Sustainable tourism in some MENA countries

Nathalie Hilmi Centre Scientifique de Monaco (<u>hilmi@centrescientifique.mc</u>)

Alain Safa Skill Partners (<u>safa@unice.fr</u>)

Brice Teisserenc, Centre Scientifique de Monaco (<u>teisserenc@centrescientifique.mc</u>)

Nicolas Peridy Université de Toulon, Léad, LIA-CNRS (<u>nicolas.peridy@univ-tln.fr</u>)

Abstract:

According to UNWFTO, 20% of world tourism is concentrated in Mediterranean countries. The wealth in natural resources of the Mediterranean coastline (beautiful landscape, climate favorable for tourism, important biodiversity, etc...) makes it the first world touristic destination. The development of the tourism sector has permitted economics gains, especially for economies on the North side of the Mediterranean Sea. Nevertheless tourism also has harmful effects such as deterioration of the environment. According to the **Plan Bleu**, in 2000, 40% of the 46 000 Km of the Mediterranean coastline are artificial and urbanized. This situation is not sustainable because the increases in touristic demand apply pressure on natural resources so that there is a risk for economic activities based on tourism. Indeed tourism depends on the environment; degradation of the natural resources has negative effects on touristic arrivals and then in revenues produced by tourism. That's why Mediterranean economies need a tourism development strategy combining economic development and preservation of the environment. Our article aims at analyzing the different effects of ecotourism in terms of revenues and employment in order to answer the following question: Can the development of ecotourism be a credible and sustainable development strategy for Mediterranean countries?

Introduction:

The Mediterranean touristic model is not sustainable. Indeed the pressure on environment is such that positive effects of tourism are insufficient to make up for negatives effects on natural resources. The existing link between tourism and environment makes necessary to implement a sustainable development strategy of tourism in order to reduce the pressure on the environment. Ecotourism appears as a mean to preserve natural resources and to benefit from positive effects of tourism. Indeed tourism represents a strong growth potential for south Mediterranean countries and sustainable tourism can be a solution making possible to create a positive dynamic for their economy. Furthermore the implication of local people in ecotourism projects can permit a reduction of poverty through employment and income generated by these projects. That's why ecotourism represents major issue for Mediterranean countries.

We first need to carry out a full diagnosis of the touristic and environmental situation in the Mediterranean basin in order to answer the question: Can the development of ecotourism be a credible and sustainable development strategy for Mediterranean countries? The development of the Mediterranean area is strongly linked to its environment which makes it the first world touristic destination. But as we said this environment is threatened by the mass tourism which applies pressure on environmental resources. The diagnosis of the situation around the Mediterranean Sea is crucial in order to understand to what extent the development of eco-tourism can be a good strategy to create economic gains and to preserve its environmental wealth.

Afterward we will analyze the different kinds of governance possible for sustainable tourism projects. Indeed as shown by **Lapeyre Renaud** *et al.* (2007), the impact of ecotourism projects varies depending on the kinds of governance. When local people are involved in ecotourism projects the economic gains are more important than when they are sideline. It would be interesting to use an econometric test to assess in what extent ecotourism implies a rise in local income and employment. We can use data concerning areas already concerned by ecotourism projects and observe the evolution of local income and employment. But the economic impact is not the only component of sustainable tourism. It is important to analyze to what extent ecotourism projects make it possible to reduce the pressure on the environment. This analysis will be dedicated both to the assessment of the current situation of ecotourism in Mediterranean and the expected gains from a development strategy of this type of tourism.

I- Tourism in the Mediterranean countries

1) Tourism in MENA countries compared to tourism in the world

The substantial growth of the tourism activity clearly marks position as one of the most remarkable economic and social phenomena of the past century. The numbers of international arrivals show an evolution from a 25 million international arrivals in 1950 to an estimated 1 billion in 2010, corresponding to an average annual growth rate of 6.5% (**Figure I**)

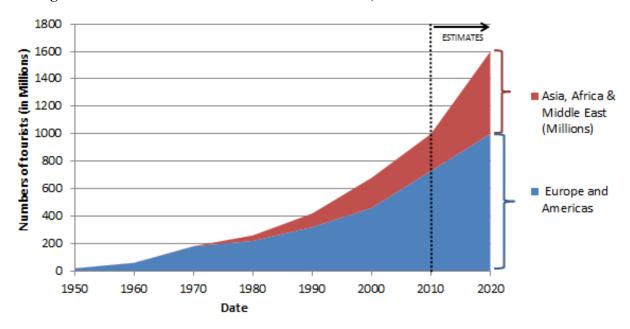


Figure I: International tourist arrivals in the world, 1950-2005

Source: World Tourism Organization

During this period, development was particularly strong in Asia and the Pacific (13% on average a year) and in the Middle East (10%) while the Americas (5%) and Europe (6%). Europe's world share of tourism declined over 10 percentage points since 1950 whereas the Americas lost 13 percentage points. Europe and the Americas were the main tourist-receiving regions between 1950 and 2000. Both regions represented a joint market share of over 95 per cent in 1950, 82% forty years later, 76% in 2000 and 70% in 2010.

As shown in Figure II, international tourist arrivals in 2013 recorded 1087 million international tourist arrivals for 1159 billion USD international tourism revenue, which grew by 38 million USD more than 2012 revenues. Europe showed the strongest growth (+5%) amid continuing economic uncertainty.

Figure II: International tourist arrivals (millions) and receipts, 2013.



INTERNATIONAL TOURIST NUMBERS GROW IN ALL REGIONS

Europe (+5%) benefited the most from the growth of tourism in the first eight months of 2013, with an estimated 20 million more arrivals in the region. Given that Europe is the world's largest tourism region with many mature destinations, a 5% growth rate is very positive. Central and Eastern Europe (+7%) and Southern and Mediterranean Europe (+6%) performed particularly well.

Asia and the Pacific (+6%) continued to show robust growth bolstered by South-East Asia (+12%) adding some ten million arrivals.

The Americas (+3%), which gained four million additional arrivals in the first eight months of the year, reported comparatively weaker results, with North America (+4%) in the lead.

Africa (+5%) where growth was by led by the recovery of North Africa (+6%), received two million extra arrivals, while in the Middle East arrivals rebounded by 7% after two years of decline.

Tourism demand depends above all on the economic conditions in the major generating markets. When economies grow, levels of disposable income will usually also rise. A relatively large part of discretionary income will typically be spent on tourism, in particular in the case of emerging economies. A tightening of the economic situation on the other hand, will often result in a decrease or trading down of tourism spending. In general, the growth of international tourism arrivals significantly outpaces growth of economic output as measured

in Gross Domestic Product (GDP). As indicated by the UNTWO, the tourism grew on average 1.3 times faster than GDP.

In the World Tourism Organization's long-term outlook and assessment of the development of tourism up to the first 30 years of the new millennium, it projects that international arrivals are expected to reach nearly 1.8 billion by the year 2030 (See Figure III).

Of these worldwide arrivals in 2030, the strongest growth will be seen in Asia and the Pacific, where arrivals are forecast to increase by 331 million to reach 535 million in 2030 (+4.9% per year). The Middle East and Africa are also expected to more than double their arrivals in this period, from 61 million to 149 million and from 50 million to 134 million respectively. Europe (from 475 million to 744 million) and the Americas (from 150 million to 248 million) will grow comparatively more slowly.

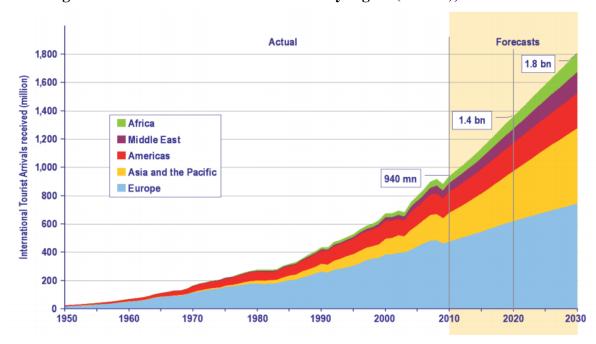


Figure III: International tourist arrivals by region (million), 1950-2030.

Source : World TourismOrganization

2) Importance of tourism for MENA Countries

Concerning MENA countries in 2013, arrivals in the Middle East (-9%) and North Africa (-15%) have been very seriously affected by the "Arab Spring".

Results varied across individual destinations. The United Arab Emirate of Dubai grew at a robust pace of 11%, while Palestine (+11%) and Oman (+8%) also reported healthy growth. Other destinations faced declines. The region's top destination Saudi Arabia reported 7% less tourist arrivals than in 2012. Egypt posted double-digit growth in the first half of the year, but saw a significant drop in arrivals in the second half due to renewed political tension in the country, leading to an overall decrease of 18%. Lebanon (-7%) and Jordan (-5%) continued to suffer from the conflict in neighboring Syria.

We consider that 2011 is an exceptional period which doesn't give us the real potential of tourism in MENA countries. Therefore, we limit our empirical study to 2010.

So, the Middle East was the fastest growing region in 2010 (+14%), but this followed a significant drop in 2009 (-4%) in link with 2008 financial crisis. Boosted by intraregional travel favored by high oil prices, the region reached 60 million arrivals in 2010, up 7.5 million on 2009 and 5 million compared with the peak year of 2008 (**See Figure IV**). International tourism receipts are estimated to have increased as well, by 14% in real terms to US\$ 50 billion. Almost all destinations recorded double-digit increases in arrivals, such as: Syria (+40%), Jordan (+20%), Egypt (+18%) and Lebanon (+17%).

As we can observe (See Figure IV and Figure V), the trend in recent years in international tourist arrivals was higher in Middle East and North Africa countries. The strong tourism increase recorded by MENA countries benefited from a growing economic wealth and the development of new tourism infrastructure adapted to growing international demand, especially European, but also intra-regional. So, international Tourism is shown to be an important economic driver, bringing foreign exchange and helping to ease the pressure on the balance of payments.

The substantial growth of tourism activity is clear in the MENA region. The number of international arrivals shows an evolution from 18 million international arrivals in 1990 to an estimated 80 million in 2010. Therefore, we observe the same phenomenon with the rise in International tourist receipts increased from 1990 to 2010. Figure V shows an evolution from 7 billion US\$ of receipts in 1990 to an estimated 60 billion US\$ in 2010.

1990 1995 2000 2003 2004 2005* 2008 2009 2010 8.398 7.271 12.769 North Africa 10.24 11.094 13.73 16.611 17.6 18.7 Middle EAST 9.63 13.704 24.183 29.538 36.265 39.023 55.237 52.9 60.9

Figure IV: International tourist arrivals by region (million), 1990-2010.

Source: By authors from UNWTO data.

Millions US\$ 2003 1990 1995 2000 2004 2005* 2008 2009 2010 North Africa 2.333 2.867 3.823 4.938 6.093 6.993 10.445 9.597 9.774 Middle EAST 5.124 10.905 17.567 22.459 25.474 27.557 39.98 42.022 50.293

Figure V: International tourist revenue by region (millions US\$), 1990-2010.

Source: Calculated from UNWTO data.

Thus, we can confirm that the Mena countries have real potential in tourism activities. The most attractive countries by number of International Tourist Arrivals in descending order and without the GCC countries are Egypt, Morocco, Tunisia, Syria, Jordan and Lebanon (See Figure VI).

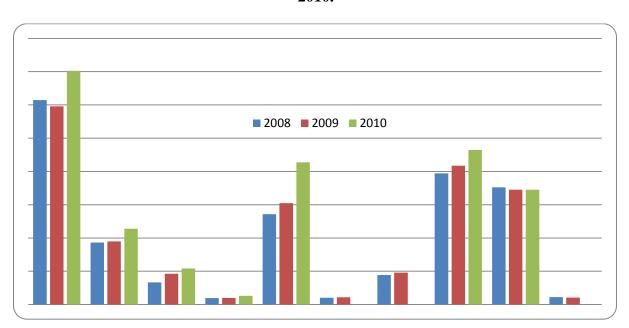


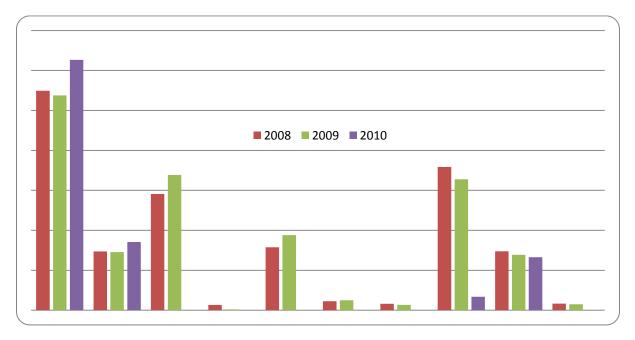
Figure VI: International tourist arrivals in MENA region by country (million), 2008-2010.

Source: By authors from UNWTO data.

Thus, we observe high amounts of International Tourist Receipts in these countries. The most attractive countries by the amount of International Tourist receipts in descending order

and without the GCC countries are Egypt, Morocco, Lebanon, Jordan, Syria, and Tunisia (See Figure VII).

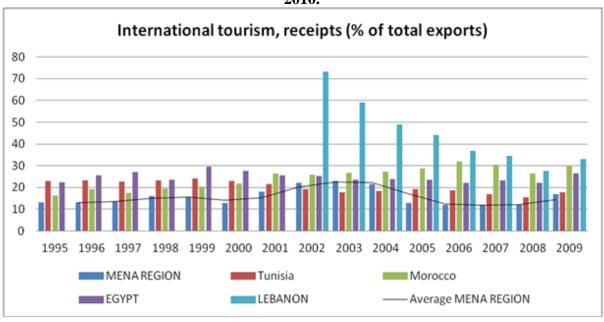
Figure VII: International tourist receipts in MENA region by country (billion US\$), 2008-2010.



Source: By authors from UNWTO data.

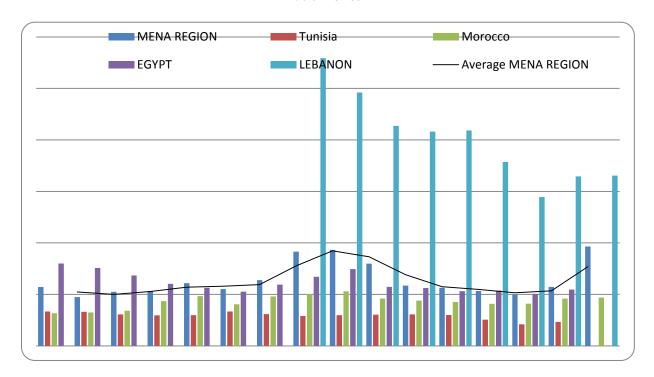
So, the International tourism receipts have a crucial socio-economic impact in these countries. The amount of the receipts designs the kind of tourism and the added value of the International Tourist Arrivals, especially in Lebanon. International tourism receipts represent more than 30% of total exports and 15% of total imports. (See Figure VIII and Figure IX).

Figure VIII: International tourist receipts in MENA countries (% total Exports), 1995-2010.



Source: By authors from UNWTO data.

Figure IX: International tourist expenditures in MENA countries (% total Imports), 1995-2010.



As we can see, it's very clear that coastal tourism plays a key role in Mediterranean countries from the MENA region. Exceptions are Syria and Saudi Arabia, where the former is attractive for cultural and archaeological reasons, and the latter gets religious pilgrimages. So, we can conclude that the most important aspect of tourism is the coastal one as we can observe in Mediterranean countries, in the Mena region and in southern Europe. Tourism is no longer a complementary source of currency; it became an economic growth model with its financial, and economic but also social and cultural impacts.

The Mediterranean is currently the worlds most popular and successful tourist destination with more than 120 million visitors every year since 2005. Its climate is perceived, by many tourists as idyllic and delightful. It has remained seductive to north European visitors since the habit of escaping from the cold and dark of the northern winter became well established by the upper classes last century.

Several countries with Mediterranean shorelines, including Spain and France are now among the most visited countries in the world and in these countries international tourism receipts account for just over 2% of gross domestic product. In Greece 10% of total employment is in the tourist industry.

There is large scale capital transfer from the tourist demand areas of North-West Europe to the generally poorer Mediterranean countries. The Mediterranean region has long been attractive to tourists because of its perceived good climate. The Mediterranean region can justifiably claim to be the focus of the modern tourism. The tourism industry is dependent on

political, economic and social changes so the probability of climate change adds another element of uncertainty to planning future developments. Tourism remains the most important economic activity, especially in the MENA region. In fact, tourism is by far the largest sector of the marine and coastal economy while primary activities, agriculture and fisheries, are struggling to maintain themselves.

II- The tourism-development relationship and problems for sustainable development

This section is dedicated to investigating the most important economic, social and environmental effects of tourism in Mediterranean countries. These include both positive effects (on economic growth, employment and balance of payment) and negative effects (over-specialization, leakages concerning tourism receipts as well as social and environmental problems due to conventional tourism). This analysis will lead to question the limits of conventional tourism and the need for new tourism initiatives related to sustainable development.

The first subsection focuses on the main positive economic effects of conventional tourism, mainly economic development. The second subsection will investigate the main economic, social and environmental negative effects of tourism.

1) The contribution of tourism to economic development

The most direct effect of tourism is related to its impact on growth and development. The argument is very often used by economists and policy makers as a means to develop tourism, especially in Mediterranean countries. Although there are a significant number of studies which have already investigated this question, there is still a lack of literature concerning Mediterranean countries specifically. Consequently, we propose an econometric analysis dedicated to assess to what extent tourism positively contributes to GDP per capita in these countries in recent years. Considering the lack of data for Syria and Monaco, 19 countries are included in this analysis, namely Albania, Algeria, Bosnia, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Montenegro, Morocco, Slovenia, Spain, Tunisia and Turkey. The time period ranges from 1995 to 2012. The model specification relies on the Barro regression, which can be developed as follows:

$$\begin{split} GDP_{it} = & a_0 + a_1 TOUR_{it} + a_2 INNOV_{it} + a_3 OPEN_{it} + a_4 GOV_{it} + a_5 AGR_{it} + a_6 SPE_{it} + \alpha_i \\ & + \beta_t + \varepsilon_{it} + \end{split}$$

Where GDP corresponds to the GDP per capita in Mediterranean countries (source: World Bank Database). TOUR denotes tourism which has been measured by the inflows of tourists and alternatively tourism revenue (source: World Bank Database). A positive parameter estimate is expected since tourism contributes to GDP. INNOV reflects the role of innovation and technical progress for economic growth and development. The Solow model expects a positive contribution. Innovation is measured by the share of high-tech exports in total exports. OPEN is a proxy for openness. In both traditional and recent theories of international trade, it is expected that openness leads to more efficient uses of resources, which leads to additional growth and development. However, some empirical studies have often questioned this argument (refer for instance to the Dutch disease argument). The present model will thus test whether Mediterranean countries have taken advantage of openness to speed up their economic development. Openness is measured by the import plus export ratio as a percentage of GDP (source: World Bank Database). Government spending (GOV) is theoretically considered as an economic distortion which may lead to growth losses.

However, empirical analyses provide mixed results, depending on whether government spending can lead to useful and efficient public investment. Consequently, the sign of the corresponding parameter estimate is a priori unknown and must be empirically tested. It is measured here as per capita government spending in constant price (source: Heston et al., 2012). AGR denotes total exports of agricultural products (FAO stat). Finally, specialization SPE is proxied by the Herfindal-Hirschman concentration index applied to exports (source: Unctadstat). Although the theory of international trade is ambiguous concerning the relationship between specialization and economic development, some recent empirical analyses shows that more diversification may be favorable to GDP/capita (Ben Hammouda et al., 2007).

In order to choose the appropriate panel data estimator, several tests are implemented. First, the Lagrange Breush-Pagan is significant. This suggests that a random effect model is more appropriate than a fixed-effect model. Second, the Pesaran autocorrelation test suggests an absence of autocorrelation whereas the Breush-Pagan/cook-Weisberg test shows problems due to heteroskedasticity. This leads to use a White-corrected GLS estimator, which provides the following results (Table I).

Table I: Estimation Results

	Tourist inflows		Tourism receipts		
	parameter	SD	parameter	SD	
TOUR	0.0001***	0.00004	2.57e-07***	4.07e-08	
AGR	0.00003***	6.02e-06	0.00002***	5,.20e-06	
SPE	-24050.6***	3151.3	-22170.0***	3141.4	
INNOV	230.05***	34.60	278.43***	33.29	
OPEN	65.818***	15.408	44.580***	15.190	
GOV	979.905***	162.80	1066.934***	154.31	
Constant	4330.67***	1288.7	3872.22***	1304.26	

^{***:} significant at 1%-level

This table shows that tourism significantly and positively contributes to GDP per capita in Mediterranean countries. In addition, the other key determinants are innovation, trade openness, agriculture as well as the role of the state (government spending). However, the results also show that the specialization of Mediterranean countries is detrimental to development.

Additional results may be provided for a sample of three different Mediterranean countries, i.e. Croatia, Spain and Egypt, for which tourism is a key component of their economy. Table II presents the estimation results using tourism receipts as the independent variable.

Table II: Estimation Results for selected Mediterranean countries

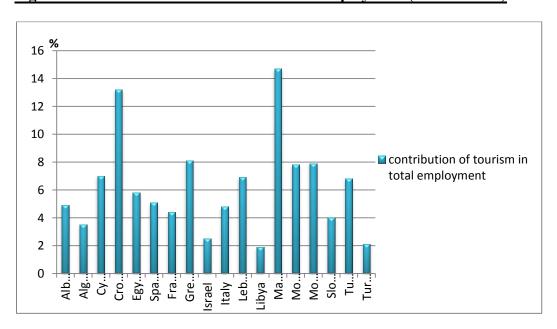
	Croatia		Spain		Egypt	
	parameter	SD	parameter	SD	parameter	SD
TOUR	5.68e-07***	2.24e-07	1.35e-07***	5.24e-08	8.62e-08***	3.52e-08
AGR	0.0007	0.0001	-0.00003**	0.0001	0.0007***	0.0001
SPE	6315.79	6557.69	-	-	-3239.1**	1512.4
INNOV	11.337	128.85	-	-	-	-
OPEN	22.462	24.499	397.76***	55.69	-20.63***	6.94
GOV	-685.93***	237.66	957.70	710.27	-683.35***	222.26
Constant	16552.79***	3352.42	1999.0	6360.1	15031***	2127.2

***: significant at 1%-level; **: significant at 5%-level

This table clearly shows that for these three countries, a rise in tourism revenue leads to an increase in GDP/capita. Consequently, tourism is a key vector for economic development. However, the other variables are generally less significant than for the whole sample because of a much smaller number of observations. In addition, some parameter estimates are not presented because of multicollinearity problems. Having said that, there are some differences between Croatia and Egypt on the one hand and Spain on the other. For example, in Spain, government spending and openness positively contribute to GDP/capita whereas in Egypt or Croatia, this relationship is negative or insignificant. There is thus a difference between developed or emerging economies in terms of development determinants.

Whatever these differences, tourism remains for all countries a positive key determinant for economic development. In addition, there are other positive economic effects of tourism. These include employment and balance of payment and spillover effects. Starting with employment, Figure X shows the direct contribution of tourism in total employment. It is striking to show that for most Mediterranean countries, tourism accounts for more than 5% of total employment. This proportion is even greater in Malta (14%), Croatia (13%), as well as Greece, Montenegro and Morocco (8%).

Figure X: Contribution of Tourism in Total Employment (direct effects)



Source: World Travel and Tourism Council.

With regard to the balance of payment, Table III shows that in Montenegro, Albania, Croatia, Cyprus, Egypt, Greece, Morocco and Lebanon, tourism accounts for more than 20% of total exports. This contribution is crucial since it makes it possible for these countries to fill a significant part of trade deficits. In this regard, Table III shows that this share as a percentage of trade deficit is greater than 100% in Spain and Croatia, and equal or greater than 50% in Albania, France, Israel, Malta, Cyprus and Greece. More generally, this tourism revenue makes it possible to increase the tax receipt for governments.

Table III: The contribution of tourism revenue to the balance of payments

Pays	Trade deficit 2012 (millions dollars US at current prices)	Tourism receipts 2012 (millions dollars US at current prices)	Trade deficit covered by tourism receipts
Albania	-2 940	1 623	55,7%
Croatia	-8 461	8 865	104,8%
Cyprus	-5 556	2 709	48,8%
Egypt	-39 803	10 823	27,2%
France	-105 707	63 530	60,1%
Greece	-27 718	13 313	48%
Israel	-12 251	6 225	50,8%
Lebanon	-16 330	6 298	38,6%
Malta	-2 348	1 451	61,8%
Montenegro	-1 865	860	46,1%
Morocco	-23 426	8 491	36,2%
Spain	-42 088	63 198	150,2%
Tunisia	-7 436	2 931	39,4%
Turkey	-84 083	32 249	38,4%

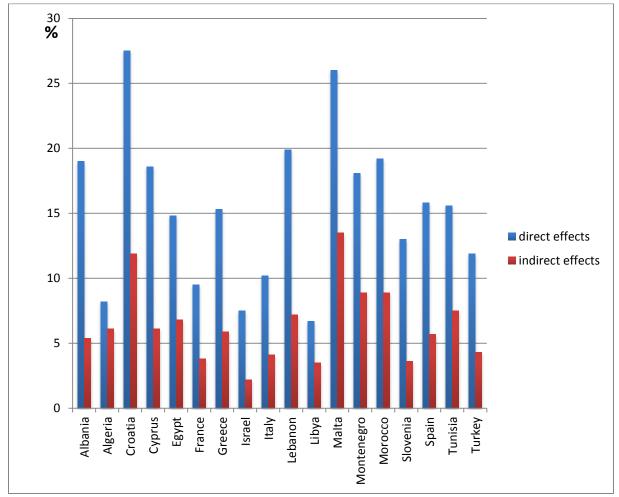
Source: World Bank and WTO

Our figure does not take into account Syria (tourism data is incomplete), Libya (positive trade balance), Italy (positive trade balance), Monaco (tourism data incomplete). Otherwise our figure takes into account trade balance of goods (without services).

A third positive effect is related to spillover effects. These are due to the relationship between tourism and the other industries in a given country. First, tourism leads to an increase in demand for local firms. For example, handicraft or agriculture takes benefit for both the demand increase from touristic firms (hotels) and tourists. This additional demand makes it possible to create new jobs and thus new revenue sources. Agriculture directly takes advantage of this by filling the demand needed by hotels and other tourism infrastructures. This leads to an increase in agricultural production. The rise in total demand also makes easier the development of scale economies for local firms and feeds private investment.

Two examples can be chosen in order to illustrate spillover effects due to tourism. The first is the breakdown between the direct and indirect contribution of tourism for GDP. Figure XI shows that the total contribution, which includes the indirect effect, is close or greater than 20% in many countries, namely Albania, Croatia, Cyprus, Lebanon, Malta, Montenegro and Morocco. It is also striking to observe that indirect effects exceed the direct effects in most countries.

Figure XI: The contribution of tourism to GDP: comparing direct and indirect effects



Source; WTTC (2014)

As a second example, Figure XII distinguishes the direct and indirect impacts on employment. In most countries, indirect employment effects are greater than direct effects, especially in Albania, Cyprus, Croatia, Spain, France, Lebanon, Morocco, Slovenia, Tunisia and Turkey. Overall, the contribution of tourism to total employment (direct plus indirect effects) is close to or exceeds 20% in Croatia, Malta, Cyprus and Lebanon. It is also greater than 15% in Albania, Spain, Greece, Morocco and Montenegro.

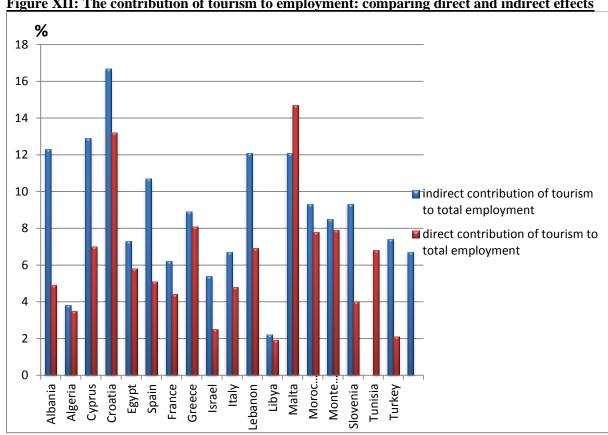


Figure XII: The contribution of tourism to employment: comparing direct and indirect effects

Source: WTTC (2014)

As a conclusion, the benefits of tourism are considerable for many Mediterranean countries in terms of growth, development, employment and trade. However, as sub-section 2 shows, tourism also raise significant problems, especially in social and environmental issues.

2) Economic, social and environmental problems due to tourism

Although tourism has undeniably positive effects in terms of growth and employment, it is important to note that the development of tourism can have negative consequences for the Mediterranean countries. We will analyze these negative effects through the three pillars of sustainable development; environmental damage, social consequences and the economy.

Environmental consequences

The strategy for tourism development in Mediterranean countries is based on research of short-term profit by the steady increase in tourist arrivals. This irrational development of tourism in the Mediterranean countries exerts significant pressure on the natural resources of the Mediterranean countries. This pressure is especially important on the shores of the Mediterranean Sea due to the orientation of the Mediterranean seaside tourism (source: Satta Alessio, 2004). The environmental damages caused by tourism are numerous and we will use the classification of United Nations Environment Programme (UNEP) to analyze it. First, tourism exerts significant pressure on natural resources. Indeed, tourism infrastructures (hotels, golf courses, restaurants, water sports) are high consumers of energy, including water and energy. In addition, the seasonality of Mediterranean tourism (source: UNEP, 2005) by lagging peak consumption of resources, creates a conflict between the tourism sector and local populations. During seasonal peaks, some Mediterranean countries (including the countries of the south shore) face increased water consumption from the top tourism sector from the available water which reduces the ability to access resources for local populations. This peak consumption phenomenon also applies to the energy that sees its consumption increased significantly during the summer, mainly due to the energy consumption of luxury residences. Building materials, including sand and wood, are also subject to high pressure. It is true that tourism in many Mediterranean countries is in the development stage. This causes a high consumption of sand and wood for the construction of tourist infrastructure (source: UNEP, 2005). The problem is that the removal of the sand leads to an erosion of sand dunes and led to the destruction of coastal ecosystems. It is the same for timber extraction which causes a harmful deforestation for both flora and fauna.

The second category of environmental damage identified by UNEP is pollution. Indeed, as with many economic activities, increased tourism activity causes an increase in pollution. This pollution obviously includes GHG emissions coming mainly from transport, accommodation and water activities. Waste generation is another consequence of tourism and contributes to environmental damage caused by the sector. Moreover the discharge of waste in nature (at sea or on land) has serious consequences on wildlife and marine life and land. The third type of pollution identified by UNEP is the artificial coastline. Indeed, while this pollution is not measurable, it is no less significant that the high concentration of tourist facilities on the Mediterranean littoral generates significant visual pollution. This will cause on the one hand, an increase in the pressure on natural resources and, on the other hand, a decline in the attractiveness of the Mediterranean landscape for tourists and therefore a decline in attendance, and thus receipts.(source: UNEP, 2005).

To end the discussion of environmental impacts, we will look at the physical impacts generated by the tourism sector. This is the degradation or even destruction of ecosystems. Irrational coastal urbanization and overexploitation of beaches strongly degrades the Mediterranean coastal ecosystems. This degradation is illustrated by habitat fragmentation and erosion of the coastline. Indeed, the concentration of tourist facilities on the beaches and along the coasts forces many species such as marine turtles, to change their place of habitat and spawning. Moreover, this concentration will also destroy the natural protection of the beaches and affect hinternlands (source: CAS/ASP, 2003). All the environmental consequences that we have just mentioned will have the common consequence of biodiversity loss which has important consequences for Mediterranean societies. This will reduce food availability in the Mediterranean countries (due to reduced fish stocks), but also a reduction in tourist arrivals and therefore revenues generated by the sector.

Social effects

The social consequences of tourism are complex to analyze. This is because they are subjective and therefore cannot be measured (Denais Laurent, 2007). We can distinguish three major impacts on the social situation in host countries (countries receiving international tourists). First of all is cultural erosion which is due to the growing phenomenon of standardization. We can explain this by the fact that local producers adapt production for tourists. This denigrates traditional production which leads, in the long term, to the degradation of cultural heritage. Cultural erosion is also caused by the admiration of foreign cultures by local people (mostly youth) vis-à-vis the tourists. The young host countries envy the lifestyle of tourists and therefore will imitate what will increase the degradation of cultural

heritage. Tourism is obviously not the sole cause of this cultural erosion but contributes greatly. The reverse can also occur, that is an increase in the sense of community could be reinforced by the highlighting of local heritage to attract tourists. This may also encourage local governments to preserve cultural heritage. However, there is a risk that increased cultural demand (religious ritual, tradition) leads to a commoditization of this cultural heritage (Denais Laurent, 2007).

Another social consequence of tourism is the risk of competition between tourism and other sectors of domestic activities. This competition could lead to conflict. Indeed, the development of tourism will cause an increase in the construction of tourism infrastructure and therefore demand in the property market. This increase in demand will lead to an increase in rents and buildable land and reduce the ability of local people and businesses to access local land. More pressure on the housing market means a sense of injustice can be born among local populations vis-à-vis tourism. This feeling is the result of inequalities between domestic and foreign workers in employment levels in the sector. Tourism jobs reserved for local workers are generally low skilled and low paid jobs while management positions are allotted to foreign workers (Piguemal Pierre, 2010). It is not possible to mention the social consequences of tourism without mentioning the problems related to these excesses. We speak in this case of sex tourism and drugs that have adverse consequences for local economies in that this type of tourism tends to favor the creation of prostitution and drug cartel networks. Note, however, that social consequences are not only negative. Indeed, tourism can contribute to improving the living environment when it entails the construction of infrastructure that will benefit the entire population. In order to attract tourists, it is necessary to invest in health infrastructure, improving roads and building security. These investments then benefit local people and help improve their welfare (source: Vellas François, 2011).

- Economic consequences

As we have seen in the previous subsection (2.1) tourism has a positive impact on GDP growth and employment. However, it is important to note that tourism also generates problems economically. Indeed, two problems arise: specialization and the phenomenon of leakage.

The positive impacts of tourism on growth and domestic employment appear as an incentive for the Mediterranean countries to specialize in tourism. However, too much specialization in tourism submits the local economy to various risks. First, the instability of tourism demand makes equally unstable income generated by this activity (Source: Ashley Caroline et al. 2007). Indeed, tourism demand depends on many external factors such as weather hazards, climate change, political instability, terrorist attacks. The manifestation of these factors leads to a reduction in the number of tourist arrival and therefore revenues. Other factors, such as the economic situation of the country of origin of tourists or the exchange rate, influence tourism demand. Too much specialization in tourism will also lead to another type of addiction. This is the dependence of large international tour operators. This dependence is a problem because there is a difference of interest between local communities and the tour operators. Indeed, if governments want to develop domestic tourism it is in order to develop the local economy and thus reduce poverty (source: Ashley Caroline et al. 2007). While the objective of tourism's multinational is the search for short-term profits without taking into account the poverty-related requirements. We also were talking about the tourism trainings effects that have a positive effect on the local economy. It is important to note that these trainings effects can also be detrimental to the local economy. For example, the influx of tourists will lead to an increase in demand for food and therefore an increase in their prices. This price increase reduces the real income of the local people. . Another example is a rise of property's prices and land that reduces the ability to access the property for local communities (source: N. E. Luvanga, Joseph L. M. Shitundu, 2003).

The phenomenon of decreasing tourism receipts corresponds to the reduction in tourism revenues collected by the local economy. This has negative consequences for the economy because the flight of tourism receipts thus leads to a decline in revenue but also to linkages generated by this sector. Although the causes of these leaks are numerous, principles are the inability of the local production system to meet demand from tourists and dependence concerning multinational firms of tourism. The inability of local economies to meet tourism demand will lead to a rise in imports which reduces the economic benefits of tourism. For example, in the development stage of tourism, major investments are needed to build the necessary infrastructure for tourism. However, materials and labor needed for the realization of these facilities are not always present in the required quantity (N. E. Luvanga, Joseph L. M. Shitundu, 2003). In addition, these leaks can also be caused by the difficulty of local producers to meet the demand of tourists. This therefore leads to an increase in the propensity to import of tourism enterprises in order to satisfy tourists, even if this leads to reduce the beneficial impacts of tourism to the local economy. But this tendency is not always the result of the inability of local producers to meet demand. Indeed, the search for the lowest price often leads international companies to prefer buy goods abroad than on the local market (source: Ashley Caroline, 2007). This phenomenon of leaks is exacerbated by the dominance of multinational corporations in relation to other tourism stakeholders. This stems from the fact that in developing countries, local firms do not have sufficient capital to build tourism infrastructure master or the transport of international tourists. Therefore, it is the international tourism business which accounts for a large share of the profits generated by tourism. This dominance is reinforced by new types of tourist offers; all-inclusive offers. These offers allow consumers to pay the full travel in their home country. This reduces the opportunities for exchanges between tourists and local producers. In addition, local businesses reach only a small part of the price paid by the consumer (N. E. Luvanga, Joseph L. M. Shitundu, 2003).

This section has allowed us to analyze the impacts of tourism in the Mediterranean countries. We emphasize that tourism has undeniable positive effects in terms of growth and employment. However, tourism also causes damage of an environmental point of view, social and economic. It is therefore essential to develop a more friendly tourism environment. This will continue to enjoy the benefits of tourism while reducing the negative effects.

III- Can sustainable tourism strategy be a solution for the Mediterranean countries? Everywhere or where?

1) Sustainable tourism and governance

Mediterranean governments understood about the necessity to promote sustainable development. In 2001, 21 Mediterranean countries who have signed the Barcelona agreement decided to set up one Mediterranean Strategy for Sustainable Development (MSSD). This MSSD is created by the Mediterranean Commission on Sustainable Development (MCSD) which stems from the Mediterranean action plan (MAP). The Plan Bleu set up as part of the MAP aims to preserve Mediterranean Sea and its seaboard. In this regard, the preservation of the environment is a crucial topic in the Mediterranean development strategy. Indeed, the economic gains are depending on governance mode. So we understand that promoting ecotourism is a good way for the development of Mediterranean economies, but it is also

important to incite the ecotourism type which leads to economic and social gains for local people. As shown by Lapeyre Renaud et al. (2007) and Dehoorne Olivier and Transler Anne-Laure (2008), it is important to involve local people in ecotourism projects. The Mediterranean sustainable development strategy must consider the development of sustainable tourism.

One of the main parts of the coastal activities is *tourism*. How to make it being *sustainable* is the important question of the environmentally oriented modern world. This principle designates a long-term process of decision-making, which should be improved on continuously basis. It should aspire to reach the equilibrium between development and the protection of the environment. Basically, sustainability can also be defined as way of thinking, which allows conserving and improving the ecological state of the coastal areas by avoiding depletion of natural resources. The concept is becoming more and more popular among different people nowadays. Thus, people are trying to follow this idea in all spheres of their life. Tourism is no exception and, so there have occurred such alternatives to the "classic" tourism as "nature-based tourism", "cultural tourism" and "ecotourism". The growth of sustainable tourism is on continuous stage and it is possible to affirm that it will be of the great demand in the nearest future.

Land and sea coexist and cannot be separated from each other. The coastal line is an important boundary, which connects those processes operating both on land and in the body of water. The flow of water from the land-based sources carries the sediment and pollutants into marine ecosystem. This process is not something that occurs in one particular country. It is something that happens all around the world. However, this process can be overseen. In current research, we intend to examine who is responsible for the management of the Mediterranean coasts. The governance as well as legislative framework, which form the basis for proper coastal management, should be acknowledged. EU and non-EU countries of the Mediterranean Sea vary between each other due to their own political, economic, social and cultural aspects.

In respond to the occurred pollution challenges, the concept of Integrated Coastal Zone Management (ICZM) was born in 1992 during the Earth Summit of Rio de Janeiro. What do these four words mean? The European Commission provides the following explanation: "ICZM is a dynamic, multidisciplinary and iterative process to promote sustainable management of coastal zones". The word "integrated" means that all the stakeholders are involved in the process of decision-making on every level: from the local fisherman to the national government. They keep each other informed, participate in different projects together and cooperate during this work. Moreover, important aspects such as the environment, economy, society, culture and recreation should interact between each other in order to reach a balance. All stake holders across the different sectors should be involved to ensure broad support for the implementation of management strategies. Areas of cooperation between stakeholders should comprise such instruments as information collection, planning (in its broadest sense), decision-making, management and monitoring of project implementations. ICZM coordinates and combines all the activities affecting the coastal zone. It is supposed to contribute to mitigation and adaptation of climate change. Consequently, the meaning and purpose of coastal zone management has been broadened. Now it is a tool for the sustainable development for human and natural resources in coastal areas. This concept can be applied to any country that has a coastline.

The Integrated Coastal Management (ICZM) approach has developed and then put into practice in response to all the problems related to the development of sustainable coastal

tourism. ICZM could also be defined as a dynamic process of the sustainable management and use of coastal zones simultaneously taking into account the fragility of coastal ecosystems and landscapes, the diversity of activities and uses, their interactions, the maritime orientation of certain activities and uses and their impact on both the maritime and land elements. In 1995, UNEP claimed that the basis of ICZM is the "comprehensive understanding of the relationships between coastal resources, their users, uses, and the mutual impacts of development on the economy, society and the environment". Clark () gives a summary of the ICZM principles. Amongst the most important ones: Firstly, the coastal area are a unique resource system, which requires special management and planning approaches, while water is the major integrating force in coastal resource systems. Secondly, conservation of natural resources for sustainable use is a major goal of coastal resource management as well as important part of ICZM programs. Moreover, all levels of government within a country must be involved in coastal management and planning. The ICZM approach offers a good framework within which the principles of sustainable tourism development can be applied together. Therefore, coastal tourism can be enhanced by ICZM. Such an "alliance" that ICZM and tourism form can produce the best solutions to the conflicts between coastal tourism and other marine and terrestrial sectors. Therefore, it helps improve cooperation between coastal tourism and other coastal sectors.

In order to become sustainable, coastal tourism requires combinations of different measures (stakeholders' participation and promotion sustainability concept among tourists). Among the most influential environmental organizations, it is generally accepted that the ICZM concept, being applied for the tourism development purposes, is of great significance in the Mediterranean region. Furthermore, it is clear that this concept is as valuable as it is profitable both for human activities and natural health. Being gathered under Mediterranean Action Plan, countries' governments of the Mediterranean basin have to manage tourism industry, improve environmental state and apply sustainable management tools for the coastal zones.

2) What is ecotourism?

Before analyzing sustainable tourism and its impacts, it is necessary to define clearly the concept of ecotourism, because there is no consensus to define it. Some definitions insist on the environmental notion (ecotourism is a form of tourism which permits to preserve natural resources) while other definitions insist on the social component of tourism. In 1983 Hector Ceballos-Lascurain laid the foundations of the ecotourism concept. Its definition, such as given by the International Ecotourism Society, considers that ecotourism is a form of tourism which respects the environment and K. Ziffer (2000) added the social component in his definition. The literature review highlights an important number of different definitions which make necessary to define clearly this concept in order to take into account all forms of ecotourism in our study.

Conclusion:

Finally, tourism is crucial for the development of the Mediterranean region in general and particularly for the MENA countries. But tourism has also deleterious environmental, economic and social impacts. That is why a sustainable tourism strategy should be implemented and ecotourism can be a long-term solution. But this concept still needs to be clearly defined before studying what kind of ecotourism can be adapted to the Mediterranean countries. That will be developed in further research.

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