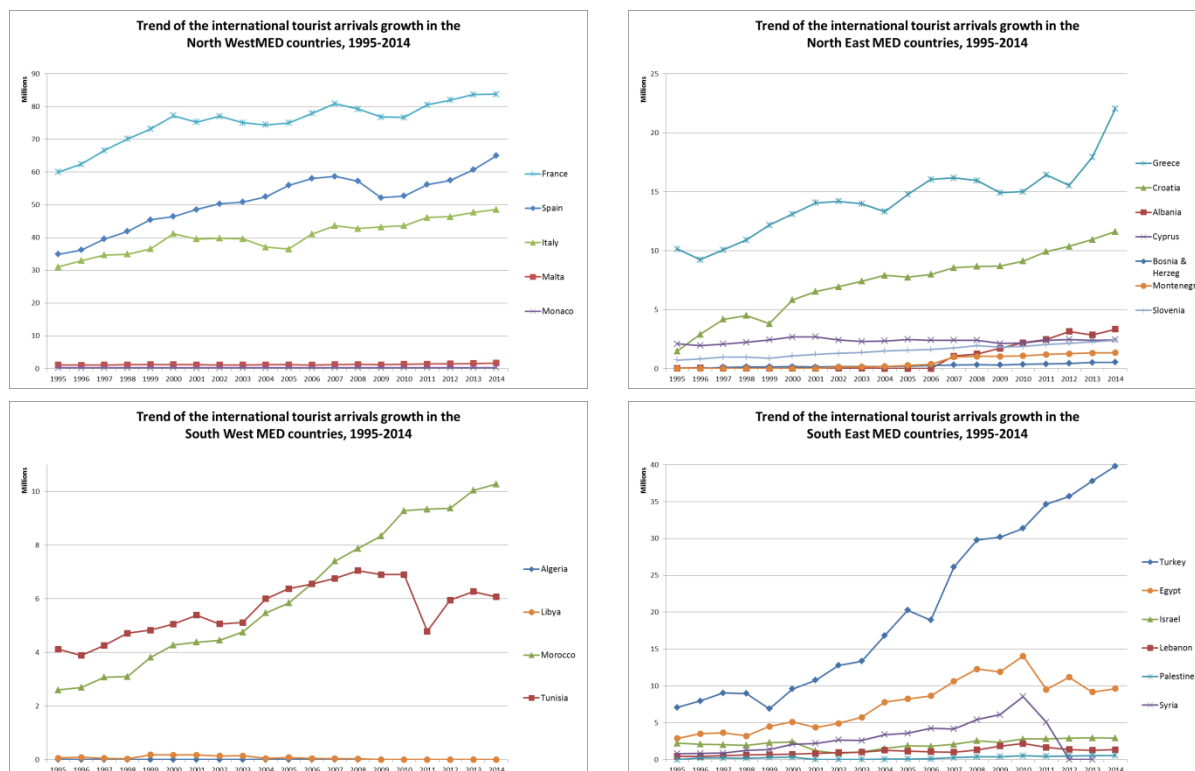
<sup>12</sup> <https://www.ecotourism.org/news/france-leads-ecotourism>

Figure 6: 1995-2014 trend of ITAs growth in the Mediterranean regional clusters (in Million)



Source: own work based on UNWTO Data, 2016

Figure 7: 1995-2014 trend of ITAs growth in the Mediterranean regional countries (in Million)



Source: own work based on UNWTO Data, 2016

Terrorist attacks in September 11, 2001 made the Arabic countries losing a growing number of visitors from North America, Europe, and Japan in the first 2000's decade, while domestic tourists preferred to spend their holidays mostly in Arab countries such as Lebanon, Egypt; Turkey and Morocco, these countries benefited from the shift in tourist flows because they were more able to satisfy the specific needs in customs and religious practice<sup>13</sup> of Arabic-originated flows.

A number of initiatives to support the development of Islamic-based tourism niche took place worldwide over the past years. The Islamic Tourism Ministers Conference for instance has been held regularly since 2000; the first Arab World Travel and Tourism Exchange took place in Beirut in 2003 to promote tourism and business travel between Islamic countries and with the rest of the world, asking for more respect of Islamic ethics and religious values<sup>14</sup>.

Another trend effect in the Mediterranean region concerns security and the phenomenon of "connected vessels effect", i.e. the fact that since some traditional destinations among southern Mediterranean countries appear to be not completely secure, a part of their flows are diverted towards similar destinations in Northern Mediterranean (see Box 1).

#### Box 1: A snap-shot of recent ITAs trends in some countries<sup>15</sup>

Turkey has become the sixth world destination for ITAs, but for the first time in the recent years the numbers in 2015 have decreased, due to terrorism threats, boycott of Russia and internal social protests.

Egypt and Tunisia show the largest collapse of their tourist flows. Tunisia has lost more than a third of its tourism revenue in 2015 compared to 2014 (i.e. more than 2% of GDP). The number of European tourists (1.3 million in 2015) plunged of 53.6% in comparison with 2014 and of 65.8% compared to 2010. Many tour operators cancelled Tunisia from their catalogues, suggesting that 2016 will be even worse.

Egypt communicates very little on the data of its tourism sector, which represents as of early 2015 over 11% of its national GDP. Compared to 2010, the country has lost in 2014 over 40% of its tourists, a drop particularly visible in the Red sea's beaches.

Less affected by terrorism, Morocco has suffered a less resounding decrease, with a decline of -0.9% of tourists in 2015 compared to 2014. Revenues generated by non-residents expenses in Morocco passed in one year from 5,86 to 5,04 billions €.

In this game of communicating vessels, Spain is a major winner: Europeans are visiting in mass the Iberian coasts, and with 68.1 million tourists (+ 4.5%), the country broke its record for the 3<sup>rd</sup> consecutive year with a +7% in 2014. The tourism sector reported € 124 billion in the Spanish economy in 2015, 14% of GDP.

Greece welcomed in 2015 26 million of foreign tourists (21.5 million in 2014) who spent € 14.5 billion. Tourism still accounts for 20% of its GDP.

In 2015, Italy welcomed 53.9 million foreign tourists (52 million in 2014). With almost 20 million visitors, the Milan World Expo partly explains this growth of 3.6%. Cultural cities and beaches also showed a good performance.

## The value of international tourism

Tourism is one of the most important economic sectors in the Mediterranean region, particularly for countries (or regions within countries) with limited industrial or agricultural development. As shown below, an overall analysis of the Mediterranean countries shows a positive trend for the future, taking in account all the main relevant economic indicators.

<sup>13</sup> Dabrowska, K. (2004). The Rise of Islamic Tourism. Islamic Tourism – Issue 13 September-October / 2004, Retrieved August 15, 2009, from [http://www.geo.uni-mainz.de/ceraw/en/58\\_60\\_Saos\\_4p.pdf](http://www.geo.uni-mainz.de/ceraw/en/58_60_Saos_4p.pdf)

<sup>14</sup> CHN Foreign Desk (2007). Islamic Tourism: Definition and Scope. Cultural Heritage News Agency. Retrieved August 15, from Website: <http://www.chnpress.com/news/section=1&id=1793>

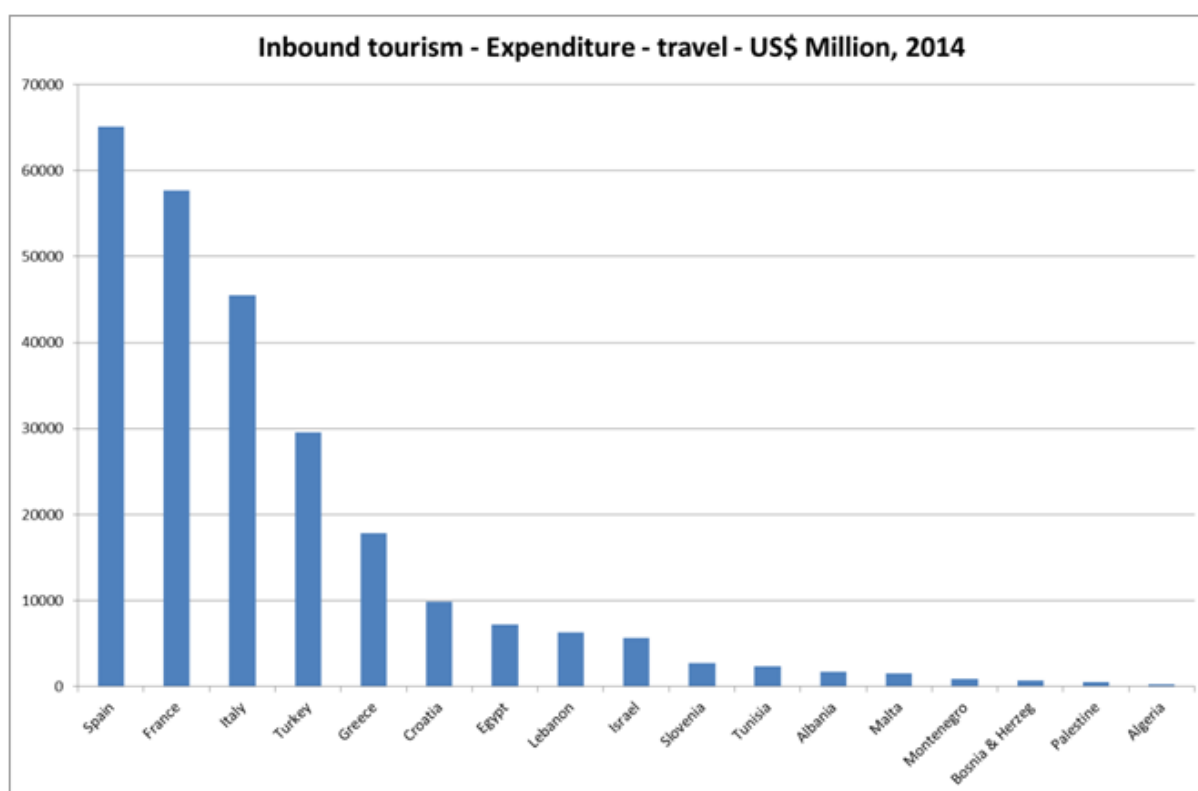
<sup>15</sup> [http://www.econostrum.info/Le-tourisme-se-deplace-massivement-du-sud-vers-le-nord-de-la-Mediterranee\\_a21387.html#ixzz3ytpVm1mB](http://www.econostrum.info/Le-tourisme-se-deplace-massivement-du-sud-vers-le-nord-de-la-Mediterranee_a21387.html#ixzz3ytpVm1mB)

Table I: Key facts regarding economic impacts of travel and tourism in the Mediterranean

Economic indicator		2014	2025
GDP (direct contribution)	The direct contribution of Travel & Tourism to GDP was USD 402.1bn (4.4% of total GDP) in 2014, and is forecast to rise up to 2.9% in 2015, and to rise by 3.0 percent annually (pa), from 2015 to 2025, to USD 556.6bn (4.8% of total GDP) in 2025.	USD 402.1bn (4.4% of total GDP)	USD 556.6bn (4.8% of total GDP)
GDP (total contribution)	The total contribution of Travel & Tourism to GDP was USD1,019.0 bn (11.3% of GDP) in 2014, and is forecast to rise by 2.9% in 2015, and to rise by 2.8% pa to USD1,375.5bn (11.9% of GDP) in 2025.	USD 1,019.0bn (11.3% of GDP)	375.5bn (11.9% of GDP)
EMPLOYMENT (direct contribution)	In 2014, Travel & Tourism directly supported 7,795,000 jobs (4.6% of total employment). This is expected to rise by 3.4% in 2015 and rise by 2.2% pa to 10,006,000 jobs (5.1% of total employment) in 2025.	7,795,000 jobs (4.6% of total employment).	10,006,000 jobs (5.1% of total employment)
EMPLOYMENT (total contribution)	In 2014, the total contribution of Travel & Tourism to employment, including jobs indirectly supported by the industry, was 11.5% of total employment (19,628,000 jobs). This is expected to rise by 2.9% in 2015 to 20,197,500 jobs and rise by 1.8% pa to 24,217,000 jobs in 2025 (12.3% of total).	11.5% of total employment (19,628,000 jobs)	24,217,000 jobs (12.3% of total)
VISITOR EXPORTS	Visitor exports generated USD 313.7bn (11.5% of total exports) in 2014. This is forecasted to grow by 3.7% in 2015, and grow by 3.5% pa, from 2015-2025, to USD 457.8bn in 2025 (11.0% of total).	USD 313.7bn (11.5% of total exports).	USD 457.8bn (11.0% of total).
INVESTMENTS	Travel & Tourism investments in 2014 were USD 113.4bn, or 6.4% of total investment. It should rise by 3.1% in 2015, and rise by 3.3% pa over the next ten years to USD 162.4bn in 2025 (7.0% of total).	USD 113.4bn, 6.4% of total investment.	USD 162.4bn (7.0% of total).

Source: own work based on WTTC DATA, 2015

Figure 8: Total expenditure of inbound tourists per country, year 2014



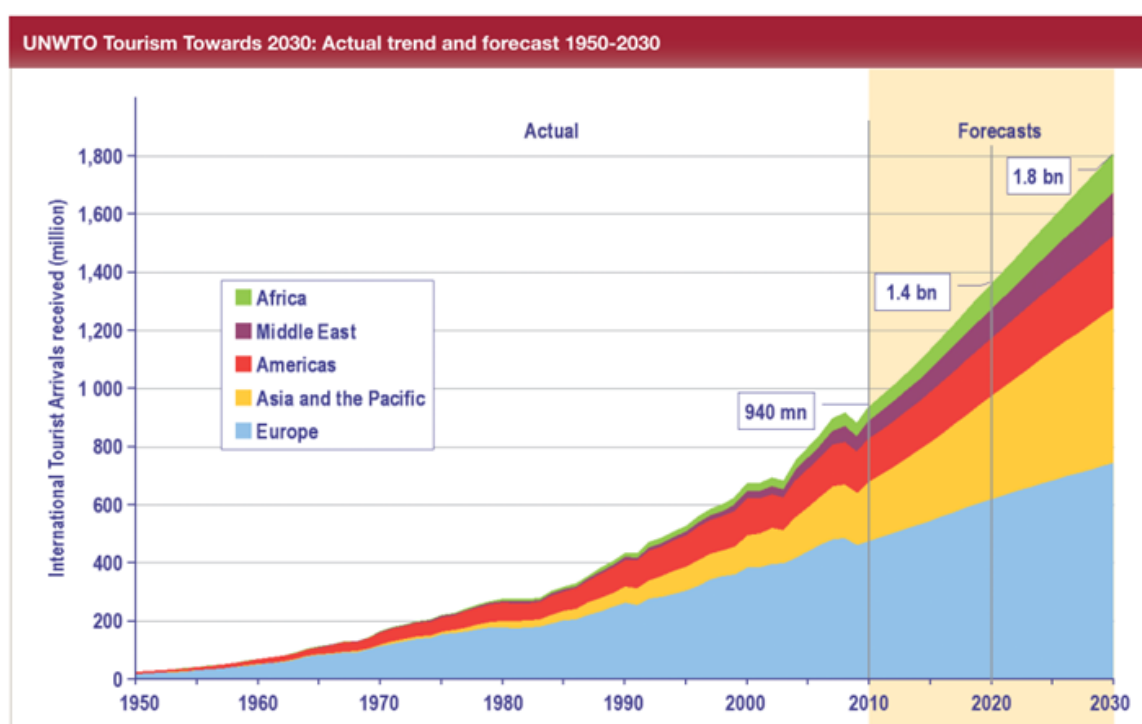
Source: own work based on UNWTO Data, 2016

The total amount of travel expenditure in 2014 was 255.438 USD million. The distribution for each country reflects the 2014-related ITAs (see above Figure 3) except for the first and the second places, where Spain in 2014 gained 7.432 USD more than France, concerning travel expenditures. This fact is understandable by looking at the length of stay: 7.15 days in France while 8.86 days for Spain.

## TRENDS OF MEDITERRANEAN TOURISM

The UNWTO scenario indicates that International Tourism will fast its growth all over the world in the next 15 years, with some areas (Americas and Asia & Pacific) more performing than others in term of increase rate. Europe seems to maintain the same trend for the next 15 years, while Middle East of course is suffering of its instability context.

Figure 9: Tourism towards 2030 at the global level.

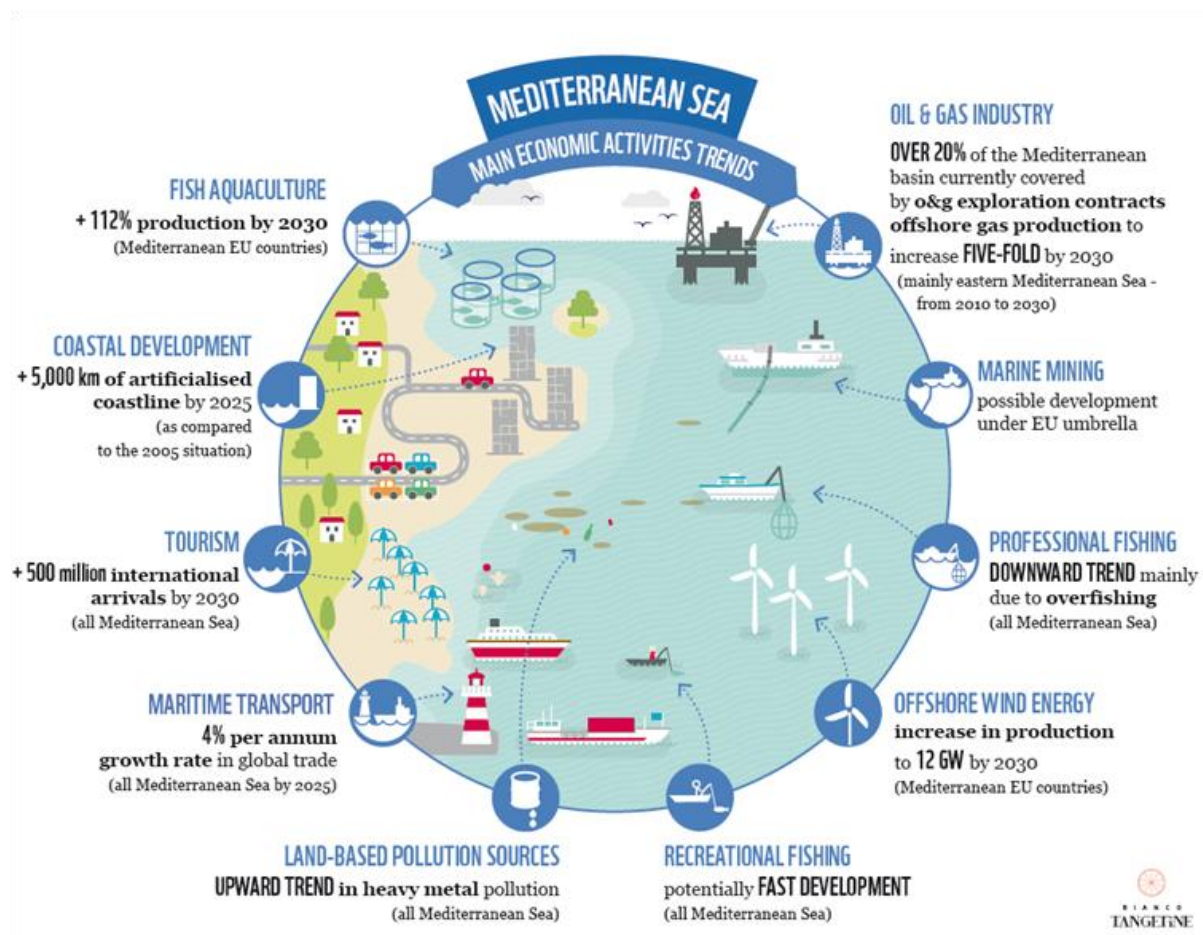


Source UNWTO Tourism Highlights, 2015 Edition

As far as the Mediterranean is concerned, this region is currently facing an impressive growth, a real “Blue Gold Rush” according to a WWF recent study<sup>16</sup>. WWF consequently states that without a long-term vision for sustainable development, the Mediterranean Sea will not be able to sustain our economy and our well-being: sea-related activities, including maritime transport, tourism, aquaculture and many others, are predicted to expand substantially over the next 15 years (see below). This is creating growing competition for limited space and marine resources, which will result in even greater pressure on an already stressed ecosystem. Therefore, the study points out that coordinated and long-term planning of the whole basin cannot wait.

<sup>16</sup> Pianté C., Ody D., 2015. Blue Growth in the Mediterranean Sea: the Challenge of Good Environmental Status. MedTrends Project. WWF-France. 192 pages.

Figure 10: Macro-economic trends in the Mediterranean



## MAIN PRODUCTS OF THE MEDITERRANEAN TOURISM

In this chapter the main tourism products (linked with specific territorial contexts) that characterize the Mediterranean offer are analyzed, in order to identify the specific issues that are mainly affecting the sustainability.

### Coastal “3S” and cruise tourism

The success of Mediterranean coastal tourism since the 1960s is based on standardized services and decreasing costs. It contributed to the democratization process of the “holiday dream”, giving the chance to the low-middle classes to enjoy their free time in holidays destinations with basic services characterized by the worldwide known “3S” (sea, sand and sun) tourism.

Product life-cycle analysis (Butler, 1980) indicates that any tourism destination is necessarily in a continuous process of change, leading to either decline or reinvention. Over the years, the 3S model has been enriched with different facilities, including golf-courses, swimming pools, leisure parks, etc. In the recent years the increase of easy reaching beaches with low prices of accommodation, food and beverage, is the main reason for the massive flow towards the Mediterranean Sea. The increasing number of low fare airlines, allowing people to travel at cheaper rates than ever, contributes to the growth of international demand.

Nevertheless, other new European destinations, such as Croatia, Albania and Montenegro, have become competitors to the more crowded Spanish, French, Italian and Greek coasts, which are still considered as the most attractive tourist destinations in the Mediterranean area.

Due to such large number of visitors, Mediterranean coastal regions are suffering from changes characterizing the “new” holidaymakers more than other “younger” coastal destinations in Europe. Whereas in the 1960s and 70s each tourist

used to spend his holiday at the same place and for a long period, nowadays he prefers escaping from the cities on more occasions during the year, experiencing different kinds of activities<sup>17</sup>.

The traditional “3S” model is declining, since nowadays tourists expect more than some decades ago. They demand a wide variety of associated leisure activities and experiences, including sports, cuisine, culture and natural attractions. At the same time, tourism destinations’ resident communities are increasingly concerned to preserve their natural, economic and social assets from negative impacts, which may arise from the development of facilities for tourism purposes.

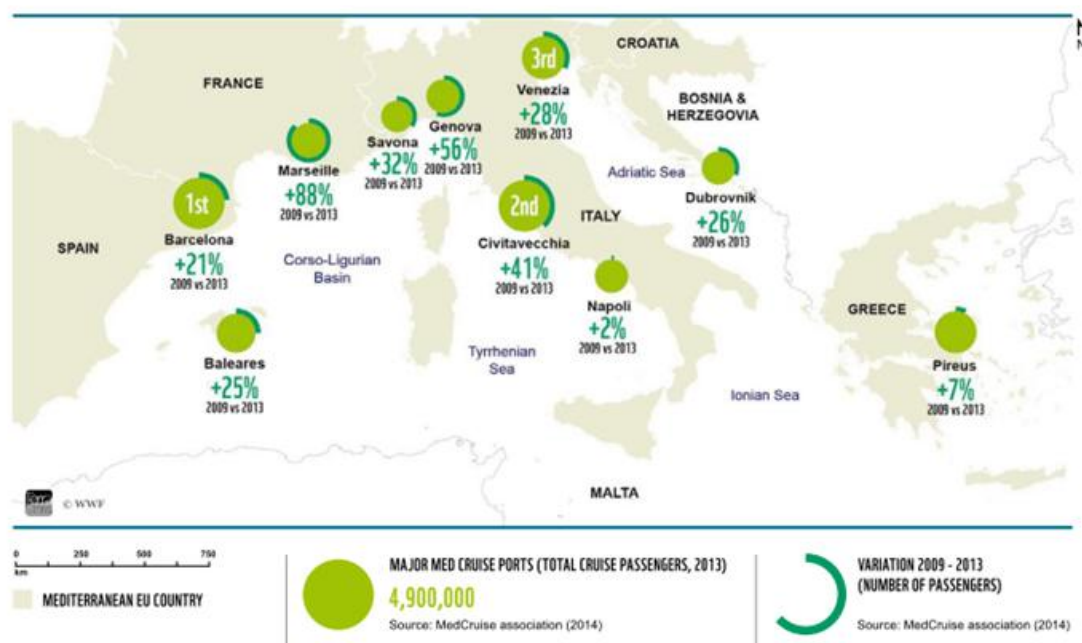
Mass tourism is a lucrative business especially for large international chains (hotel industry, tour operators and cruise companies). The relationship between the economic growth and the induced social transformation at destination level remains problematic.

Profitability is not correlated with economic viability and sustainable territorial development in the realm of tourism. Land-based mass tourism, concentrated in coastal areas, and the booming cruise industry are emblematic of the problems associated with economic leakage, the ability to create jobs and the redistribution of the tourism activity's benefits in the Mediterranean region<sup>18</sup>.

The Mediterranean Sea is among the most important cruise areas in the world<sup>19</sup>: around 27 million passengers went through its ports in 2013. Cruise tourism is especially developed in Italy and Greece, but is also very promising in several other countries. The 5 Mediterranean ports handling the largest number of cruise passengers in 2009 in the Mediterranean were in Spain (Barcelona), Italy (Civitavecchia) and Greece. This is also caused by the fact that 75% of Mediterranean ports are located in Italy, Spain, France, Greece, Croatia and Slovenia, with 9% of ports being located in Turkey and Cyprus and only 7% in North Africa<sup>20</sup>.

Cruise tourism contributes to the wider economy through different expenditures (cruise lines, passenger and crew purchases) and shipbuilding. Italy, Spain, France and Greece earned almost 48% of total cruise expenditures in Europe in 2012 (these figures include cruises originating in non-Mediterranean areas).

Figure 11: Growth of Mediterranean ports in number of cruise passengers between 2009 and 2013



Source: WWF, 2015

<sup>17</sup> CSIL Centre for Industrial Studies in partnership with Touring Servizi for the European Parliament's Committee on Regional Development, 2008. "The Impact of Tourism on Coastal Areas: Regional Development Aspects".

<sup>18</sup> Plan Bleu, 2012, Notes #24, November 2'

<sup>19</sup> PERSEUS, 2013. Preliminary identification of pressures of the coastal seas in socio-economic terms. Gap analysis on data and knowledge. Deliverable Nr. 2.2. [pdf] Available at: [http://www.perseus-net.eu/assets/media/PDF/deliverables/3332.2\\_Final.pdf](http://www.perseus-net.eu/assets/media/PDF/deliverables/3332.2_Final.pdf)

<sup>20</sup> MedCruise Association, 2014. Cruise activities in MedCruise ports: Statistics 2013. [pdf] Piraeus, Greece. Available at: [http://www.medcruise.com/sites/default/files/cruise\\_activities\\_in\\_medcruise\\_ports-statistics\\_2013.pdf](http://www.medcruise.com/sites/default/files/cruise_activities_in_medcruise_ports-statistics_2013.pdf)

One of the main impacts of cruise tourism is water pollution caused by the sewage systems<sup>21,22</sup>, since a cruise line usually dumps minimally treated sewage directly into the water.

In conclusion, we can identify the following issues as strongly linked with this product:

- Pressures (new tourism facilities buildings, overcrowding, wastes increase, etc.) on the local ecosystems and biodiversity
- specific pressures (seaside-related facilities, wastewater, marine pollution, etc.) on coastal ecosystems & biodiversity
- Water pollution caused by cruise sewage systems
- Water pollution caused by wastewater production
- Lack of binding rules (e.g. carrying capacity) assuring environmental impacts pre-assessments in tourism planning process
- Obsolescence of 3S product
- Poor quality of generated employment (seasonal, low salaries, unqualified, often part-time...)
- Decrease of aesthetic values of landscapes
- Lack of stable monitoring systems on tourism flows and impacts
- Low level of innovation in sustainable services/products/destinations

## Nature-based tourism, rural tourism and ecotourism

Nature-based tourism, rural tourism, ecotourism<sup>23</sup>, but also sustainable, responsible, community-based tourism have different definitions in literature and from a scientific point of view many different meanings. Nevertheless, looking at the Mediterranean tourism offer, all such different tourism typologies refer to a new trend of the tourism demand and the tourism industry, involving in this way a wide range of public and private stakeholders participating to the management of the destinations.

Ecotourism has gradually been developing within national parks, nature reserves and marine protected areas all over the Mediterranean countries. Developing ecotourism aims to bring significant benefits to the local communities and to contribute effectively to nature and biodiversity conservation. However, tourism can have negative impacts on the environment in the protected areas when the governance is not effective. That is why it is important to link strictly all the nature-based activities with an integrated management system that involves the operators and the public managers under the same planning process.

Ecotourism is one of the more growing segments in Morocco, although also MICE (Meetings, incentives, conferencing, exhibitions) and medical tourism have grown in recent years<sup>24</sup>.

### Box 2: The European Charter for Sustainable Tourism in Protected Areas (ECST)

A successful experience, implemented by 143 Protected Areas in 17 European countries, is the “European Charter for Sustainable Tourism in Protected Areas (ECST)”, developed by Europarc Federation these last two decades. It is a practical management tool for ensuring that tourism contributes to a balanced economic, social and environmental development of protected areas. The Charter is a voluntary commitment and aims to encourage good practice by recognizing those protected areas which are meeting the binding requirements for a sustainable development and management of tourism<sup>25</sup>.

Based on the ECST, the Mediterranean Experience of Ecotourism (MEET) project has been developed in order to foster the diversification of the tourism offer and engage a better seasonal distribution of tourism flows, aiming to improve the sustainability and the rationalization in distribution of the tourism sector in the Mediterranean region. In the framework of cross-border cooperation within the European Neighborhood Policy Instrument (ENPI Med), this project has involved eight countries of the Mediterranean: Italy, France, Spain, Jordan, Lebanon, Malta, Greece and Tunisia<sup>26</sup>. The project developed an ecotourism planning model for 25 Mediterranean Protected Areas and built up a catalogue of ecotourism packages. The project partnership currently is setting up a Destination Management Organization willing to involve as many as possible Parks in a joint development of the Mediterranean ecotourism offer.

<sup>21</sup> Ross A. Klein, PhD, for Friends of the Earth, 2009. Getting a Grip on Cruise Ship Pollution.

<sup>22</sup> Friends of the Earth 2013- Cruise ship environmental report card

<sup>23</sup> UNWTO definitions: <http://sd.unwto.org/content/ecotourism-and-protected-areas>

<sup>24</sup> Foreign affairs, 2015. Morocco Pioneering economic growth. [https://www.foreignaffairs.com/sites/default/files/fa\\_morocco\\_nov\\_dec\\_2015\\_engl\\_reprint-single.pdf](https://www.foreignaffairs.com/sites/default/files/fa_morocco_nov_dec_2015_engl_reprint-single.pdf)

<sup>25</sup> <http://www.european-charter.org/home/>

<sup>26</sup> <http://www.medecotourism.org/>

Among the rural tourism experiences, agro-tourism started slowly but has grown exponentially in most of the Euro-Mediterranean countries since the 1980s, combining a blend of agriculture and tourism that offers to farming communities – and visitors – substantial advantages and has proved to be socially, environmentally and economically beneficial to both groups. It has helped to increase revenues for farmers and directly contributes to the diversification of agriculture regarding both the variety of fresh production and of the provision of rural restaurants, where visitors can taste typical farm products and enjoy the hospitality of farming communities, which enhances their appreciation of the cultural, educational and the recreational aspects of the rural community.

Italy has a long and diversified experience in the agro-tourism sector, which since 1985 has been formally recognized with a national legislation, accompanied by regional laws. Agro-tourism has represented one of the main drivers for farm diversification and has contributed to the economic development and wellbeing of rural areas, by attracting millions of tourists into parts of the country, which were ignored even by Italians tourists. The offer is very diverse, ranging from small and simple family farms to luxurious estates, with services of the highest quality. In 2010, with 19,973 operators and about 200,000 beds available, there were more than two million of guests, out of which 50% are foreigners, who spent on the farm an average of 4.5 nights. Agro-tourism operators have net incomes and returns to family labor that represent an integration of their traditional incomes coming from their traditional activities (agriculture and livestock).

In Malta, as a semi-tropical country, rural and agro-tourism services can be provided almost all year round, although one could spare visitors the harsh summer weather. No surprise that in the Spanish island of Ibiza, the season lasts nearly all year round and in Spain itself there is a constant flow of tourists who have booked in agro-tourism facilities, with leading to more and more airlines, hotels and restaurants. Poland is another example, with rural and agro-tourism holidays being regarded as a cheap alternative<sup>27</sup>.

### Box 3: The Mornag Eco Farm – Tunisia

An interesting practice is the Mornag Eco Farm<sup>28</sup> in Tunisia, supported by the SwitchMed<sup>29</sup> initiative that supports and connects stakeholders to scale-up social and eco innovations in the Mediterranean. Mornag Eco Farm is an ecological farm based on sustainable techniques and behaviors. This project aims to bring people from urban space to the nature offering guest rooms, tours and activities that involve the local community.

In conclusion we can identify the following issues as strongly linked with this product:

- Soil degradation
- Pressures (new tourism facilities buildings, overcrowding, wastes increase, etc.) on the local ecosystems and biodiversity
- Noise pollution, esp. in high natural environments
- Lack of binding rules (e.g. carrying capacity) assuring environmental impacts pre-assessments in tourism planning process
- specific marketing of sustainable products is not well developed
- unbalanced human relationships between inhabitants and visitors due to the cultural/social/economic gaps
- Lack of DMO-based governance at destination level
- Lack of integration of sustainable tourism needs in the other sectors' (e.g. transport) planning

## Cultural tourism and MICE

Mediterranean cities, particularly old capitals as Athens, Rome and Istanbul, are well appreciated all over the world. In last decades, the attractiveness of this kind of cities have grown thanks to a strategic planning based on culture, like the cases of Valencia – with more than 45 available museums – and Marseille<sup>30</sup>, European Capital of Culture 2013.

One of the new perspectives for cultural tourism dynamic is religious tourism – especially in Egypt, Palestine, Israel, Jordan, Lebanon, Syria and Turkey – which already accounts from 15% to 20% of international tourist arrivals, not only from Europe or other long-haul destinations, but also from the Middle East region itself. According to UNWTO and UNESCO, religious tourism – particularly pilgrimage routes and itineraries – can strengthen territories by investing on quality and multiplication of partnerships, for example through the creation of “clubs of producers” able to develop a dedicated tour offer associated with religious tourism<sup>31</sup>.

<sup>27</sup> <http://www.independent.com.mt/articles/2013-09-22/opinions/can-agri-tourism-thrive-in-malta-2679209987/>

<sup>28</sup> <http://www.theswitchers.eu/en/switchers/583/>

<sup>29</sup> <http://www.switchmed.eu/en>

<sup>30</sup> <http://www.theguardian.com/artanddesign/2013/apr/01/marseille-capital-culture-architecture>

<sup>31</sup> CASE – Center for Social and Economic Research, Warsaw, 2011. Tourism in the MED 11 Countries.

#### Box 4: Religious tourism

This revitalization of religious tourism – particularly pilgrimage routes and itineraries, forms part of the vision of projects such as the “Abraham's Path Initiative” or the “Spirits of the Mediterranean: Structuring Rural Spaces and Religious and Spiritual Tourism” which play out with popular and religious festivals, elements of cultural identity as well as factors of local economic development.

At the same time, UNWTO – after the success of the Silk Road – is starting to develop new routes focusing on the MENA region and with the the SEMCs, such as the very ancient Incense Road.

MICE (Meetings, Incentives, Conferences, and Events) tourism contributes significantly to the development of a tourism destination. The EU market is a large source market for MICE, in particular, Germany, the UK and France are promising markets for MICE suppliers of developing countries as they are the largest EU source markets for business travel.

Small-scale meetings and incentive trips are the most promising segments, coping with the main requirements from EU MICE buyers: unique experiences, high quality services, value for money, sufficient capacity, flexibility and professionalism<sup>32</sup>. The MICE industry is moving toward sustainability, and implemented such approach in the Olympics Games of London in 2012, which were certified ISO 20121 (Event Sustainability Management System)<sup>33</sup>.

In conclusion, we can identify the following issues as strongly linked with this product:

- Natural resources (mainly water) demand
- Energy consumption mainly based on fossil sources
- Water pollution caused by wastewater production
- Economic leakage, i.e. unbalanced distribution of tourism-generated revenues (little share to local community)
- Lack of proper models and tools to assess the economic impacts (both positive and negative) of tourism at local level
- Pressures on local community quality of life (e.g. conflict on resources use, overcrowding of urban spaces, etc.)
- “Homogenization” of shopping/food & beverage offer within the historical city centers
- superficiality of visiting experience (in particular due to lack of time for day trippers) which does not permit to meet properly the local population and culture
- Decrease of aesthetic values of historical centers
- Loss of local cultural identity
- Lack of stable monitoring systems on tourism flows and impacts
- Weak, partial and inconsistent monitoring indicators of tourism sector
- Lack of integration of sustainable tourism needs in the other sectors' (e.g. transport) planning
- (Geo)political instability and insecurity

<sup>32</sup> CBI Market Information Database, 2014. <https://www.cbi.eu/sites/default/files/study/product-factsheet-mice-tourism-europe-tourism-2014.pdf>

<sup>33</sup> [http://www.iso.org/iso/home/news\\_index/news\\_archive/news.htm?Refid=Ref1690](http://www.iso.org/iso/home/news_index/news_archive/news.htm?Refid=Ref1690)

# The main impacts of tourism activities in the Mediterranean

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To analyze the impacts created by the tourism activities in the Mediterranean is a huge work. In the current work the effort has been to be comprehensive (i.e. to do not miss any significant impact) but also synthetic, in order to have an "operational" picture. Therefore, the impacts have been clustered in the four main components (environmental, economic, social and cultural) in order to suggest specific issues that can be clearly understood and tackled (see Deliverable 3).

## HOW TO ASSESS?

The tourism industry has become a major sector for the global economy since the second half of the 20<sup>th</sup> century and is rapidly growing at a tremendous annual rate. The capacity of tourism to generate foreign exchange revenue and absorb unemployment has been provided by a political and social legitimacy. Tourism has been promoted as a panacea within the "sustainable development" approach<sup>34</sup>. At the same time, it is worldwide agreed that there is a strong link between the economic growth of tourism and the huge socio-economic transformation of tourism destinations: such interaction seems to become more and more dangerous for the state of the environment and the quality of life of the local populations.

Generally, tourism impacts, which are different according to countries or regions, are classified in three main clusters: economic, socio-cultural and physical (natural and built). Whereas environmental and economic indicators of tourism do lend themselves to objective measurement, the socio-cultural impacts are often highly qualitative and subjective in nature<sup>35</sup>.

Positive economic impacts from tourism are constantly monitored referring to:

- they refer to financial benefits - earnings for the different actors involved in the value chain – where the main issue is the distribution of such benefits;
- occurred costs, where the main issue is the difference between those that are "internalized" (i.e. integrated in the final price: e.g. the cost of a service provider like an accommodation) and those not: the latter are linked to several costs that the public sector must endorse, for instance in promoting the tourism offer, but also to provide other services (public transport system, enlightening of the streets, waste treatment, etc.) and to pay for the restoration of tourism-related damages (to the environment, to the cultural heritage, etc.).

For these reasons, in the current work, the social and cultural aspects have been treated in a different way, in order to have detailed impacts and related issues to be tackled with, even if in some cases the social and cultural impacts of an impact are very close.

## ENVIRONMENTAL IMPACTS

Among the numerous impacts generated by tourism activities (and related services, like transport) the current study focuses on the main relevant and significant for the Mediterranean context and in relation with new policies and initiatives recently developed.

### Climate change and tourism

The tourism industry and destinations are sensitive to climate variability due to their close connections to environment and climate, tourism is considered as a highly climate-sensitive economic sector similar to agriculture, insurance, energy, and transportation<sup>36</sup>.

The Intergovernmental Panel on Climate Change (IPCC) declared "Each of the last three decades has been successively warmer at the Earth's surface than any preceding decade since 1850. The period from 1983 to 2012 was likely the warmest 30-year period of the last 1400 years in the Northern Hemisphere, where such assessment is possible (medium

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<sup>34</sup> Barbaressos S., Sgouro M., Globalisation and sustainable tourism development: a critical review: <http://jotr.eu/index.php/tourism-management/79-globalisation-and-sustainable-tourism-development-a-critical-review>

<sup>35</sup> Cooper et al., 1998

<sup>36</sup> Wilbanks, T. J. et al. (2007), 'Industry, Settlement and Society', in M. L. Parry et al. (eds.), *Climate Change 2007: Impacts, Adaptation and Vulnerability*. Contribution of Working Group II to the Fourth Assessment Report of the IPCC, Cambridge University Press, Cambridge and New York, pp. 357–390.

confidence). The globally averaged combined land and ocean surface temperature data as calculated by a linear trend show a warming of 0.85 [0.65 to 1.06] °C over the period 1880 to 2012 [...] Human influence on the climate system is clear, and recent anthropogenic emissions of green-house gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems<sup>37</sup>.

Climate actually defines the length and quality of tourism seasons and plays a major role in destination choice and tourist spending<sup>38</sup>. In many destinations, tourism is closely linked with the natural environment that can be affected by climate such as snow conditions and biodiversity, water levels and quality. Climate has also an important influence on environmental conditions that can deter tourists, including infectious disease, wildfires, insect or water-borne pests (e.g., jellyfish, algae blooms), and extreme events such as tropical cyclones.

According to the study "Time is of the essence: adaptation of tourism demand to climate change in Europe", climate changes can affect the tourism demand in EU regions as altered climatic conditions may influence the relative allure of many regions. Under current economic conditions, the 2100 climate could lower tourism revenues by up to 0.45% of GDP per year in Mediterranean EU regions, while other EU regions in northern Europe could gain up to 0.32% of GDP<sup>39</sup>.

The Mediterranean is likely to face increased competition from other seaside-related destinations, which will become more attractive such as Atlantic coasts of Spain and France or possibly even northern European beaches. Due to the expected increase in summer temperatures, many tourists might perceive Mediterranean beaches as too hot and choose other destinations<sup>40</sup>. Mediterranean Spain and Bulgaria were likely to be the biggest losers from climate disruption, while Estonia, Latvia, Slovenia and Slovakia would gain the most<sup>41</sup>.

Climate change mitigation includes technological, economic and social changes that could contribute to reduction in greenhouse gas emissions. In tourism, mitigation can be achieved by improving energy efficiency, increasing the use of renewable energy, sustainable destination planning and management, tour operators' choice of destinations and packaging of travel products, as well as other changes in business practices. Technological changes and innovations are extremely important for reducing greenhouse gas emissions; however, this would not be sufficient to achieve absolute emission reductions, especially considering global tourism growth rates. Changing tourists' behavior and introducing structural changes in tourism industry would be crucial for reversing the trend of greenhouse gas emissions growth in the tourism sector. Considering growing interest in "green" holiday options<sup>42</sup> and low-carbon tourism products, embracing mitigation could be new business opportunity in tourism (Simpson et al., 2008).

#### Box 5: Broad categories of climate change impacts affecting tourism destinations<sup>43</sup>

The main categories of climate change impacts that affect tourism destinations, their competitiveness and sustainability can be summarized as follows:

**Direct climatic impacts:** Climate is a principal resource for tourism, as it co-determines the suitability of locations for a wide range of tourist activities. It is a principal driver of global seasonality in tourism demand, and has an important influence on operating costs, such as heating-cooling, snow-making, irrigation, food and water supply, and insurance costs. Thus, changes in the length and quality of climate-dependent tourism seasons (i.e., sun-and-sea or winter sports holidays) could have considerable implications for competitive relationships between destinations and therefore the profitability of tourism enterprises.

**Indirect environmental change impacts:** Because environmental conditions are such a critical resource for tourism, a wide-range of climate-induced environmental changes will have profound effects on tourism at the destination and regional level. Changes in water availability, biodiversity loss, reduced landscape aesthetic, altered agricultural production (e.g., tourism related to food paths: wine tourism, etc.), increased natural hazards, coastal erosion and inundation, damage to infrastructure and the increasing incidence of vector-borne diseases will all impact tourism to varying degrees. In contrast to the varied impacts of a changed climate on tourism, the indirect effects of climate induced environmental change are likely to be largely negative. Mountain, island, and coastal

<sup>37</sup> IPCC, 2014: Climate Change 2014: Fifth Assessment Report of the Intergovernmental Panel on Climate Change – AR5 [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)].

<sup>38</sup> UNWTO, UNEP, 2008. "Climate Change and Tourism Responding to Global Challenges".

<sup>39</sup> <https://ec.europa.eu/jrc/en/news/climate-change-lower-revenues-mediterranean-regions>

<sup>40</sup> See: How will climate change affect tourism flows in Europe? Adaptation options for beach and ski tourists assessed by ToPDAd models

<sup>41</sup> See: The Guardian, 13 August 2015, "Costa's last stand: climate change could see tourists swap the Med for the Baltics"

<http://www.theguardian.com/environment/2015/aug/13/climate-change-tourists-swap-med-for-baltics>; Daily Mail, 14 August 2015. "Climate change will make the Mediterranean too hot for British holidaymakers who will flock to resorts in the Balkans by 2100" [http://www.dailymail.co.uk/travel/travel\\_news/article-3198549/Climate-change-make-Mediterranean-hot-British-holidaymakers-flock-resorts-Balkans-2100.html#ixzz429O1VwKN](http://www.dailymail.co.uk/travel/travel_news/article-3198549/Climate-change-make-Mediterranean-hot-British-holidaymakers-flock-resorts-Balkans-2100.html#ixzz429O1VwKN)

<sup>42</sup> [www.responsibletravel.com](http://www.responsibletravel.com)

<sup>43</sup> UNWTO, UNEP, 2008. "Climate Change and Tourism Responding to Global Challenges".

destinations are considered particularly sensitive to climate-induced environmental changes, as their offer respond to a nature-based tourism market. UNESCO has also identified several World Heritage Sites that are critical tourist destinations, to be vulnerable to climate-induced environmental change (e.g., Venice, Italy – sea level rise).

**Impacts of mitigation policies on tourist mobility:** National or international mitigation policies – that are policies that seek to reduce GHG emissions – are likely to have an impact on tourist flows. They will lead to an increase in transport costs and may foster environmental attitudes that lead tourists to change their travel patterns (e.g., shift transport mode or destination choices). There has been substantial recent media coverage on this topic, specifically related to air travel. Long-haul destinations can be particularly affected and officials in Southeast Asia, Australia-New Zealand, and the Caribbean have expressed concern that mitigation policies could adversely impact their national tourism economy.

**Indirect societal change impacts:** Climate change is deemed to pose a risk to future economic growth and the political stability of some nations. The Stern Report on the Economics of Climate Change concluded that although a global warming of only 1° C might benefit global GDP, greater climate change would eventually damage economic growth at the global scale, including the stark conclusion that unmitigated climate change could cause a reduction in consumption per capita of 20% later in the 21st century or early 22nd century. Any such reduction of global GDP due to climate change would reduce the discretionary wealth available to consumers for tourism and have negative implications for anticipated future growth in tourism; however there has been no in-depth interpretation of the Stern Report 54 for the tourism sector.

The major categories of climate change impacts projected by the IPCC that have the greatest potential significance for the tourism sector in the Mediterranean region are outlined below (Table 2).

**Table 2: Major climate change impacts and implications for tourism destinations**

Pressure from climate change	Impacts for tourism
Warmer temperatures	Altered seasonality, heat stress for tourists, cooling costs, changes in plant-wildlife-insect populations and distribution, infectious disease ranges
Increasing frequency and intensity of extreme storms	Risk for tourism facilities, increased insurance costs/loss of insurability, business interruption costs
Reduced precipitation and increased evaporation in some regions	Water shortages, competition over water resources between tourism and other sectors, desertification, increased wildfires threatening infrastructure and affecting demand
Increased frequency of heavy precipitations in some regions	Flooding damage affecting historic architectural and cultural assets, damages to tourism infrastructure, altered seasonality
Sea level rise	Increased coral bleaching and marine resource and aesthetics degradation in diving and snorkeling destinations
Changes in terrestrial and marine biodiversity	Loss of natural attractions and species from destinations, higher risk of diseases in tropical-subtropical countries
Soil changes (e.g., moisture levels, erosion and acidity)	Loss of archaeological assets and other natural resources, with impacts on destination attractions

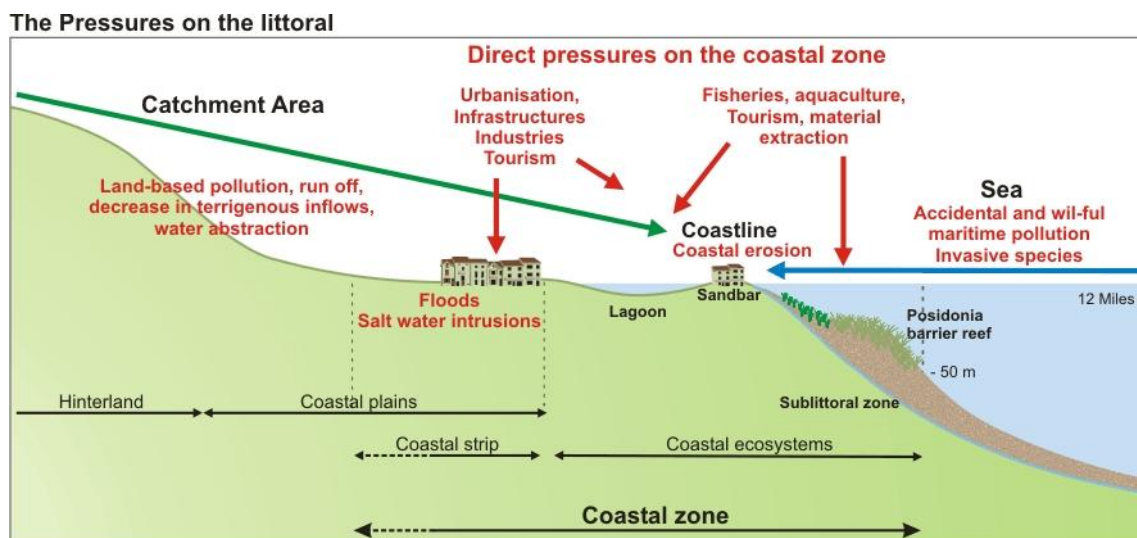
Source: UNEP, 2008

Beyond the environmental damage (pollution, coastal erosion, saline intrusion), human pressures are also endangering plant and animal biodiversity; the “artificialisation” of natural areas affects the sediment and water balances that maintain flora and a local wildlife; water sports activities damage the seagrass (*Posidonia* and coralligenous) who are also nesting areas for sea turtles and monk seals. Natural areas are deteriorating, which ultimately contributes to the collapse of the destination.

The following Figure 12 shows the effects of the various pressures on the coastal areas, highlighting that the interdependence of activities and resources in the coastal zone explains why a sectorial approach to coastal zone management cannot be able to achieve satisfactory results<sup>44</sup>.

<sup>44</sup> PAP/RAC - [http://www.pap-thecoastcentre.org/about.php?blob\\_id=21&lang=en](http://www.pap-thecoastcentre.org/about.php?blob_id=21&lang=en) (accessed March 01, 2016)

Figure 12: Pressure on the coastal area



Source: Plan Bleu, 2009

Effective coastal zone management should be based not only on sectoral initiatives and their expected impacts, but also on the combined effects of different sectors activities on each other and on coastal resources. In order to minimize tourism-induced problems and secure both the sustainability of the tourism industry and coastal resources exploited by other sectors, increased attention must be paid to the integration of coastal tourism into strategic development planning. In planning tourism development, it is of the utmost importance to focus on the appropriate planning of tourism growth with regard to the capacity of local systems.

Integrated Coastal Zone Management (ICZM) has been recognized lately by many tourism operators and decision-makers as a path to follow towards the sustainable development of coastal tourism. The ICZM is an adaptive, multi-sector governance approach, which strives to a balanced development, use and protection of coastal environments. It is based on principles such as holistic and ecosystem-based approach, good governance, inter and intra-generational solidarity, safeguarding the distinctiveness of coasts, precautionary and preventive principle, which give a context for achieving the aims of sustainable tourism.

#### Box 6: ICZM Protocol<sup>45,46</sup>

On 13 September 2010, the European Council adopted the decision to ratify the Protocol on Integrated Coastal Zone Management to the Barcelona Convention (Council Decision 2010/631/EU). This EU decision follows the signature of the Protocol adopted by the European Council on 4 December 2008 (2009/89/EC). On the occasion of the Barcelona Convention CoP 17 (Paris 8-10 February 2012), the Action Plan for the implementation of the Protocol 2012-2019 was adopted.

The CoP 18 (Istanbul, 3-6 December 2013) adopted the institutional and legal sections of the Reporting Format for the ICZM Protocol. The Parties are convinced that this Protocol represents a crucial step in the history of MAP. It will allow the countries to better manage their coastal zones, as well as to deal with the emerging coastal environmental challenges, such as the climate change.

During the 19th CoP (Athens 9-12 February 2016), Mediterranean ministers and parties renewed their commitment to enhance measures to reduce pressures on their marine and coastal environment.

To support ICZM and the Protocol's implementation, the EU co-funds a research project: PEGASO. 23 partners collaborate in the project, from EU and non-EU countries around the Mediterranean, as well as from the Black Sea. The project run from 2/2010 to 1/2014 and had a total budget of 8,9 million €

<sup>45</sup> European Commission <http://ec.europa.eu/environment/iczm/barcelona.htm> (accessed March 01, 2016)

<sup>46</sup> PAP/RAC - [http://www.pap-thecoastcentre.org/about.php?blob\\_id=21&lang=en](http://www.pap-thecoastcentre.org/about.php?blob_id=21&lang=en) (accessed March 01, 2016)

A coastal setback zone is already present in some Mediterranean countries where ecological considerations also played their part in providing more arguments against coastal urbanization: laws such as the “*Loi Littoral*” (1986) in France or the Sardinian “*Legge Salvacoste*”<sup>47</sup> of 2004 are the results of such new approaches. In Italy the definition of a “no construction zone”, represents a strong answer to coastal urbanization and a form of adaptation to potential impacts from climate change through physical and landscape planning.

In several Mediterranean countries, law already establishes the setback zone. The most common approach to define the “setback zone” is the so-called “quantitative” option based on the “establishment of a setback with a uniformly determined width for the whole of the national coastline” (Rochette et al., 2010). An exception is the case of the Sardinia Island that, by applying a “qualitative” approach, adapts building regulations to the specific characteristics of coastal zones, including also extremely restrictive provisions for the coastal areas (identified with the band of two kilometers from the shoreline).

The coastal setback, under protection by law, in the majority of Mediterranean countries is 100 m. In the case of France the setback line can be extended to more than 100-metre when justified by specific hazards like coastal erosion<sup>48</sup>. The below “Regional Risk Assessment Map”<sup>49</sup> of coastal risk to climate and non-climate forces, displays the result in terms of qualitative risk classes in the investigated coastal zones. The map below shows the values of risk assumed by each location when applying the equation defined for the method CRI-MED<sup>50</sup>: sites that assume “extremely high risk” values are indicated in red and defined as “hot-spots”. It is worth to note that areas at extremely high risk are relatively few and predominantly located in the southern Mediterranean region, the countries primarily concerned by coastal risk being Morocco, Algeria, Libya, Egypt, Palestine, and Syria.

<sup>47</sup> Unique in its kind is the case of the Sardinia, the second largest island of the Mediterranean with more than 2000 km of shoreline, the first region in Italy to adopt a landscape plan based on the European Landscape Convention and through the Regional Law 8/2004 “rules for urgent provisional safeguard and landscape planning of the regional coastal areas”, were established extremely restrictive provisions for the coastal areas (identified with the band of two kilometers from the shore line), which would remain in force until the approval of the Regional Landscape Plan (PPR), the process of defining, adoption and approval of the same law defines “Salvacoste” in an extremely rigorous. The legislation defines twenty-seven Areas of landscape that make up the First Homogeneous Area, corresponding to the coastal territory where the preservation of coastal ecosystems and coastal landscape takes precedence over all other uses. They are in fact only allowed the recovery and redevelopment of the existing buildings. The definition of the coastal setback in Sardinia is based on a “qualitative” approach. Source: Satta A., 2014. An Index-based method to assess vulnerabilities and risks of Mediterranean coastal zones to multiple hazards. Doctoral dissertation submitted in October 2014 to the Department of Economics Ca' Foscari University of Venice, Italy.

<sup>48</sup> Satta A., 2014. An Index-based method to assess vulnerabilities and risks of Mediterranean coastal zones to multiple hazards. Doctoral dissertation submitted in October 2014 to the Department of Economics Ca' Foscari University of Venice, Italy.

<sup>49</sup> Satta, A., Venturini, S., Puddu, M., Firth, J., Lafitte, A. (2015). Strengthening the Knowledge Base on Regional Climate Variability and Change: Application of a Multi-Scale Coastal Risk Index at Regional and Local Scale in the Mediterranean. Plan Bleu Report.

<sup>50</sup> The CRI-MED method was applied regionally to measure risk in eleven countries I of the project “Integration of climatic variability and change into national strategies to implement the ICZM protocol in the Mediterranean” (ClimVar & ICZM). The application led to a ranking of the relative risk of each coastal region in relation to potential coastal hazards generated and/or exacerbated by climate and non-climate forcing. In the CRI-MED study [Satta et al., 2015] the risk equation with weighted variables was applied to each cell (300 m x 300 m) of the coastal study area grid. The coastal spots at risk were identified through a statistical analysis by spatially clustering cells characterized by similar risk values. To be considered a statistically significant hot spot, a site (cell) must be characterized by a “high-risk” value and be surrounded by other sites (cells) with high risk values as well. The statistical analysis (Fig.2) resulted in a very limited number of cells characterized by relatively high risk values that could form clusters. CRI scores ( $\geq 0.55$ ) were deemed to identify hot spots. The hot-spot threshold was set in a way to highlight only areas that appear exceptionally at risk according to the statistical distribution of cells. [http://planbleu.org/sites/default/files/publications/notes28\\_en.pdf](http://planbleu.org/sites/default/files/publications/notes28_en.pdf)

Figure 13: Regional Risk Assessment Map for the Mediterranean



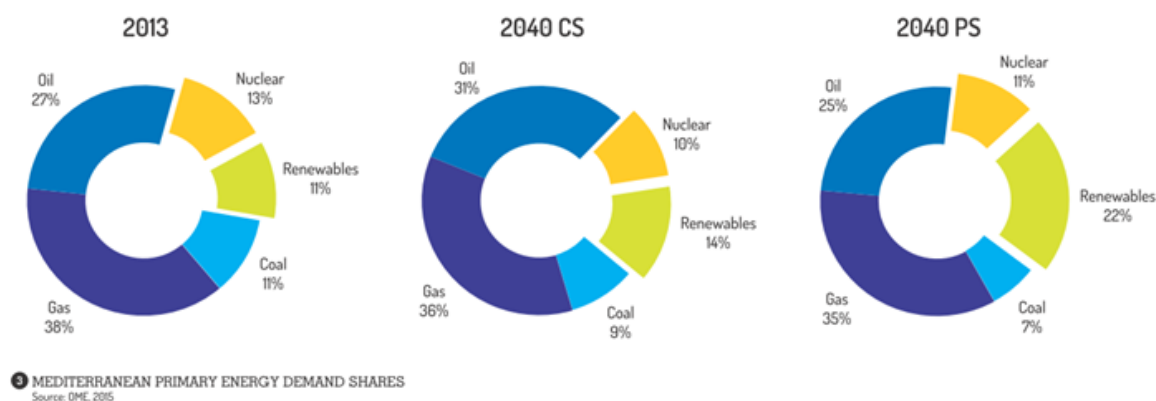
Source: Plan Bleu, 2015

## Tourism and energy consumption

Nowadays, the North Mediterranean region accounts for two-thirds of Mediterranean primary energy demand, but this trend will be reversed over the next 25 years as energy demand is expected to grow more robustly in the South Mediterranean countries than in the North ones, triggered by stronger economic and population growth.

A recent study states (see below) that a 50% increase in primary energy demand is expected in the Conservative Scenario by 2040, whereas it could be brought down to a 22% increase in the Proactive Scenario. But more strikingly, nearly all the increase in energy demand is expected to occur in the South: in the Conservative Scenario, South Mediterranean primary energy demand would more than double from current levels at horizon 2040 (+136%); in the Proactive Scenario, the whole increase in energy demand of the region would occur in the South (+78%) with an actual decrease in energy demand in the North (-9%)<sup>51</sup>.

Figure 14: Mediterranean primary energy demand shares

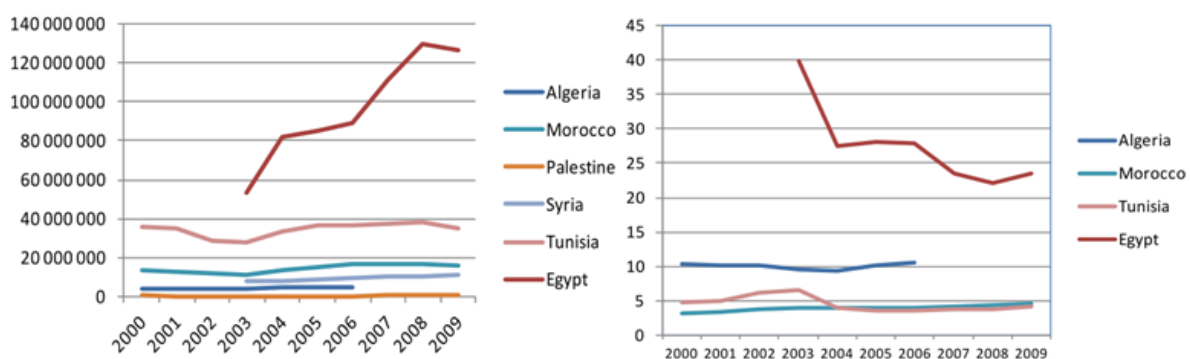


Source: OME, 2015

<sup>51</sup> OME's Mediterranean Energy Perspectives, 2015

Energy consumption from tourism concerns mainly transportation, construction and infrastructures associated with urban services such as water treatment and desalination plants, public lighting, etc. Energy consumption is high in tourist accommodations and varies from country to country (in relation to their level of equipment and national energy policies: thermal regulations, pricing policy, etc.). Some data on energy efficiency indicators gives hints on unit consumption in hotels per overnight stay: the latter seems to be stabilizing or even decreasing, partly due to higher occupancy rates in hotels<sup>52</sup>.

Figure 15: Total number of nights in hotels and energy consumption per overnight stay (kgep/night)



Source: Plan Bleu – national indicator studies, 2012

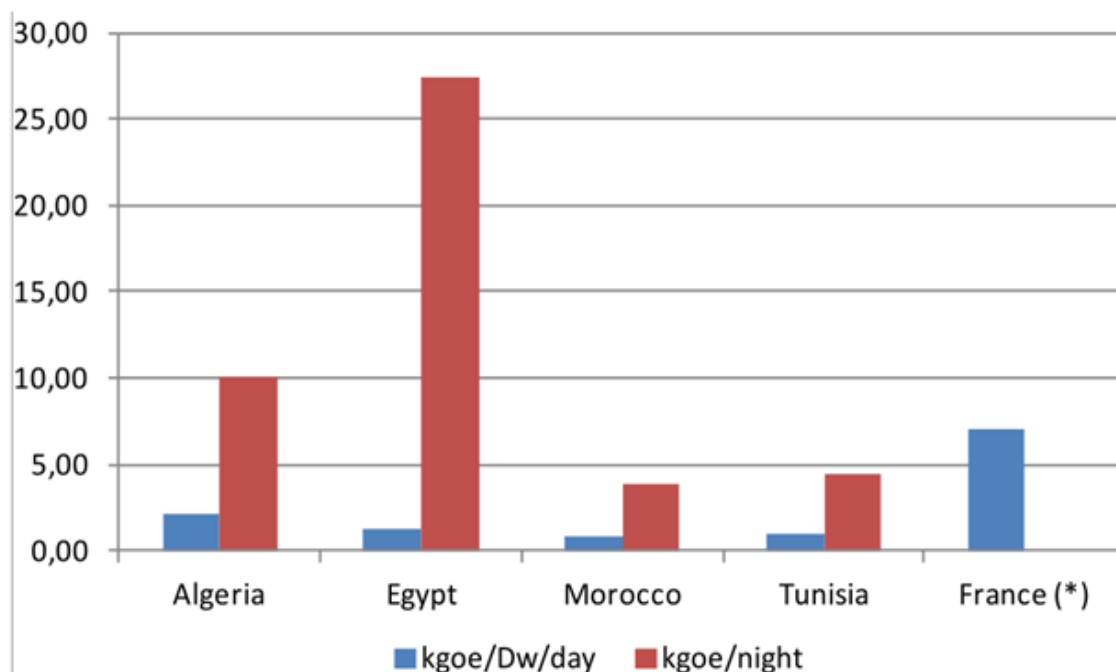
This issue is combined with inequality in the use of resources between local populations and tourists as shown in the following figure. The levels of consumption in tourism facilities are similar in the South Mediterranean to those in the residential sector in Northern Mediterranean countries (e.g. case of consumption per French household).

In a context of increasing overnight stays, the relative improvement of energy intensity in tourism, if indicates a degree of optimization of the industry's energy, raises the question about the industry's ability to reduce its overall energy consumption and related emissions. Its reliance on non-renewable resources, whose prices tend to be on the rise, makes it vulnerable and even unable to adapt. This problem must be taken into account in the medium and long term and be integrated immediately into the planning of tourism supply (esp. transportation and accommodation).

This problem is combined with inequality in the use of resources between local populations and tourists as shown in following Figure. The levels of consumption from tourism in the Southern countries are similar to those in the residential sector in Northern Mediterranean countries (e.g. case of consumption per French household).

<sup>52</sup> Plan Bleu, 2012. 2009 – 2012 Work Programme Energy Tourism Interactions

Figure 16: Energy consumption per household per day vs. energy consumption per overnight stay (kgep)



Source: Plan Bleu - national indicator studies, 2012

(\*) For France, MEDDE data, Observation and Statistics Department, and assumption of an occupancy rate of 2.27 persons per household.

The tourism sector could contribute in some ambitious and innovative clean energy solutions: the aviation industry is implementing cutting-edge technologies to make aircraft lighter than ever before; commercial flights are beginning to use biofuels in their fuel mix; key card systems and energy saving light bulbs are increasingly being implemented in hotel rooms worldwide; and tour operators are asking for more energy efficiency throughout their supply chains<sup>53</sup>.

#### Box 7: 2012: United Nations International Year of Sustainable Energy for All

The 2012 theme for World Tourism Day was 'Tourism & Sustainable Energy: Powering Sustainable Development'.

The theme was also an opportunity to ensure international tourism continues to play a role in tackling the major energy challenges of our time, being addressed by the Clean energy solutions in tourism are bringing the sector's carbon emissions down, protecting local environments and communities, carrying modern energy services to the world's poor, cutting costs for businesses and creating jobs and economic opportunities. In order to support the tourist accommodation, UNWTO launched the Energy School and a specific publication: Hotel Energy Solutions (2011), Hotel Energy Solutions: Fostering innovation to fight climate change - Public Report. Hotel Energy Solutions project publications.

The use of renewable energies can be considered in the following tourism related fields:

- Housing, in order to meet electricity (photovoltaic) and heating (solar, biomass) needs. In the Mediterranean region, and in particularly in coastal areas, benefitting from high sunlight and mild weather conditions, domestic hot water needs could be met by solar heating. This sector is growing with variations from country to country depending on energy pricing.
- Touristic sites, to contribute to the production of local renewable energy (photovoltaic, small wind turbines, geothermal energy, biomass).

<sup>53</sup> <http://wtd.unwto.org/content/tourism-sustainable-energy-powering-sustainable-development>

### Box 8: NZEB Nearly Zero Energy Buildings Application in Mediterranean hotels<sup>54 55</sup>

The NEZEH project, co-financed by the European Commission aims to reinforce businesses operating in the hospitality sector to meet the challenges of competitiveness, reduction of energy consumption and adoption of green energy technologies, providing technical support and advice to selected hotels in order to develop sustainable and feasible large scale renovations towards Near Zero Energy consumption levels.

The project covers six Southern European countries – Spain, Greece, Italy, Romania, Croatia and France – locally and nationally. This need becomes more urgent as European law (Energy Performance of Building Directive recast) requires that -by 2020- all new buildings will be zero energy consumption (NZEB). However, the concept of NZEB is still not well developed in most EU countries and Member States should adopt specific policies and measures to accelerate the rate of large scale refurbishments of existing buildings.

16 Hotels in Europe will benefit of technical assistance to become neZEH and enjoy up to 70% reduction of their operation costs using best solutions: energy efficiency measures; renewable energy sources and behavioural changes of staff and clients. Commitment to the environment and sustainability is a key prerequisite for hoteliers to achieve nearly zero status.

The pilot cases will be implemented in the 7 neZEH countries: (Croatia, Greece, France, Italy, Romania, Spain, Sweden) to prove the feasibility and sustainability of neZEH projects.

The neZEH hotel owners receive:

- Access to technical expertise
- Energy audits suggesting technical solutions
- Feasibility studies for financing decision-making
- Advice on national financing alternatives
- Training of hotel staff
- Increased visibility at national and EU level and promotional tools to communicate efficiently their neZEH profile to potential customers.

## Tourism and air pollution

The most important issue concerning climate change relates to the increased atmospheric concentration of carbon dioxide (CO<sub>2</sub>). The primary source of this concentration since the pre-industrial period is fossil fuel use (IPCC, 2007). The use of fossil energy is one of the major environmental problems associated with tourism and travel. According to, IPPC, UNWTO, UNEP and WMO, the contribution of tourism (including transports, accommodation and activities) to greenhouse gas (GHG) emissions is rising. Calculations of the contribution of tourism to global carbon dioxide (CO<sub>2</sub>) emissions range from 3.9% to 6% of human emissions, with 4.9% the best estimate. The sector is expected to grow by an average of 4% annually and reach 10% of global GDP within ten years. The sector's emissions are going to grow 130% between 2005 and 2035<sup>56</sup>. There is great variation in emissions across tourism sectors and within different types of transportation. Trips by coach and rail account for 34% of all trips, but for only 13% of all CO<sub>2</sub> emissions. At the same time, long-haul travel accounts for only 2.7% of all tourist trips, but contributes with 17% of global tourist emissions. In 2005, tourism's contribution to global warming was estimated between 5% and 14% to the overall warming caused by human emissions of greenhouse gases (Simpson et al., 2008)<sup>57</sup>.

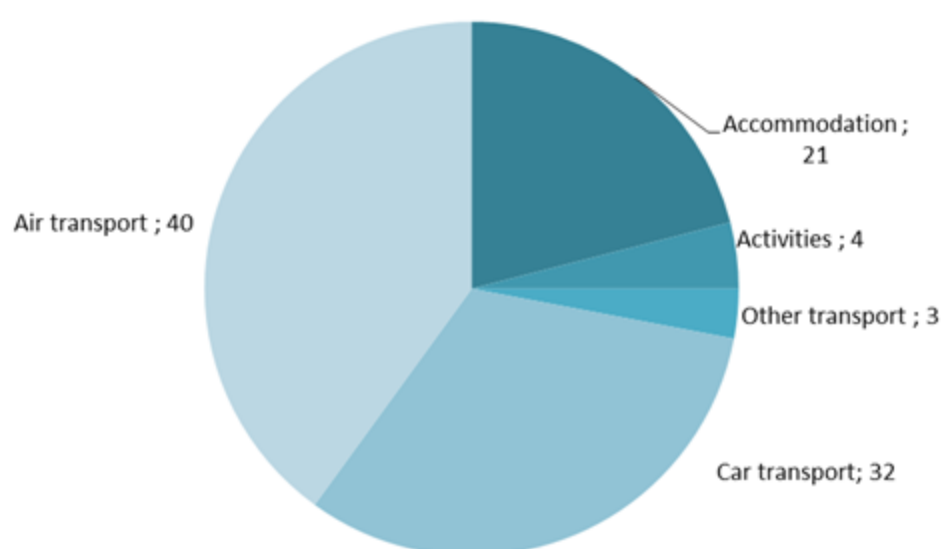
The following Figure 17 shows that in 2005 transport generated the largest proportion of CO<sub>2</sub> emissions (75%) from global tourism, with approximately 40% of the total being caused by air transport alone. Emissions from accommodation and activities were estimated to be substantially lower than transport emissions, but emissions from the accommodation sub-sector are also not negligible.

<sup>54</sup> <http://www.nezeh.eu/>

<sup>55</sup> T. Tsoutsos, S. Tournaki, C. Avellaner de Santos, R. Vercellotti, 2013 Nearly Zero Energy Buildings. Application in Mediterranean hotels

<sup>56</sup> IPCC, 2014: Climate Change 2014: Fifth Assessment Report of the Intergovernmental Panel on Climate Change – AR5 [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)].

<sup>57</sup> UNEP, 2009. "Sustainable Coastal Tourism: An integrated planning and management approach".

Figure 17: Tourism-related sectors CO<sub>2</sub> emissions (%), 2005**Contribution of various tourism sub-sector to CO<sub>2</sub> emission (%)**

Source: UNEP, 2008

Air transport is growing at a faster pace than surface transport (by road, rail or overwater). In the period from 1980 to 2010, surface travels grew worldwide 3% per year on average, while travels by air grew 5%<sup>58</sup>. In 2013, just over half of international tourists worldwide arrived at their destination by air. Air transport is also EU28 residents' main mode of transport for outbound trips. In 2013, it was used for 53% of outbound trips of EU28 residents while motor vehicle was used for 30%<sup>59</sup>.

In the past five to ten years, growth was especially high in the low-cost segment, accelerated, among other factors, by the global financial crisis. Europe is the region where low-cost airlines are the most active. According to Oxford Economics 2014 data, low-cost airlines were used for 250 million passenger trips per year in Europe, compared to 173 million passenger trips per year in North America and 117 million passenger trips per year in Asia.

Over the last twenty years, air transport has increased greatly on a Mediterranean scale. It increased from one quarter of international arrivals in the late 1980s to more than half (51%) in 2006. In comparison, over the same period arrivals by sea increased by just 2%, arrivals by rail was divided by three and arrivals by road decreased by one half, down from 60% to 30%. In terms of energy consumption, for a distance of 370 km, a jet airplane consumes 27 liters of fuel per passenger, a European car 18 liters and a turboprop airplane 16 liters<sup>60</sup>.

At the same time, international tourist's consciousness about the increasing carbon footprint raised in the last decade and lots of tourism companies decided to offer to their clients the opportunity to minimize their impact offering to their clients the opportunity to offset their trips.

On 8 February 2016, the International Civil Aviation Organization (ICAO) agreed a CO<sub>2</sub> efficiency Standard for commercial aircraft. The Standard, which has taken six years of painstaking negotiation and technical work, expected to come into force from 2020, will ensure that CO<sub>2</sub> emissions from new aircraft will have to meet a minimum baseline (defined as a maximum fuel burn per flight kilometer, which must not be exceeded). From 2023, this will also be applied to existing aircraft designs still in manufacture at that date<sup>61</sup>.

<sup>58</sup> UNWTO, 2014. 'International tourism trends in EU-28 member states. Current situation and forecasts for 2020-2025-2030'.

<sup>59</sup> EPRS. European Parliamentary Research Service, 2015. "Tourism and the European Union Recent trends and policy developments".

<sup>60</sup> Plan Bleu, 2012. 2009 – 2012 Work Programme Energy Tourism Interactions

<sup>61</sup> IATA <http://www.iata.org/pressroom/pr/Pages/2016-02-09-01.aspx> (accessed February, 20, 2016)

## ECONOMIC IMPACTS

Conflicts arise when the economic benefits of tourism are unevenly distributed, especially when disparities in wealth are important. The direct income for an area is the amount of tourist expenditure that remains locally after that taxes, profits, and wages are paid outside the area and after imports are purchased; these subtracted amounts are called leakage. In most all-inclusive package tours, about 80% of travelers' expenditures go to airlines, hotels and other international companies (who often have their headquarters in the travelers' home countries), and not to local businesses or workers. In addition, significant amounts of income actually retained at destination level can leave again through leakage<sup>62</sup>.

Import leakage occurs when tourists demand of equipment, food, and other products are not supplied locally but by national/international operators. Sustainable, responsible, fair-trade tourism initiatives growing on the last decades are highlighting the need to develop a more genuine and authentic offer to answer to the growing tourism demand more aware on the local impacts of tourism but also on the "real taste", in terms of food, for example, of the visited country. On the other hand, an export leakage arises when overseas investors who finance the resorts and hotels take their profits back to their country of origin.

Economic dependence of the local community to tourism is another economic threat that are living countries in the Mediterranean, especially the ones that have embraced tourism as a way to boost their economy. The "tourism monoculture" is a very common model in Mediterranean islands like Malta, Balearic islands, Jerba, but also for some mass tourism destinations like Rimini (Italy), the "Costa del Sol" and "Costa Brava" (Spain), Antalya (Turkey), etc.

The lack of proper models and tools to assess the economic effects of tourism is due to the nature of the tourism sector, which is large, diverse, constantly evolving, and managed by different groups of stakeholders. Nevertheless, there are a number of initiatives and frameworks that have been developed to capture information across all dimensions.

Key chronological milestones in the development of monitoring systems have included:

1. the development of destination specific management and monitoring systems, prominent examples of which include Kangaroo Island, Australia, or the US Forest Service's Limits of Acceptable Change methodology for protected areas;
2. the UNWTO Indicators of Sustainable Development for Tourism Destinations in 2004;
3. the Global Sustainable Tourism Council's (GSTC) Global Sustainability Criteria for Destinations;
4. the European Tourism Indicator System (ETIS) in 2011.

These regional and global level systems all include a set of indicators relating to economic, environmental, social, and cultural impacts with the goal of aggregating and standardizing the monitoring of several impact types across multiple destinations for improved geographic and temporal comparison and analysis<sup>63</sup>.

## SOCIAL IMPACTS

Tourism is often promoted as a labor-intensive economic activity, i.e. as a sector that creates many job opportunities although, according to the UNPD "work, not just jobs or employment, is crucial for human progress<sup>64</sup>". That is why it is very important for the tourism sector to consider not only the official figures of the occupied workers but also the many others engaged in unpaid care such as family work for small tourism enterprises and trainees. Moreover, most jobs being available for people of local community usually concern low-profile positions (such as servants, housemaids, waiters, gardeners, etc.). In addition to this, the tourism-related labor contracts are mainly seasonal.

Tourism creates human exchange opportunities and more recreational facilities, but it can also cause disruption of various elements of the quality of life. In other words, tourism can contribute to create opportunities for locals to learn and share the cultural aspects of the tourist's culture and heritage, whilst at the same giving rise for some concerns<sup>65</sup>. However, the social and cultural impacts of tourism development could negatively affect the perception of residents<sup>66</sup>. Furthermore, the presence of low quality tourism can induce young people to develop bad habits, such as prostitution and petty criminality. It can also create a degree of apathy<sup>67</sup> in the relationship between tourists and locals as a result of different and perhaps

<sup>62</sup> UNEP, Negative Economic Impacts of Tourism.

<http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFiguresaboutTourism/ImpactsofTourism/EconomicImpactsofTourism/NegativeEconomicImpactsofTourism/tabid/78784/Default.aspx>

<sup>63</sup> World Bank Group, 2015. "Towards More Effective Impact Measurement in the Tourism Sector. Observations and Key Issues"

<sup>64</sup> UNDP, 2015. Human Development Report 2015 Work for Human Development

<sup>65</sup> A Model for Assessing the Level of Tourism Impacts and Sustainability of Coastal Cities Beser Oktay Vehbi Eastern Mediterranean University, Faculty of Architecture, Department of Architecture, North Cyprus, Turkey. <http://cdn.intechopen.com/pdfs-wm/35710.pdf>

<sup>66</sup> Jurowski et al., 1997; Liu & Var, 1986; Milman & Pizam, 1988; Perdue et al., 1987

<sup>67</sup> Doxey, 1976

unexpected behaviors. Congestion in public spaces, traffic jams, noise and increasing crimes are some examples of the social impacts of tourism<sup>68</sup>.

The fact that host community members adapt to tourism in various ways adds complexity to the problem: usually tourism growth may occur alongside other changes, including, for example, a wider range of economic sectors, and the local people's behavior may be a response to these changes more than to the changes brought by tourism<sup>69</sup>. Usually residents are more likely to support tourism if they stand to benefit from it through employment for themselves or family members, or if they believe the benefits of tourism outweigh the negative impacts. Local communities are generally concerned over the impact of tourism development on property prices, access to recreation structures/districts, traffic congestion, quality of life, salaries and food & beverage prices increase. A common problem that rises with the development of tourism is the increase of prices for basic necessities, higher taxes and competition over the distribution of benefits.

Loss of authenticity is another common issue in tourism destinations. Tourists want souvenirs, arts, crafts, and cultural manifestations, and in many tourist destinations, craftsmen have responded to the growing demand, and have made changes in design of their products to bring them more in line with new customers' tastes. While the interest shown by tourists also contributes to the sense of self-worth of the craftsmen, and helps conserve a cultural tradition, cultural erosion may occur due to the commodification of cultural goods.

#### Box 9: How Local Communities Can Lose Out on the Benefits of Tourism<sup>70</sup>

- Tourism may not attract sufficient visitors quickly enough to generate the quantities of revenue needed to meet the economic expectations of the community. This results from the competitive nature of tourism or the quality of resources in the communities. The inability to meet community expectations can lead to disenchantment with the touristic project programme and the belief that the site serves no useful purpose with the community, which is in turn less likely to engage in protection activities.
- Tourism can increase burdens on local populations without producing mitigating benefits. Tourism revenues often reach a different segment of the population than those who must bear the burden of diminishing resources.
- Most tourist spending – airfares, hotel and tour operators' fees – benefits foreign companies.
- Locals may live in scattered small groups or villages and communication may be difficult, limiting fair distribution of economic revenues.
- Developers may deprive locals of anticipated economic benefits, or local power relations may dictate who will benefit from tourism opportunities. For example, well-connected individuals may monopolize opportunities to serve as guides or provide transport for visitors.
- Start-up credit may be difficult to obtain. A study in Belize showed that while local investors had extreme difficulty obtaining credit to start tourism businesses, the same banks offered credit if the same investors entered into partnerships with foreign firms.
- Not all tourism activities have equal potential for community involvement. Some more sophisticated activities need specific training before a community can be involved. For example, small community-run hotel projects may be hampered by administrative and organizational problems resulting from a lack of business skills. In Mexico, a cooperatively owned and run hotel project failed because cooperative members lacked training in the necessary administrative skills to effectively run the business. In many cases providing opportunities for guiding in specialized activities such as bird-watching or river rafting is not feasible. Ground operators prefer skilled, well-educated guides from the capital city who speak English or other European languages.
- Tour companies and hotels, as a general policy, do not use local guides. In attempts to rectify the situation in some countries, tour operators and hotels are required to hire under-skilled local guides under government rules or regulations or sometimes in the form of a protected area policy. Because these countries often have few competent local guides, tour operators resent being required to use them, often seeing them as an additional financial drain.
- Because rural tourism is often seasonal, it tends not to create permanent employment. But the temporary jobs it offers may compete with other seasonal jobs such as agricultural work, leaving no net gain for the community.

The relationship between hosts and guests is also linked to opportunities that tourists should have to spend some time with their hosts. The frequent "daily excursions" and the standardization of the tourism services, especially provided by the mass tourism companies, are depriving the tourists' experiences of the human aspects. On the contrary, over the last decade a wide range of community-based tourism offers arose all around the Mediterranean countries, for instance small size tourists accommodations owned and managed by locals (such Agro-tourism, B&B) and the most recent Airbnb phenomenon: in the

<sup>68</sup> Gunn, 1988; Johnson et al., 1994; Milman & Pizam, 1988

<sup>69</sup> UNESCO, 2002 Managing Tourism at World Heritage Sites: a Practical Manual for World Heritage Site Managers. By Arthur Pedersen

<sup>70</sup> UNESCO, 2002. Managing Tourism at World Heritage Sites: a Practical Manual for World Heritage Site Managers. By Arthur Pedersen

last five years, summer travel on Airbnb has grown 353 times<sup>71</sup>. These guests are using Airbnb because staying in an individual home gives them a unique experience that they cannot get anywhere else. As stated in 2015 Summer Report, the guests “visited local coffee shops and small businesses that have not benefitted from tourism in the past, and they met community members they never would have encountered if they stayed in traditional accommodations”.

The impacts on the local population are particularly emphasized in small, insular regions. In particular, the islands of the Mediterranean host a great amount of tourist flows. A series of difficulties occur, due to the lack of a solid framework for planning sustainable tourism practices and the way these practices can be implemented. Due to mass tourism, multiple impacts occurred, especially in urban areas.

A study<sup>72</sup> examined the tourism impacts in capitals of four island territories: the city of Rhodes, the city of Calvia in Majorca, the city of Corfu, and the city of Valletta in Malta. The examined host destinations appear to have similar impacts in the economic, social and environmental aspects. The local economy's short and middle term profits from tourism has led all the examined destinations to a productivity orientation towards the tertiary sector. The high level of economic prosperity has maximized the labor force seeking for occupation in the tourism industry. Rhodes, Calvia, and Corfu are characterized by increasing urbanization. On the other hand, Valletta is being abandoned by the local population, as it happens in the historical center of Corfu and the Medieval Town of Rhodes.

The social cohesion of these urban territories has changed: local crafts, arts, traditions and customs have changed to match tourists' needs. Symptoms of social pathogens (e.g. prostitution) have appeared or increased. The social and economic classes within the local community have been transformed; trends in consumption and entertainment at a local level have changed.

## CULTURAL IMPACTS

The geographical concept of the Mediterranean Basin draws together a set of regions holding a unique cultural heritage, which comes as the result of the historical development of the civilizations that constitutes the Mediterranean culture melting pot in all its expressions, both material and immaterial. The cultural heritage, common to all Mediterranean countries, is the unifying factor for such different people and regions, beyond geographical factors. Material and immaterial impacts of tourism in the crowded Mediterranean tourist destinations are threatening their cultural wealth and authenticity, exceeding their carrying capacity.

Figure 18: World Heritage List Map, UNESCO, 2016



<sup>71</sup> Airbnb Summer Travel Report: 2015 <http://blog.airbnb.com/wp-content/uploads/2015/09/Airbnb-Summer-Travel-Report-1.pdf>

<sup>72</sup> N. Pappas, 2015. “Mediterranean Tourism: A Comparative Study of Urban Island Host Destinations”

The built environment in tourist areas includes generally densely populated urban centers as well as the ruins of past settlements. Tourism was not of course the initial driver in the development of these built environments, but it exerts a powerful influence in the patterns of the daily life in such environments (Gartner, 1996). Tourism may create a positive as well as a negative impact at significant levels in those areas where the built environment is the major tourist attraction in terms of its age, aesthetic appearance and historical interest.

A spatial effect by tourism development that affects the landscape is the second-home development, especially when it concentrates on coastal. Moreover, many agricultural lands, with traditional Mediterranean plantations as olive trees, facing the sea or are not far from coastal areas, turned into second houses built up areas. The Gime region in Turkish Republic of Northern Cyprus, for example, has experienced this process: perceiving the hills that reach over to coastal areas as common property expands the second-home development<sup>73</sup>. In addition to this, the increase in the number of tourists may force to developing additional infrastructures such as transport, increasing road maintenance efforts, organizing parking areas and fostering the provisions of water and electricity in peak seasons.

The material changes resulting from tourism not only affect the features of natural structures, but also historical and architectural heritages. In this sense, no protection of the characteristics of local architecture seen as protected in new developing areas are underlined as different important problems<sup>74</sup>. In other words, tourism negatively causes the demolition of the traditional townscapes in order to accommodate the tourism industry (Ashworth & Goodall, 1990). Tourist facilities, such as restaurants, cafes and hotels, can alter the local identity and affect the physical appearance of the coastal cities, in a negative manner, especially in historical centers.

Some of the visual pollution caused by tourism can be summarized as follows<sup>75</sup>.

- Poorly-designed hotels and other tourist facility buildings that are not compatible with the local architectural style and scale or badly integrated into the natural environment;
- Use of inappropriate building materials on external surfaces;
- Badly planned layout of the tourist facilities;
- Obstruction of scenic views by tourism-related buildings/facilities.

Examples of negative impact on the historical heritage are growing including also some fascinating cities like Venice and Barcelona

#### Box 10: Barcelona and Venice| Nobody goes there any more, it's too crowded<sup>76</sup>

Barcelona is one of the great cities on Earth is something on which most people can agree. The architecture, the fiestas, the food: it is a city with vibrancy and soul. However, as an article by Bloomberg nicely describes, it is on the horns of a tourism dilemma. The city's mayor recently elected, Mrs. Ada Colau Ballano, is looking at ways to stop the influx of visitors because, she thinks, there is the danger of becoming overrun and turning into little more than a theme park. As any visitor can attest, the narrow Gothic streets behind Las Ramblas, a tree-lined shopping promenade, can feel like rush-hour on the tube; the must-see Gaudi sites tend to be well-hidden behind deep ranks of visitors slung round cameras; and at certain times of the year the beaches can be invisible under the quilted rectangles of towels.

It was not ever thus. Bloomberg quotes economists from University of Venice, who wrote in a 2008 paper that Barcelona had cleverly used the 1992 Olympics to its advantage, sparking urban renewal and putting itself "on the map of 'cool cities'". Back then, the economists described the city's "very positive image in the media and among cultural trendsetters". Now, Bloomberg says, locals are complaining about everything from noise and litter to rising real-estate prices. In the Gràcia district, protesters recently occupied a building to prevent its conversion into a hotel. The seaside neighborhood of Barceloneta erupted in protests last summer over an explosion of short-term rentals that residents said were turning apartment buildings into 'youth hostels'. These local groups have found an ally in Mrs. Colau, an activist who led protests over mass evictions after the collapse of Spain's real-estate market.

Bloomberg offers the cautionary tale of Venice, too, which seems to be closing the transition from living-and-working town to mere visitors attraction. Its population now stands at just 60,000 compared with around 2 million who visit the town each year. This is, as the article acknowledges, something of a wrong comparison: Barcelona is Spain's second-biggest city, with plenty of other industries and big suburbs. However, it does speak to a tricky conundrum. Nearly all cities are sold on the idea of attracting tourists; many take extensive measures to lure them. But, how can those cities turn the taps off when they become overrun?

<sup>73</sup> C. KARA, 2003. Sustainable Tourism Development in Small Island Developing States. Turkish Republic of Northern Cyprus (TRNC) as a Case Study.

<sup>74</sup> Beser Oktay Vehbi, 2012 A Model for Assessing the Level of Tourism Impacts and Sustainability of Coastal Cities. <http://cdn.intechopen.com/pdfs-wm/35710.pdf>

<sup>75</sup> Inskeep, 1991, p. 345

<sup>76</sup> See: <http://www.economist.com/blogs/gulliver/2015/06/tourism-barcelona> Jun 9th 2015, 10:17 BY B.R.

When towns such as Barcelona are in danger of becoming victims of their own success, the best point to start with is deciding which kind of tourists to keep. Both Barcelona and Venice are firmly on the cruise-ship circuit; perhaps a third of the visitors to the Catalan capital arrive on a large boat. For some cities, no doubt, they are an invaluable source of income. But, for those perched at the brink of being overwhelmed, they seem like a good place to start to manage. They are less valuable than other visitors because they don't stay in hotels, and very often don't even eat in restaurants. What is more, the vibe they give to a town is somewhat frantic. They, after all, arrive with only a few hours to Hoover up all the culture, architecture and shopping they can do before moving on to the next stop on the itinerary. Perhaps it is time to initiate cruise control.

Destinations risk standardization in the effort of satisfying tourists' needs for "familiar" facilities. While landscape, cultural heritage, entertaining events, food and drinks, etc., must meet the tourists' expectations for discovery and unfamiliar desires, tourists often look for recognizable facilities like well-known fast-food restaurants and hotel chains<sup>77</sup>.

This process may affect the cultural heritage of tourism destination in what Augé<sup>78</sup> calls homogenized "non-places" where we spend so much of our time: airports, railway stations, superstores, motorways and international hotel chains. Unlike conventional "anthropological places" (the symbolic site of an altar), these "spaces of circulation, consumption and communication" exist beyond history, relations and the game of identity. In these non-places, mass-consumption takes presence in a site with no territorial features. In opposition to the pre-modern times where travels were characterized by an encounter between guests and hosts, modernity created places where personal relationships with otherness are being replaced by visual attractions.

This de-naturalization approach plus the intense urbanization is involving some of the most important cultural cities of the Mediterranean basin, putting in danger some cultural heritage sites such as the already mentioned cities of Barcelona and Venice but also the Amphitheater of El Jem (Tunisia) where the expanding urbanization of the city surrounds the Amphitheater.

<sup>77</sup> UNEP, Negative Socio-Cultural Impacts From Tourism.  
<http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFiguresaboutTourism/ImpactsofTourism/Socio-CulturalImpacts/NegativeSocio-CulturalImpactsFromTourism/tabid/78781/Default.aspx>

<sup>78</sup> M. Augé, 1995. "Non-Places: Introduction to an Anthropology of Supermodernity"

# Where sustainability stands for in Mediterranean tourism?

The concept of sustainability was applied on tourism more than twenty years ago, since the “Earth Summit” held in Rio in 1992, and in the ensuing Agenda 21 process that considered travel and tourism as one of the industries identified as having the potential to give a positive contribution to a healthier planet<sup>79</sup>. Being the tourism sector linked to a wide range of other services, agriculture and manufacturing industries, actually it offers various opportunities for promoting sustainable practices, as alternative way to develop the economy by putting in value the local resources. Sustainable tourism must be supported by three pillars: social justice, economic development, and environmental integrity. They can really give a relevant contribution to build a better future if local, private, governmental, intergovernmental and non-governmental stakeholders are able to work following the same vision, according to these three pillars.

In the next paragraphs, the most relevant issues to be tackled in the Mediterranean region have been identified, in order to set up a common understanding of the challenges to face with. This “drawing” is based on the “pictures” already described briefly in the previous chapters, in order to have a complete and updated glance of the reality as it appears. However, a great effort has been put in focusing on the most impacting and “structural” issues, in order to highlight the most promising areas where to invest in the available resources (human, financial, etc.).

## PRIMARY ISSUES TO BE TACKLED

In the previous chapter the main impacts have been identified: in this chapter the issues (i.e. the challenges) descending of such impacts will be developed. But before all, two “transversal” topics are tackled, because of their importance as basic element for ensuring the effectiveness of any strategy/policy/action: the governance and the financing.

### Governance

The main problem of sustainability is that, still nowadays, public sector and economic actors are not able to integrate the different needs in one comprehensive framework, there is no a global “tourism governing system”, involving public and private sector, not at international level (EU and Mediterranean) nor at national level – at least as far as the Mediterranean countries are concerned.

In the last decade, the so called “DMO (Destination Management Organization)” approach has started to be spread in many Mediterranean destinations, at least at municipal level, thus improving the capacity of governance of local stakeholders. But very rarely such governance frameworks are focusing their mission on the development of sustainable tourism, because the main “mover” of these cooperation schemes usually is the pure economic return in terms of arrivals and overnights, instead of the renew of the tourism pattern. Therefore, there is the need to develop a new methodological approach in governing tourism, where the quality – and not just the quantity – is the leading factor.

Most of market analysis confirm that within the concept of “quality” there are the sustainability (environmental, social and economic) components, because the most dynamic sectors of tourism demand are looking for more authenticity, are attracted by local features, are concerned about environmental externalities of tourism experience. However, the undoubtable marginality of such elements in the Mediterranean-based tourism offer is naturally reflected in available data. While observing the phenomena of the sustainability degree in the Mediterranean tourism, it is evident that there is a lack of updated and integrated data.

The need for a stable structure that permanently collects data at Mediterranean level and integrates them in new indicators is a basic need in order to improve the monitoring of the tourism sustainability in the Mediterranean, and for assessing the trends on a regional scale, and planning new policies and measures to be implemented by the Mediterranean governments in a cooperative way.

Finally the necessity for new indicators, in order to create an integrated data system, could solve the problem related to the very often “lacking” tourist data, based only on self-declarations (arrivals and numbers of overnights) coming from the accommodation owners: for instance a system that merges the indicators related to the arrivals and overnights with the

<sup>79</sup> <http://www.uncsd2012.org/index.php?page=view&type=510&nr=448&menu=20#sthash.mO7eejvP.dpuf>

water and energy consumption<sup>80</sup> can certainly contribute to build more realistic pictures and allow more reliable evaluations.

## Financing sustainability

Very crucial for the tourism sector in a wide sense, and especially for new approaches that want to increase the quality of this sector, is the issue of how to financing initiatives that can increase the sustainability of a facility/product/destination. In the current analysis, only the “grants” are taken into account, because the “investments” and the “loans” refers to complete different mechanisms and are more linked with the entrepreneurial environment, while in this work the focus concerns public-driven policies.

A short list of main existing sources of funds for tourism-related initiatives can be the following<sup>81</sup>:

- international public donors (WB, UNDP, GEF, etc.);
- foreign public bilateral donors (USAID, GTZ, etc.);
- international funds (UNWTO 10YFP Sustainable Tourism Programme, EC COSME Programme, etc.);
- national funds (e.g. Libyan Investment Authority Sovereign Wealth Fund);
- local funds (mainly from local administrations and/or tourism-related associations of economic operators);
- national laws which favor the investments (e.g. “Renovotel” scheme in Morocco, “Tourism Enhancement Act” for Turkey).

The available data<sup>82</sup> show that the Mediterranean region has a constant decrease in international private investments – due to the increasing insecurity of the region – which has been partially covered by public aid concentrated on traditional components of the tourism offer: i.e. the facilities (mainly accommodation). In general within such tourism-related initiatives (both public and private) the importance of natural and cultural assets protection, or the enforcement of a sustainable offer, are often quoted but rarely financed, and when funds are available, they don't cover all the needs and those of their proponents, because of the progressive disengagement of public resources towards such Issues.

Therefore, the need for focusing on more innovative mechanisms is evident. From the world-wide known success stories the following solutions can be outlined:

- Public-Private Partnership (PPP): the “Public-Private Partnership in Infrastructure Resource Center” (PPPIRC)<sup>83</sup> defines a PPP as “a long-term contract between a private party and a government entity, for providing a public asset or service, in which the private party bears significant risk and management responsibility, and remuneration is linked to performance”. This means that tourism offer is considered not just a mere entrepreneurial activity but also a public asset, and therefore the cooperation between public and private sector should not be an opportunity, but a must for both sides.
- Market-driven financing schemes: additional resources for funding the sustainability performance of a service/product/destination can come from the market, through the payment (on a voluntary basis or included in the retail price) of an additional – in relation with the real costs – amount devoted to conservation/restoration/mitigation measures; this contribution should be always declared when declaring the price of the tourism product, also because a rising part of tourism-related customers give an added value to this.
- Shared economy: it's gaining this more and more visible approach deals with money-for-service transfer (between supplier and customer) which is fully or partially substituted by exchange of services, which can be the same (e.g. hosting a person to be hosted in the future) or different ones (usually through a “virtual” currency that indicates the value of each service); this can be started up in different ways (bottom-up or top-down) and it's usually linked to the establishment of a “community” which shares some common principles.
- Volunteering: many young people (but also elder ones, when retired) are available to provide free-of-charge work when devoted to public-interests activities (e.g. environmental restoration, beach cleaning, etc.); these resources are not easy to manage in starting phase, but many public administrations (e.g. Park management bodies) are getting skilled on this and see tremendous effects in terms of effectiveness.

<sup>80</sup> as realized by the Plan Bleu in 2011: “Profile of sustainability in some Mediterranean tourism destinations”

<sup>81</sup> 2013, Study on financing the sustainable tourism in the Developing countries – Annex 3, appointed by the French Agency for international cooperation to Horwath HTL consulting company

<sup>82</sup> Ibidem

<sup>83</sup> <http://ppp.worldbank.org/public-private-partnership/about-pppirc>

## Issues per component

In conclusion, taking in consideration the current situation of tourism in the Mediterranean region and its weaknesses in relation with the sustainability, a list of relevant issues has been identified, distributed in four sustainability-related components (environment, society, economy and culture) and a fifth one concerning governance.

COMPONENT	ISSUES
ENVIRONMENT	Soil degradation
	Pressures (new tourism facilities buildings, overcrowding, wastes increase, etc.) on the local ecosystems and biodiversity
	specific pressures (seaside-related facilities, wastewater, marine pollution, etc.) on coastal ecosystems & biodiversity
	Water pollution caused by cruise sewage systems
	Air pollution/climate changing gases from transports and tourism facilities
	Noise pollution, esp. in urban areas and in natural environments
	Natural resources (mainly water) demand
	Energy consumption mainly based on fossil sources
	Water pollution caused by wastewater production
	Lack of binding rules (e.g. carrying capacity) assuring environmental impacts pre-assessments in tourism planning process
	Lack of "impacts mitigation mechanisms" in tourism planning
	Loss of land resources for alternative uses (agriculture, conservation, etc.)
ECONOMY	Economic leakage, i.e. unbalanced distribution of tourism-generated revenues (little share to local community)
	Low level of added value coming from local features different than the standardized ones
	Low impact of environmental-related certifications/labels on tourism demand
	Ineffective and/or unbalanced collaborations between public and private actors
	specific marketing of sustainable products is not well developed
	Obsolescence of 3S product
	Lack of proper models and tools to assess the economic impacts (both positive and negative) of tourism at local level
	Lack of resilience to climate change impact
SOCIETY	Lack of local ownership of the tourism-related business
	lack of involvement of local community in tourism planning
	Pressures on local community quality of life (e.g. conflict on resources use, overcrowding of urban spaces, etc.)
	Poor quality of generated employment (seasonal, low salaries, unqualified, often part-time...)
	"Homogenization" of shopping/food&beverage offer within the historical city centers
	superficiality of visiting experience (in particular due to lack of time for day trippers) which does not permit to meet properly the local population and culture
	unbalanced human relationships between inhabitants and visitors due to the cultural/social/economic gaps
CULTURE	"Homogenization" of shopping/food&beverage offer within the historical city centers
	Decrease of aesthetic values of historical centers
	Decrease of aesthetic values of landscapes
	Loss of local cultural identity
	Unbalanced human relationships between inhabitants and visitors due to the cultural/social/economic gaps
	Lack of knowledge / sensitiveness of visitors into the local cultural values / traditions / heritage.
GOVERNANCE	lack of governance (e.g.: lack of dialogue/cooperation between tourism stakeholders at local level) at regional (Med) level
	Lack of DMO-based governance at destination level
	Lack of stable monitoring systems on tourism flows and impacts
	Weak, partial and inconsistent monitoring indicators of tourism sector
	Gaps in enforcement/implementation of environmental conservation tools (EIAs, Protected Areas, etc.)
	Lack of integration of sustainable tourism needs in the other sectors' (e.g. transport) planning
	Few synergies (in products integration, coordinated promotion, facilities building, etc.) with other sectors (agriculture, housing, etc.)
	Low level of innovation in sustainable services/products/destinations
	(Geo)political instability and insecurity

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