







Union for the Mediterranean Union pour la Méditerranée الاتحاد من أجل المتوسط

## Co-Evolve4BG

# Tourist Well-being and Infection Control in Mediterranean

Mediterranean Scale -

The present document has been produced with the financial assistance of the European Union under the ENI CBC Med Program. The contents of this document are the sole responsibility of *National Institute of Marine Sciences and Technologies* (Tunisia) and can under no circumstances be regarded as reflecting the position of the European Union of the program management structures.

#### **OVERVIEW**

The present document was produced in the framework of **Co-Evolve4BG** project "*Co-evolution of coastal human activities & Med natural systems for sustainable tourism & Blue Growth in the Mediterranean*" in relation to Threats and Enabling Factors for maritime and coastal tourism development at a national scale" Co-funded by ENI CBC Med Program (Grant Agreement A\_B.4.4\_0075).

This document constitutes the **Deliverable 3.1.1.7** (Tourist Well-being and Infection Control in Mediterranean-Scale Emergency Situations) of the **Activity 3.1.1** (Threats and enabling factors at Mediterranean scale: Med scale analysis) under the **Output 3.1** (Integrated analysis of Threats and Enabling Factors for sustainable tourism at MED scale) of the project.

## REVIEW

#### **Authors**

Rihab RABEI, Master's degree Faculty of Humanities and Social Sciences of Tunis Azza GHRAM, PhD Faculty of Humanities and Social Sciences of Tunis

#### **Reviewers**

Harry COCOSSIS, PhD International consultant

Martina BOCCI, PhD t-ELIKA, Venice – Italy

Hatem KANFOUDI, PhD National Engineering School of Tunis

#### Editor

#### Béchir BEJAOUI, PhD

National Institute of Marine Sciences and Technologies <u>http://www.instm.agrinet.tn/index.php/fr/</u>

Arnaldo Marin ATUCHA, PhD Biology University of Murcia https://www.um.es/

#### **Contributors to the report**

Béchir Béjaoui, Khouloud Athimen, Moez Shaiek, Mounir Jarraya, Giuliano Tallone, Erica Peroni, Cristina Culiani, Carolina Pozzi, Serena Muccitelli, Stefano Magaudda, Paraskevi Chouridou, Maria Chamitidou, Savvas Chrysoulidis, Giorgos Gkiouzepas, Ioanna Papaioannou, Dimitris Papadopoulos, Arnaldo Marin Atucha, Nuria Garcia-Bueno, Pedro Martinez-Baños, Nahed Msayleb, Sana Abi Dib, Myriam Lteif, Myriam Ghsoub, Anthony Ouba, Talal Darwish, Amin Shaban, Rebecca Aziz, Malek Ghandour.



Houaida BOUALI, Engineer National Institute of Marine Sciences and Technologies

**Mohamed Ali BRIKI**, Engineer Coastal Protection and Planning Agency, Tunisia

**Laura PÉREZ**, Graphic Designer Fundación Valenciaport

**Emma CASANOVA**, Technician Fundación Valenciaport

**Carolina NAVARRO**, Engineer Fundación Valenciaport

# Index Index

# Index

Index 6
List of figures
List of tables
Abstract
I. Introduction
II.The Mediterranean basin: the world's leading tourism region 11
III.Well-Preserved tourist well-being13
III.1. Favorable characteristics for tourist well-being
III.2. Risks threatening wellbeing and health
IV.Tourism a stricken sector and measures undertaken
IV.1. Tourism and epidemics in the Mediterranean
IV.1. Tourism and epidemics in the Mediterranean
IV.1.1. Review of previous epidemics: little impact on tourism19
IV.1.1. Review of previous epidemics: little impact on tourism19 IV.1.2. The time of Covid-19, an unprecedented collapse
IV.1.1. Review of previous epidemics: little impact on tourism19IV.1.2. The time of Covid-19, an unprecedented collapse19IV.2. Declining Indicators
IV.1.1. Review of previous epidemics: little impact on tourism
IV.1.1. Review of previous epidemics: little impact on tourism



## List of figures \_\_\_\_\_

Figure 1. Affected Provinces by Flood in Italy in 2020 (EM-DATA)15
Figure 2. Affected Regions by Storm in Italy in 2020 (EM-DATA)15
Figure 3. Affected Provinces by Storm in Spain in 2020 (EM-DATA)16
Figure 4. Affected Governorates by flood in Tunisia in 2020
Figure 5. Affected Island by Earthquake in Greece in 202017
Figure 6. Epidemiological situation of Covid-19 in the Mediterranean countries in 22/10/2020
<b>Figure 7.</b> Milestones in controlling the epidemic, plotted against the daily number of new laboratory confirmed cases in Italy
<b>Figure 8.</b> Coronavirus vaccinations (Percent of population fully vaccinated) in the Mediterranean countries on 10/03/2022 (Our World in Data)



## List of tables

<b>Table 1.</b> Tourist arrivals and receipts recorded in the Mediterranean countries in 2019(World Tourism Organization, 2020.)	
Table 2. Number of deaths from natural disasters in 2020 (EM-DAT)       14	4
<b>Table 3.</b> Number of humans injures registered due to the natural disaster in 2020(EM-DAT)15	5
<b>Table 4.</b> Epidemiological situation of Covid-19 in the Mediterranean countries(22/10/2020) (European Centre for Disease Prevention and control, 2020.)	9
<b>Table 5.</b> Falling GDP growth in some Mediterranean tourist countries in 2020(World Bank, 2020)	C
<b>Table 6.</b> Coronavirus vaccinations in the Mediterranean countries in 10/03/2022         (Our World in Data)	3
<b>Table 7.</b> Date of reopening of the borders in the Mediterranean countries         (ONTT, 2020.)	4



# Abstract

The objective of this research is to assess the safety of tourist destinations, whether it is natural or human (man-made) threats or major infectious diseases at the Mediterranean scale, specifically in Italy, Greece, Lebanon, Spain and Tunisia.

The research question is therefore to analyze the well-being of tourists and the different health emergencies, the prevention and control of infections, as well as the role of local tourism and how the participation of local communities in the tourism activity has become one of the major standards of sustainable tourism.

## I. Introduction

As the world's leading tourist destination, the Mediterranean basin hosts nearly 30% of the total number of tourists in the world in 2014 (UNWTO, 2016). Tourism represents a strategic and important sector for social development and economic growth for several Mediterranean countries that compete with each other to attract tourists of diverse geographical origins.

Taking safety into account is a fundamental priority for the sustainability of the tourism sector. Health risks are among the permanent fears of tourists wishing to stay in a tourist destination. The deterioration of the well-being and health of tourists spoils their stay and sows anxiety and fear instead of the desired peace and tranquility.

Natural hazards are permanent and sometimes unpredictable and are characterized by their brutality, significant infectious diseases can also pose a risk to tourists and threaten public health II. The Mediterranean basin: the world's leading tourism region

#### II. The Mediterranean basin: the world's leading tourism region

The Mediterranean receives around a third of the total arrivals of global tourism, especially the EU Mediterranean countries, the charm of the sites, the climate, and the quality of the accommodation are the fundamental elements of seaside tourism across the Mediterranean. Tourism is the heavy industry for these countries and an important economic pillar, contributing significantly to the national GDP.

Table 1. Tourist arrivals and receipts recorded in the Mediterranean countries in 2019(World Tourism Organization, 2020.)

Country	International tourist arrivals (million)	Revenues (USD million)
Spain	83,509	79,708
Italy	64,513	49,596
Greece	31,348	20,351
Lebanon	1,936	8,593
Tunisia	9,429	1.916



## III. Well-Preserved tourist well-being

#### III. Well-Preserved tourist well-being

#### III.1. Favorable characteristics for tourist well-being

The evaluation of tourist satisfaction within a particular destination is based on multiple attributes, including service quality, security, safety, price, infrastructure, and so on.

The Mediterranean regions are geographically easily accessible from European, African, and Asian markets. With a well-established tourism industry, enormous sunshine potential, and several places with touristic flavor (historical, archeological, natural), these regions present a very attractive destination for leisure and well-being.

More than any other economic activity, the success or failure of a tourism destination depends on being able to provide a safe and secure environment for visitors. The presence of risk, no matter if real or perceived, influences the travel decision-making process dramatically.

#### III.2. Risks threatening wellbeing and health

Several risks and crises pose significant threats to the tourism industry. The Mediterranean basin is not only the leading region but also one of the safest destinations in the world from a health point of view, but some Mediterranean destinations may be more susceptible to particular crises than others. A wide range of risks can impact the tourist's stay in any destination:

Natural disasters: tourists that travel to countries that have natural disaster risks (earthquakes, volcanic eruptions, tsunamis and floods, and other extreme weather disasters) threaten their wellbeing. However, health risks are infrequent in Mediterranean destinations but natural disasters are unpredictable in all regions; therefore, tourists need to be cautious.

Country	Flood	Storm	Landslide Earthquake Wildfire
Italy	5	11	3
Spain		17	
Tunisia	б		
Greece	8		
Lebanon			

Table 2. Number of deaths from natural disasters in 2020 (EM-DAT)



Table 3. Number of humans injures registered due to the natural disaster in 2020 (EM-DAT)

Country	Flood	Storm	Landslide	Earthquake	Wildfire
Italy		22			
Spain					
Tunisia					
Greece				19	
Lebanon					

\*Empty table fields mean no deaths or injuries registered.



Figure 1. Provinces Affected by Flood in Italy in 2020 (EM-DATA)

Legend ■ Affected Provinces by Flood



According to the Data 5 people were dead due to this natural disaster.

Figure 2. Regions Affected by Storm in Italy in 2020 (EM-DATA)

Legend ■Affected Regions by Storm 
 1:2
 364
 491

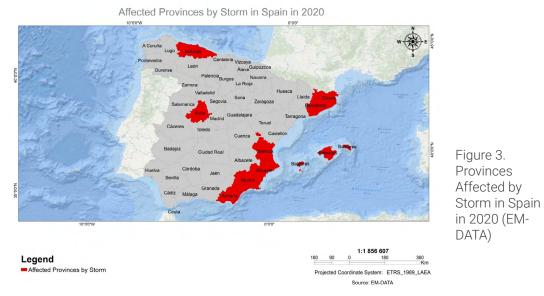
 240
 120
 240
 480

 Mm
 Km
 Km

 Projected Coordinate System:
 ETRS\_1989\_LAEA

 Source:
 EM-DATA

Severe storms hit much of Italy in 2020 leaving widespread damage, 11 deaths, and 22 injured people.



The Catalan coast and the Balearic Islands and other Provinces have been ravaged by Storm Gloria. Hundreds of thousands of people were left without power and 17 people have been killed.

Affected Governorates by Flood in Tunisia in 2020

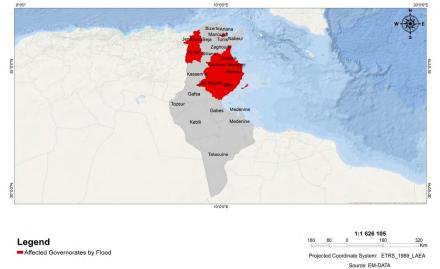


Figure 4. Governorates Affected by flood in Tunisia in 2020

Tunisia witnessed floods caused by heavy rains. In September 2020, six people, including three children, died when storms accompanied by rain hit homes across the country because of weak infrastructure, including old water drainage systems, and poor urban planning. Among the affected governorates are Sousse, Monastir, Jandouba, and Tunis, these coastal governorates contain most of the biggest hotel units and seaside tourist resorts in the country and are considered the best tourist destinations in Tunisia.



Affected Island by Earthquake in Greece in 2020

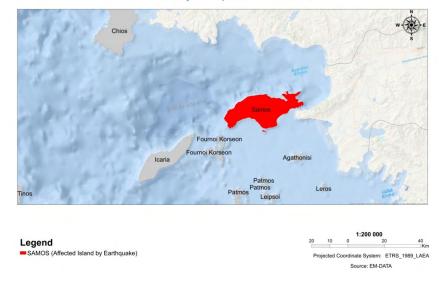


Figure 5. Island Affected by Earthquake in Greece in 2020

Samos is a Greek island in the eastern Aegean Sea, south of Chios, north of Patmos and the Dodecanese, and off the coast of western Turkey. Well-known from antiquity, Samos is an island with great history and outstanding beauty, a very attractive tourist destination. On 30 October 2020 Samos earthquake ruptured an east-west striking, north dipping normal fault located offshore the northern coast of Samos Island.

**Political issues:** Political instability poses a significant threat to tourism. The countries of the South-Eastern Mediterranean such as Lebanon have experienced instability which has strongly impacted tourist activity and also, the political instability that followed the 2011 revolution in Tunisia.

**Terrorism:** Lebanon has witnessed a large number of terrorism events that impacted all the vital sectors, especially tourism. Due to its political instability, Lebanon is more prone to terrorism events. Therefore, any touristic activity performed during peaks of instability will affect tourists' well-being and happiness. The attacks that hit Tunisia in 2015 have reduced tourist numbers in the country.

IV. Tourism a stricken sector and measures undertaken



#### IV. Tourism a stricken sector and measures undertaken

#### IV.1. Tourism and epidemics in the Mediterranean

#### IV.1.1. Review of previous epidemics: little impact on tourism

Over the previous three decades, several infectious diseases, with different characteristics, intensely affected tourism (bird flu, swine flu, West Nile virus infection, Ebola virus...). Most of these diseases are spread from their original areas to other more distant areas by multiple vectors: migratory birds, insects, movement of goods and individuals, and means of transport. For tourism destinations, the containment of the effect of each epidemic and the recovery process was always influenced by the efficiency of the crisis management plans.

#### IV.1.2. The time of Covid-19, an unprecedented collapse

Covid-19 disease (SARS-COV-2) is an infectious disease of viral zoonosis type. It is due to a recent version of coronavirus discovered in China on 17 November 2019. The symptoms of Covid-19 are varied: fever, cough, fatigue and breathing difficulties. In the elderly or chronically ill, more serious symptoms are potentially common, such as acute respiratory distress, which can lead to death. The loss of the sense of smell and/or taste are more or less frequent signs of the disease, and are considered as indicators of Covid-19 infection (WHO, 2020).

Table 4. Epidemiological situation of Covid-19 in the Mediterranean countries(22/10/2020) (European Centre for Disease Prevention and control, 2020.)

Country	Total number of cases	Number of new cases / day	Total number of deaths
Spain	1,026,281	20,986	34,521
Italy	465,726	16,078	36,968
Lebanon	67,027	1,450	552
Tunisia	45,892	1,524	740
Greece	28,216	882	549

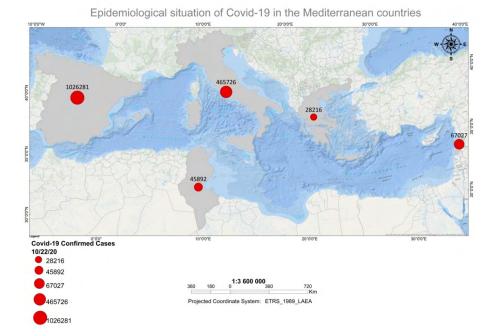


Figure 6. Epidemiological situation of Covid-19 in the Mediterranean countries in 22/10/2020

#### **IV.2. Declining Indicators**

According to the latest figures from the World Tourism Organization (UNWTO, 2020) 2020 was the worst year for global tourism, with international arrivals down -74% comparing to 2019. Destinations received 1.1 billion worldwide fewer international arrivals in 2020 compared to the previous year, due to unprecedented decline in demand and extensive travel restrictions.

The fall of GDP is enormous on the northern and southern shores of the Mediterranean in 2020.

Table 5. Falling GDP growth in someMediterranean tourist countries in2020 (World Bank, 2020)

Country	GDP growth
Spain	-12.8%
Italy	-12.8%
Greece	-8.2%
Tunisia	-8%
Lebanon	-12%





#### **IV.3. Sanitary measures applied**

The brutal spread of the Covid-19 virus has created a state of panic and fear about an invisible deadly disease.

The first case of the coronavirus in Tunisia was discovered on 2 March 2020. The government measures applied (health protocols, border closures, and general confinement on 20 March 2020). These measures were effective in controlling the disease and succeeded in controlling it on 10 May, when no new cases of Covid-19 were recorded.

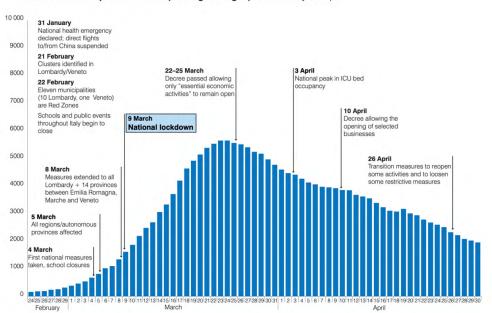
Due to the pandemic, the Spanish Government instructed the alert state on the 14th of March of 2020, which implied the limitation of people circulation and the implementation of containment measures in various economic activities, particularly touristic activity. The first measures aimed at the tourism sector, established in Royal Decree 463/2020, determined the suspension of hotel and restaurant activities, and only home delivery services may be provided exclusively. It also established the suspension of the opening to the public of museums, archives, libraries, monuments, and premises where public shows, sports, and leisure activities were developed.

During the first wave of the Covid-19 pandemic, Greece took strict measures, which had a remarkable impact on the number of arrivals. On March 14, 2020, all air traffic with Italy was banned. On March 16, Greece closed its borders with Albania and North Macedonia, only allowing the transportation of goods and the entry of Greek nationals and residents. The suspension of ferry services to and from Italy, air links to Spain, as well as the banning of all cruise ships and sailboats docking in Greek ports.

In Lebanon after the declaration of the first case of COVID-19 in February 2020, the government prohibited public transport and flights to countries that had experienced rapid growth of COVID-19. Schools, universities, pubs and bars, nightclubs, gyms, theatres, malls, restaurants, daycare centers, touristic sites, and public gardens were closed. Then, the government announced and closed the borders, with a complete lockdown of nonessential services.

Italy deployed instruments to control and mitigate the epidemic. This included case-detection and contract-tracing, isolation and quarantine, physical distancing and mobility restrictions, a set of new individual behaviors, a massive expansion of healthcare infrastructure and equipment, and redeployment of staff. The measures were steered by the legal and regulatory instruments emanating from the national command-and-control structures and regional and local initiatives. Restriction of the movement started in February in the north and was extended to the whole country in early March. It began with checkpoints and prohibition of trains and flights, and then extended to international travel and local restrictions.

Towards the end of April, it became clear that COVID-19 cases were in decline and the initial peak had passed.



COVID-19 virus positive cases (moving averages): 24 February-30 April

Figure 7. Milestones in controlling the epidemic, plotted against the daily number of new laboratories confirmed cases in Italy

#### **IV.4. Coronavirus vaccinations**

The tourism sector has been strongly affected by the coronavirus disease; the intensification of COVID-19 vaccination around the world is the best way out of the COVID-tourism crisis. The vaccination reduces the risk of infection and protects against the virus.

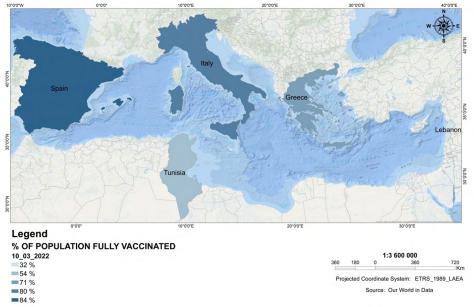
There are huge disparities among countries of different income levels regarding COVID-19 Vaccination Rates. Until 10/3/2022, 84.1% of the population in Spain have received full vaccination, 80% in Italy, and 70.6% in Greece. On the other hand, just about 54% in Tunisia and only 31.9% in Lebanon.

High vaccination rates are attractive to tourists who avoid traveling to countries with high infection rates, low vaccination rates, and fragile medical infrastructure.



Table 6. Coronavirus vaccinations in the Mediterranean countries in 10/03/2022 (OurWorld in Data)

Country	Number of fully vaccinated people	Percent of population	Doses Administered
Italy	47,664,391	80%	137,846,197
Tunisia	6,339,503	53,6%	13,178,235
Greece	7,560,823	70,6%	21,043,225
Spain	39,845,453	84,1%	101,466,700
Lebanon	2,178,509	31,9%	5,634,462



CORONAVIRUS VACCINATIONS (% OF POPULATION FULLY VACCINATED)

Figure 8. Coronavirus vaccinations (Percent of population fully vaccinated) in the Mediterranean countries on 10/03/2022 (Our World in Data)

## IV.5. Tourism and local communities (Local tourism: an alternative in time)

The role of tourism in economic, social and cultural development is acknowledged. Local community participation in tourism activity has become one of the major standards of sustainable tourism. The involvement of the host community is relevant towards the success of the tourism evolution. The progressive opening of borders does not mean that the epidemiological situation is well recovered; the Mediterranean countries were the first to reopen the borders and resume tourism activity. However, tourist resorts in both the southern and northern shore countries were deserted. International tourists were absent or rare.

Table7.Date of reopening ofthe borders in the Mediterraneancountries (ONTT, 2020.)

Date of reopening of the borders
01 July 2020
03 June 2020
01 July 2020
27 June 2020

Faced with the recession in international tourism, the Mediterranean countries considered alternatives in order to save their tourism sectors from collapse.

Italy has financially reinforced local tourism aimed at reducing the catastrophic impacts of the coronavirus crisis on the tourism sector. "Holiday Bonus" is a financial aid to encourage Italians to spend their holidays in Italy. This allowance is for families with an ISEE (Equivalent Economic Situation Indicator) not exceeding 40,000 euros to motivate Italians to spend their vacations in their own country. The holiday bonus was valid until 31 December 2020 for all kinds of tourist accommodations.

Certainly, this measure will not compensate the tremendous losses of tourism professionals but has helped to ensure the minimum of activities in summer.

In the same context of promoting domestic tourism, the Spanish population was widely aware of the critical circumstances of the tourism sector in their country, that's why they favored spending their vacations in their own country. The Spanish people preferred non-hotel accommodations (tourist flats, campsites, rural tourism accommodation, youth hostels), their number increased from 127,553 establishments in July to 141,372 establishments in August 2020. Rural tourism establishments have registered the highest occupancy rates; more than 75% of the accommodation rooms were occupied in the Oyambre nature reserve, on the Gipuzkoa coast, in the Picos de Europa National Park, and Costa Verde.



In Tunisia, hotels in Hammamet, Sousse, Monastir, and Djerba adopted attractive prices starting from 44 dinars per night on half-board in the high season to attract Tunisians to spend their vacations in hotels despite the risks of Covid-19 contamination. The TFTA has underlined the importance of the flow of Tunisian tourists and their role in the crisis phases when it revealed that certain hotel units, especially in Djerba and Sousse, were fully booked thanks to domestic tourism. Some experts in the sector acknowledged that tourism was partly saved by local tourism.

# V. Conclusions



#### **V. Conclusions**

For several Mediterranean countries, tourism is a strategic sector, a locomotive of economic and social development which generates foreign currency and boosts economic life. The notion of tourist well-being can mainly be related to their safety whether from natural or human (man-made) threats or significant infectious diseases. To make the touristic places more attractive for tourists, the health care system must be at a high level.

Seaside tourism, which dominates in the Mediterranean basin in general, is a product that is very vulnerable to crisis. However, the analyses of the tourist situation in the countries on the northern shore of the Mediterranean show that other sustainable tourist products are proving to be less affected by the effects of the Covid19 pandemic. In particular, rural tourism sectors have been recorded in Spain, for example. This confirms the need to diversify the tourist product in the Mediterranean basin by exploiting the natural and cultural potentialities of the various regions to maintain the resilience of the sector in the face of this unprecedented universal crisis.

## References

United Nation World Tourism Organization (UNWTO), 2016. Tourism trends snapshot: Tourism in the Mediterranean, edition 2015.

United Nation World Tourism Organization (UNWTO), 2020. How are countries supporting tourism recovery. UNWTO Briefing Note-Tourism and COVID-19, Issue2, 27 p.

United Nations Conference on Trade and Development (UNCTD), 2020. COVID-19 and tourism. Assessing the economic consequences. Geneva, 26 p.

World Health Organization (WHO), 2020. Naming the coronavirus disease (CVID-19) and the virus that causes it.

www.Banquemondiale.fr : La pandémie de COVID-19 plonge l'économie planétaire dans sa pire récession depuis la seconde guerre mondiale. Publié le 08 juin 2020.

Organisation Mondiale de tourisme (OMT), 2020. Faits saillants du tourisme international. Edition 2019, 23 p.

Ministère de Tourisme, 2020. Synthèse du protocle sanitaire pour le tourisme tunisien anti-Covid-19.

Office National de Tourisme Tunisien (ONTT), 2019. Le tourisme tunisien en chiffres.

Office National de Tourisme Tunisien (ONTT), 2020. Les statistiques des années 2018, 2019, 2020. Le commissariat du tourisme à Monastir.





