

## **Environmental sustainability briefing – The effect on tourists and their choices - Case Malta**

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Degree programme in tourism

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<p>This study explored how sustainable Malta is as a tourist destination, mainly focusing on the question from the tourist's angle. The aim of the study was to brief a small group of tourists prior to the trip and to investigate how this affected tourists' decisions in matters regarding sustainability, particularly environmental sustainability. The aim was to determine how the briefing affected the group directly after the trip as well as after a period six months. The most visible factors that tourists took into consideration included recycling, water consumption and electricity usage. The thesis was commissioned by Ministry of Tourism, EU Affairs &amp; Policy Development Unit. The subject was perceived as topical, since the Scandinavian market and its interest in Malta as tourist destination was of current interest.</p> <p>The group investigated for this study took a recreational trip to Mellieha where the practical part of the study took place during the period of 7<sup>th</sup> - 15<sup>th</sup> May 2014. The data were collected by means of interviews and participant observations. The study indicated that the briefing raised positive thoughts and also awareness towards having a sustainable vacation. Even though the number of group members was low, the results still indicated that such briefings could be useful in other destinations where tourists' presence is actively seen. The theoretical framework of the study concentrated on negative and positive sustainability impacts in Malta. The purpose was to discuss current issues, measures taken previously as well as what could be done for improving the sustainability in the country.</p>	
<b>Key words</b> Environmental sustainability, recycling, fresh water consumption, Malta, electricity, Mellieha	

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# 1 Introduction

Imagine living on an island in the middle of the sea and lacking water you can drink. This has become an issue since Malta is part of the Mediterranean climate, which means that the weather is hot and dry and the annual amount of rain is approximately 530 mm. We still have to keep in mind that Malta is an often visited tourist destination, therefore the locals are not the only ones consuming fresh water. The aim of the study was to brief the small group of tourists before the trip and see how it affected tourists' decisions in sustainability, especially environmental sustainability. The thesis was commissioned by Ministry of Tourism, EU Affairs & Policy Development Unit.

We visited Malta and specifically Mellicha on a recreational trip for a week in May in 2014. Tourists overuse fresh water supplies in Malta, therefore we got the idea to do an environmental sustainability study about Malta. The empirical part of the study is concentrated on environmental issues such as the overconsumption of water and electricity and recycling. We were observing the test subjects as well as taking part in the experiment, therefore we chose to do an empirical study and as methods we used participant observation and interviews.

The second chapter briefly explains the basic facts about Malta in general and focuses on the two cities that we visited – Valletta and Mellicha. The city of Mellicha is discussed more in the chapter six but is based on the tourists' own perceptions than on cold hard facts.

For the readers to understand what sustainability is and what are the three pillars it stands on, we explain the meaning in chapter three. The chapter explains the negative and positive impacts what tourism have on socio-culture, economy and environmental of the destination, but many of the issues are linked together. Since the experiment took place in Malta, the chapter four explains how the sustainability issues are visible there. All the pillars are explained, but most of the insight still comes from the environmental issues.



As said, the approach we chose was qualitative study and the chapter five is dedicated to it. Chapter five also shows the research process we had while conducting this study. The research process was not going forward all the time, therefore one can see differences between the gathering of the information before and after the trip. One has to keep in mind that gathering information is not only about books and long texts, but also about pictures. All the pictures that are taken are to show you, how the things in Malta really were.

Chapter six is all about the research results and how we conducted the experiment. It tells the whole story from the point of arriving to the destination and departing it. The results will give the answer to the questions what, where and why, however the whole story is not revealed without analyzing the replies. We analyze the feedback replies the subjects gave us directly after the trip and the answers they gave after six months. The results show how many of the subjects were changing their attitudes after hearing the briefing as well as, have the briefing affected them half a year later.

In the chapter seven we have derived a conclusion based on the results we have gathered. The chapter shows whether our hypothesis were successful or not. Our hypothesis was that the briefing will not have a long lasting effect on tourist and their choices concerning environmental sustainability while traveling. It shows what we have learned and what the outcome of this study is. Chapter seven shows also the ideas and suggestions we have and one of them is undoubtedly that someone would take an interest in it and wishes to continue it.

## 2 Basic information

In this chapter we write about the basic facts about Malta, its capital Valletta and Mellieha, the tiny town we travelled to in May 2014.

### 2.1 Malta

Malta is one of the three islands in the central Mediterranean Sea. Other two smaller islands are Gozo and Comino (Visit Malta 2014a). Malta is located midway between Sicily and North Africa and therefore they enjoy Subtropical Mediterranean climate. Malta is low-lying and flat and the total area is only 316 square kilometers (BBC 2012.) and the population in 2010 was approximately 410 000 (Ministry for foreign affairs of Finland 2014). Malta became a republic in 1974 and joined the European Union in 2004 adopting euro as their currency in 2008. (Visit Malta 2014b) Malta is primarily a Catholic nation and it was under a British rule until 1964 when the island became independent. Malta became a Republic in 1974. (Visit Malta 2014c)



Picture 1. Map of Malta. (Timsaxon 2014.)

Three attractions in Malta can be found on the UNESCO World Heritage List (UNESCO 2014). The first one is the seven different Megalithic Temples for example Ggantija Temples, Hagar Qim, Mnajdra and Tarxien. These are represented as a group and they are a unique architectural tradition that grew on the Maltese Islands between 3600 and 2500 B.C. The second one, The Hal Saflieni Hypogeum is considered one of the most essential prehistoric monuments in the world. It was discovered in 1902 during construction works and it is a rock-cut underground complex, which was used as a sanctuary and as burial purposes. (Visit Malta 2014d) The third one is Valletta, the capital of Malta.

## 2.2 Valletta

Valletta, also known as the Fortress City has gotten its name after its founder, the Grand Master of the Order of St. John, Jean Parisot de la Valette. Valletta grew rapidly to a big city after they started building it in 1566. It took only 15 years for it to rise steeply from two harbors, Marsamxett and Grand Harbor. (Visit Malta 2014e). In those days Valletta was a great example of fine modern city planning. The city had carefully planned water and sanitation systems and the circulation of air. Valletta was one of the first European cities to be constructed on a new and modern way. (Visit Malta 2014f) Valletta was named European Capital of Culture (ECoC) for 2018 unanimously by experts in 2012. The title is given to cities, which have a great potential of socio-economic and cultural regeneration and also are rich in heritage. (Visit Malta 2014g.)



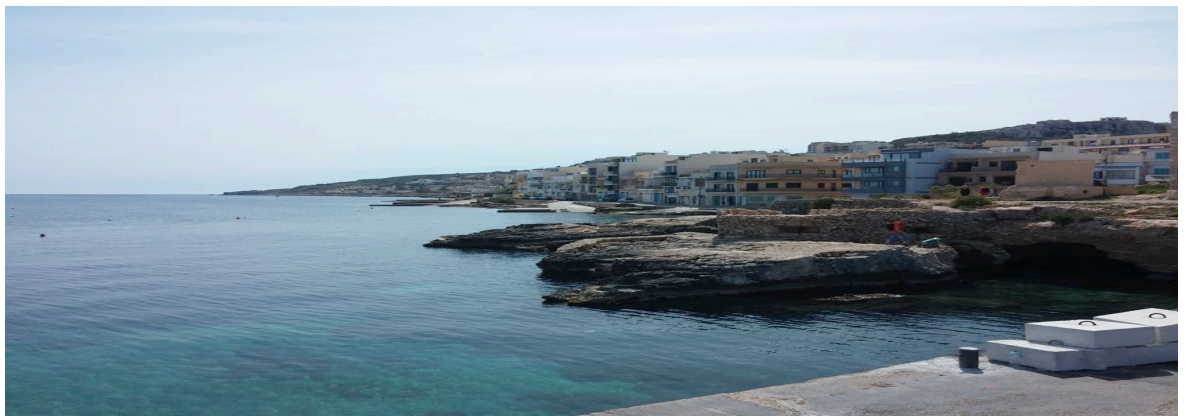
Picture 2. The Grand Harbor of Valletta (Oinonen, O. 12.5.2014)

The picture 2 was taken from the Grand Harbor of Valletta and for us it represented the authenticity of Malta as an island state.

## 2.3 Mellicha

Mellicha is a small town of about 9,000 inhabitants and it is located in the northwest of Malta and three sides by the Mediterranean Sea are surrounding it. Mellicha has a diverse history because of their position on the map. The fact that so many easily accessible beaches, several beach posts and pillboxes surrounding Mellicha were built along the shoreline during World War II to meet against possible enemies or invasions. Mellicha has been awarded as a European Destination of Excellence in 2009. (Mellicha Local Council 2012.)

In 2010 A Sustainable Development Plan was made for Mellicha for 2011-2014. The plan was commissioned by the Local Council of Mellicha and the plan contains four main pillars: Sustainable tourism and culture which was chosen to be the most important, Sustainable transport and mobility, Sustainable urban regeneration and cultural asset restoration, Sustainable landscape and ecology. They carried out a survey for the residents and asked what they thought about these subjects in Mellicha. The main idea for this plan was to give Maltese people the power to enjoy better quality of life, satisfy their basic needs without endangering the life of future generations. (Sustainable Plan for the Locality 2011, 3-17.) This is a great opportunity for us to observe at the scene if this plan has been successful or not.



Picture 3. Mellicha (Oinonen, O. 8.5.2014)

Picture 3 is taken from Mellicha. With this picture we wanted to show the lower side of Mellicha. It is taken between the apartment hotel we stayed at and the beach.

### **3 Three pillars of sustainability**

This chapter contains the three pillars of sustainability in sustainable development. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs. It means that although the world continues growing and developing we do so by making sure that we do not overuse our resources and degrade the planet. (Tourism and sustainable Development Unit 2014)

#### **3.1 Socio-cultural impact**

“The impacts arise when tourism brings about changes in value systems and behaviour and thereby threatens indigenous identity.”(Unep 2014a.) The socio-cultural impact is demonstrated through a huge range of aspects such as arts and crafts as well through fundamental behaviour of collective groups and individuals. There are also positive and negative impacts. (Cooper, Fletcher, Fyall, Gilbert & Wanhill 2008, 187.)

One of the positive impacts of tourism is to inspire pride in the local culture and make the locals proud of their heritage. Occasionally time affects the rituals and the ceremonies by making them not so appealing to the local residents and therefore tourism is a way of reviving them. The same affect can be seen on the old crafts and skills that may not exist anymore without tourism since they are no longer needed in the modern society. Controversy with this one is that, why something that is not needed anymore has to be revived just for the sake of tourism. (Cooper et al. 2008, 196 – 206.)

Traveling to another country and visiting a new culture is a great way to learn new things and become more appreciative towards the culture and customs one is visiting. By this the tourists become more aware about the new society and the cultural exchange between locals and tourists may help building peace between communities. When a destination is developed for tourism it also improves its infrastructure. It means that the sewage treatment and supply of water improves and by that helps people to stay healthier. When there is an airport nearby locals have access to international flights. Locals also benefit from the new entertainment facilities, venues for sport and restaurants. (Cooper et al. 2008, 196 – 206.)

Even though the economic factors are a separate topic, they still influence socio-cultural behaviour. When tourism activity takes place between less industrialised and industrialised destinations, there will be imbalance of economic power between the hosts and the tourists. It may develop some kind of resentment towards the tourists, when they seem to be wealthier than the locals. Before the locals can reap the benefits of the new infrastructure that is built for tourists, they actually have to pay for it first by paying taxes. Social tension will grow when locals have problems to meet the high tax demands. There can be a positive effect on local communities when the locals' opinions are taken into account while developing the site for tourism (Page & Connell 2014, 302). Tourism industry attracts workers from other employment industries and usually these workers are working as a front line staff. The experienced staff that fills the middle management positions, is hired from another country. Generally, tourism industry is known for higher salaries than fishing or farming industries but is also known for not so fair working conditions. It is a sad fact that there are children under 12 working in this industry. Also there are too many casual contracts and part-time jobs that do not give the workers any belief for permanent jobs or stable future in tourism industry. Tourists may knowingly or unknowingly offend the locals, if they behave in a manner that is not suitable or accepted in that country. This creates tension between locals and tourists but eventually between locals since in time some may find the inappropriate dress codes or behaviour appealing. (Cooper et al. 2008, 196 – 206.) This is better known as demonstration effect as it changes the values, attitudes and behaviour of the locals. The greatest effect it has on young people and therefore it may generate a gap between them and older people. Especially between those who wish to obtain their traditions and those who wish to take on a new “culture”. (Page & Connell 2014, 296.)

The down side of tourism is definitely sex-tourism, which has found foothold for example in Thailand and Gambia. The question without an answer is that whether sex trade has influenced tourism or has tourism influenced sex trade, nevertheless it is a problem. Prostitution and child prostitution are issues that concern in some tourist destinations and nowadays with the rapidly developing technology and Internet; it has had an international communication network behind it. It is hard to say if there is a

correlation between tourism and crime or is it just about the increased density of population at one place. Still it is quite understandable that tourists are victims of crime since they are usually carrying large sums of money and can be easily identified as tourists. (Cooper et al. 2008, 196 – 206.)

There is a problem of commodification where local ceremonies, rituals and crafts are being exploited by the needs of tourists. Tourists may not see the local rituals appealing in their natural state and therefore need more colourful, spectacular and more dramatic versions of them. The locals present their rituals in favour of tourists' time frame. Locals have to change their traditions to attract tourists. Tourists also wish to possess products that represent cultural authenticity. Also they want to visit places where they can see so-called real life of the locals. Locals' rituals become pseudo-events when they are suited to satisfy the needs of tourists. Tourists wish to visit unfamiliar places however when there, they wish to use familiar facilities. Usually these westernised facilities are found at destinations, which wish to capture large number of tourists. The local environment might not be ready to adapt to new modern facilities and new ways of operating them, therefore it will cause a loss of diversity in the socio-cultural environment. (Cooper et al. 2008, 196 – 206.)

### **3.2 Economic impact**

It is a known fact that tourism is an industry where the money constantly flows but the question is where it flows and who the benefactors of it are. Positive side of economic impacts is considered to be a direct spending by tourists. It benefits the local community since the money goes directly to them, therefore being profitable for business and employment growth. The same money is then re-spent in the local economy, since the most of profits comes from cities; it is then spent also in the rural areas. Beneficial factors are also the rise of new businesses which will serve better the needs of tourists for example transport and retailing as well creating new work places for locals. Tourism industry operates 24 hours a day and seven days a week, hence making it a good working ground for young people and people who seek part-time jobs. (Tourism Excellence 2014.) The types of employment that are generated by tourism are divided into three sections – direct, indirect and induced employment. Direct means the jobs that are re-

sults of visitor expenditure such as hotels. Indirect means the jobs that are not the direct result of tourism, but created within tourism sector. Induced employment means that there are jobs created from the tourism expenditure and the locals are the ones who spend the money that is earned from tourism (Page & Connell 2014, 283.)

One of the negative impacts of tourism is leakage; all the taxes, wages and profits that are paid outside the area leaving less direct income for the destination. For example most of the travellers' expenditure of all-inclusive packages goes to hotels, airlines and international companies and the locals do not benefit from it. The term consists of two types of leakages import and export leakages. When destination cannot provide the food and products by the same standards tourists have accustomed to and they need to be imported, is called import leakage. It is somewhat a roundabout since the money tourists bring in is going out for paying the imported goods they need. Investors from overseas who are investing in developing destinations usually in less-developed countries are collecting their profits, are key factors of export leakage, since the profits goes to another country. All-inclusive hotels and cruise ships are also a part of enclave tourism, which means that tourists use almost all their money in the hotel or on board. The locals do not have the chance to benefit from tourists since the money does not reach them. Through these three pillars it has been gone back and forth on the issue, whether building an infrastructure is beneficial for locals or not. In the perspective of negative economic impacts it is not beneficial since the local community have to pay more taxes to benefit tourism and it may decrease the amount of money that is used to sustain education and health. In addition, the construction of facilities such as hotels may increase the costs of real estate and land values, of which the locals cannot afford. Problem for many developing destinations is that they are dependent on tourism industry. Some countries do not have other resources to boost up their economy; therefore it is linked to the ups and downs of one industry. Even though tourism is an industry that operates every day of the year, in some destinations the most profit is made on seasonal tourism; thus the employees do not have permanent jobs and continuous salary. (UNEP 2014b.)



### 3.3 Environmental impact

The fundamental part of tourism product is definitely the environment, whether it is natural or artificial. The environment immediately changes when tourism is taken place. The reasons can be the facilitation of tourism or the production process of tourism. The impacts on the environment can be direct, indirect or induced. Some of them are positive and some are negative. In this context the positive side is not as widely discussed as the negative one. It has been said that one cannot develop tourism without doing some level of harm to the environment; however it can be reduced with correct planning. Planning is the key to encouraging the positive and minimise the negative impacts of tourism. The positive impacts are considered to be the preservation of ancient monuments, historic buildings and sites, as well the restoration of these places. The creation of wildlife parks, national parks, protection of the beaches and the reefs as well the maintenance of forest is considered as positive impacts. Tourism can be a way to raise awareness towards protecting the environment when tourists come in contact with it (Unep 2014c).

Unfortunately there are a lot more negative impacts than positive ones. While one tries to preserve historical places the other may harm them by disfiguration or damage them by using graffiti. The erosion of the paths to the ancient sites and erosion of the sand dunes by overuse are negative impacts. Tourists may destroy the local vegetation with constant walking tours. Fishing and hunting have clear impacts on the environment. The harm that tourism can do to the coral reefs with the cruise ships – their waste disposal and anchors- diving courses and just with the disturbance to the local diversity. It is very crucial that the local biodiversity stays untouched. The buildings that are built for tourist can be in a disharmony with the local constructions. Over consumption of fresh water is a current problem for example in areas around the Mediterranean. Since the summer is very hot there, tourists tend to use more water, approximately 440 litres per person per day. For comparison that is almost double of the normal use of residents in urban areas of Italy or Spain. The pollution tourism industry creates is a big problem. The way hotels dispose of their litter affects a lot since it can be a direct impact on the local wildlife. Same thing goes with the sewage and it also includes cruise ships and the way they deal with this issue. Perhaps not so much thought about, but

noise pollution is also a problem to the environment. Tourists themselves or by the means of their transportation choices can disturb the locals. For example tourists on the safari tours disturb the animals and that way can even effect on the changes of their behaviour toward people in general. Air pollution is one of the main factors regarding the climate change since the main use of air traffic is in tourism industry. (Cooper et al.2008, 161 –165.)

It is stated that Malta has the most polluted ground and surface water by nitrates in the EU. Some farmers are still using crops fertilization and animal manure, which has excessive concentrations of nitrates, which filters into water causing air pollution, a threat to biodiversity and algal blooms. This ends up polluting drinking water, which puts human health at risk (Malta Independent 2013.)

## **4 Sustainability in tourism in Malta**

In 2006 the National Commission for Sustainable Development proposed a plan for the Maltese Islands to contribute to the country's sustainability. It implemented the 20 most important strategic directions, which the commission wanted to concentrate on. The list includes environmental issues such as climate change, fresh water supplies waste management, air quality as well as economic growth, employment and society issues. Many of these issues were to be handled before 2010 but a couple of issues such as reducing car ownership to EU average by 2014 and achieving good status of fresh water supplies before 2015. (A Sustainable Development Strategy for the Maltese Islands 2006, 5-8.)

### **4.1 Socio-cultural sustainability**

The Maltese people are laidback, friendly and commonly known to welcome tourists, although they are more reserved than the usual impression about people from the Mediterranean countries. Tourists may easily witness the originality of the Maltese since it has withstood to some extent globalization and therefore it has remained fascinating and unique. Malta has also traditional crafts such as hand-woven fabrics, handmade lace and silver filigree and silversmiths still produce filigree but nowadays mostly for meeting tourist demand (Lonely Planet 2010, 33). Even though the Maltese are friendly and laidback, they are also quite conservative and hold their traditions in high regard. Malta is a Catholic country and religion has a major part to play in its day-to-day life – abortion and divorce were still illegal in Malta as late as 2008. (Lonely Planet 2010, 30 – 31.) Something has changed in few years, since in the year of 2011 Malta has had a referendum concerning divorce and the outcome was that it has become legal (Time 2011). Unfortunately, some things have not changed in Malta, such as racism toward colored people. Malta has a growing population of North-African immigrants and there have been surveys that show the locals' unhappiness with that. The survey was carried out among the students of University of Malta and it showed that 30 % were not willing to share their campus with colored ones and 40 % were not willing to live on the same street with them. Approximately half of the students were backing up the government's ill-considered pushback policy. (Times of Malta 2014a.)

There are few negative tourism impacts such as the production of silver filigree. Since they are nowadays produced for tourists, they have lost some value they have used to possess, however these local crafts are a way to show how important the heritage is. Tourists may offend unwillingly locals by not understanding how conservative the country may be, by using too revealing clothes or expressing their affections publicly. Even though immigrants and tourists cannot be put in the same group, they still affect one another. Locals who have radical opinions about colored people may not see the difference between people who want to settle there and people who wish to spend their holiday and money there. This may lead to hostility towards tourists.

#### **4.2 Economic sustainability**

Cultural ideals affect also employment in Malta since they affect the way women are seen as employees. In 2008 the employment rate of women was 35 % and it was the lowest in the European Union at that time. Women are seen as stay-at-home mums, who take care of the children or/and their elderly parents. Women get pressured by the government to go to work and by the church not to. This does not tell the whole story, since the Maltese are known for doing work aside from their official employment such as teachers giving private lessons during their own time. This also explains partly why the employment rate for women is low, for it does not cover all the work women do. (Lonely Planet 2010, 31 – 31.) In 2013, the employment rate for women was increased to 46, 9 % and for year 2020 the government hopes it will increase to 62, 9 % (The Malta Independent 2013).

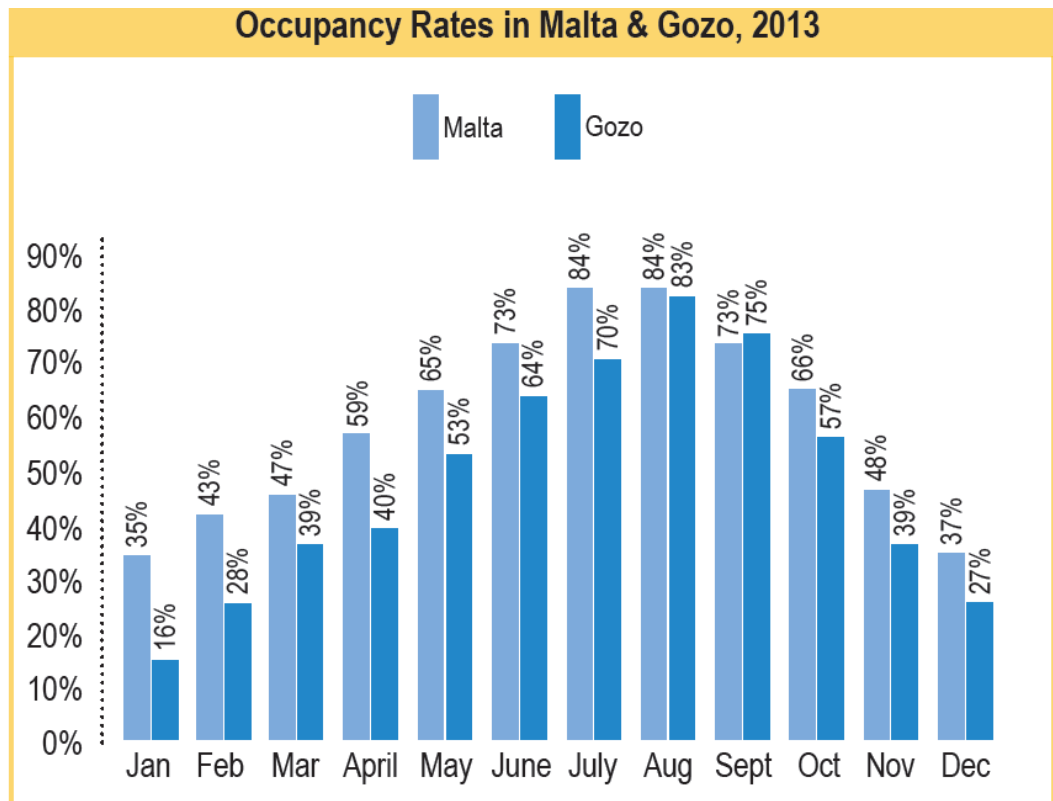
Malta is reliant on imports, since it only grows 20 % of its food requirement, has limited supplies for fresh water and has no domestic sources for energy (Index Mundi 2014). Malta is the only county in the EU which is fully dependent on imported fuel – The rate is 100 % (Times of Malta 2014b). The fuel costs a lot and it is used to produce electricity which makes the electricity tariff high as well. (Independent 2014.) Tourism has a big part to play in Malta since its total contribution to the country's GDP in 2013 was 25, 5 % and it is expected to increase 30, 4 % by 2024 (Travel & tourism economic impact Malta 2014, 6).



Source: MTA Expenditure Survey 2013

Figure 1. Share of Expenditure during Stay 2013. (MTA statistics 2014a).

Figure 1 shows what tourists have spent their money on. Over 50 % of their expenditure is spent on food and drinks and around 16 % on shopping, 15, 6 % is used on recreational activity, 9 % on transport and 5 % for other purposes. Unfortunately this figure does not show if the products are produced locally or imported. Nevertheless, by encouraging green and sustainable agriculture, tourists can spend more money on local products which will benefit all.



Source: NSO (Collective Accommodation Establishments)

Figure 2. Occupancy Rates in Malta & Gozo, 2013. (MTA statistics 2014b).

Figure 2 will show the occupancy rates during the whole calendar year. Since Malta has Mediterranean climate, it is dependent on the seasons. High season for Malta can be seen in this figure and it is from May till October – occupancy rate is over 65 %. Low-season does not offer so much work, so it is understandable why people are doing other kind of work as well.

Since Malta is highly reliant on imports, it easily induces import leakage for tourists are bound to buy imported goods. Nevertheless the upside of expenditure is that tourists also by the local goods such as wines, vegetables and fruits.

#### 4.3 Environmental sustainability

Malta has little of vegetation and does not support land based life, since the land is bare and rocky and where it is not, it has been cultivated. Perhaps the biggest issue for Malta now is the barely existing amount of fresh water. People of Malta get their fresh water from water table, which comes from desalination plants. The increasing number of the plants is good, since they are a good way of filtering the water from nitrates that

are used for farming. Even though Malta is not suitable for land based wildlife, it is suited for birds especially migrating birds. Unfortunately Malta is known for its bird hunting and trapping. (Lonely Planet 2010, 43 – 45.) Malta holds an annual spring bird shoot which is criticized a lot due to the fact that Malta lets its bird hunters kill yearly around 16, 000 turtle doves and quails. Sadly many birds are shot illegally and many of them are species that are under protection. It is said that the “normal” Maltese are against this sport, for it stains the country’s reputation and keeps the locals from going to the countryside. (Guardian 2014.) Something is still done for protecting the migrating and resident birds, since Malta has two nature preserves, which are located in Northwest Malta. The country also has one nature park called Tal- Majjistral and it is also located in Northwest Malta. Sea cliffs are also protected which is beneficial, since Malta has very rich and diverse marine fauna, the waters are clean and they attract scuba divers. (Lonely Planet 2010, 43 – 45.) Scuba diving can have both positive and negative effect on Malta. It is positive for the economy, since it is a boost for employment and a way to raise awareness for sea life. It is negative, if the divers do not appreciate the marine fauna and wrecks and pollutes the underwater environment.

It has been stated that Malta has active construction work going on. Here the demand and supply does not meet, since many building have been left empty. Active construction work means that it creates air and noise pollution. Also car emissions and power plants that run on coal or oil give their contribution to air pollution. (Lonely Planet 2010, 43 – 45.) It seems that air pollution and respiratory diseases go hand in hand in Malta. There has been a research concerning the issue of black dust and it has been noted that the problem comes from Marsa power station. Research shows that in southern parts of Malta the rate of black dust is 1 and around the power station it is 12. Perhaps the main reason why the power station has so high level of black dust is that it runs on heavy fuel oil. (Greenfudge 2014.) There has been done another research which concerns the issue of respiratory problems of children in Malta and in Sicily. Even though the research has been conducted between only two areas, it shows that Malta has a high number of children who suffer from asthma. Fine particulate matter that comes from cars is notably high in Malta and the research also shows direct connection with Marsa power station and the number of asthmatic children nearby. (The Times of Malta 2014c.) However bad the situation has been or is, it is relieving to know

that something is and has been done. Malta has created the Waste Management Plan for The Maltese Island for period of 2014 – 2020. During this time Malta is trying to meet the targets of recycling the EU has set. (Ms Dec 2014.) Recent studies that concern the issues of car emissions have shown that Malta is already reaching the targets that are set for year 2015 in car emissions. The idea is that Malta imports smaller and more environmentally friendly vehicles. (Mepa 2014.)

**Table 1 – National and EU waste targets (Souce MEPA Data)**

Waste Stream	Target	Status
All waste streams	To draft a waste prevention programme by December 2013	Waste prevention programme currently being drafted
Household waste	To recycle 50% of paper, plastics, metal and glass by 2020	23% of household waste recycled in 2011
Biodegradable Municipal Solid Waste (BMW)	Allowed to landfill: 75% by 2010 50% by 2013 35% by 2020 of total BMW generated in 2002	Landfilled: 83% in 2010 (78% in 2011)
Packaging and Packaging Waste	Overall recovery 60% Overall recycling 55% Glass recycling 60% Metal recycling 50% Plastic recycling 22.5% Paper & Cardboard recycling 60% Wood recycling 15% (by 2013)	Overall recovery: 29.2% Overall recycling: 28.5% Glass recycling: 5.8% Metals recycling: 33.4% Plastic recycling: 22% Paper and board: 51.4% Wood recycling: 2.7% (2010 data)

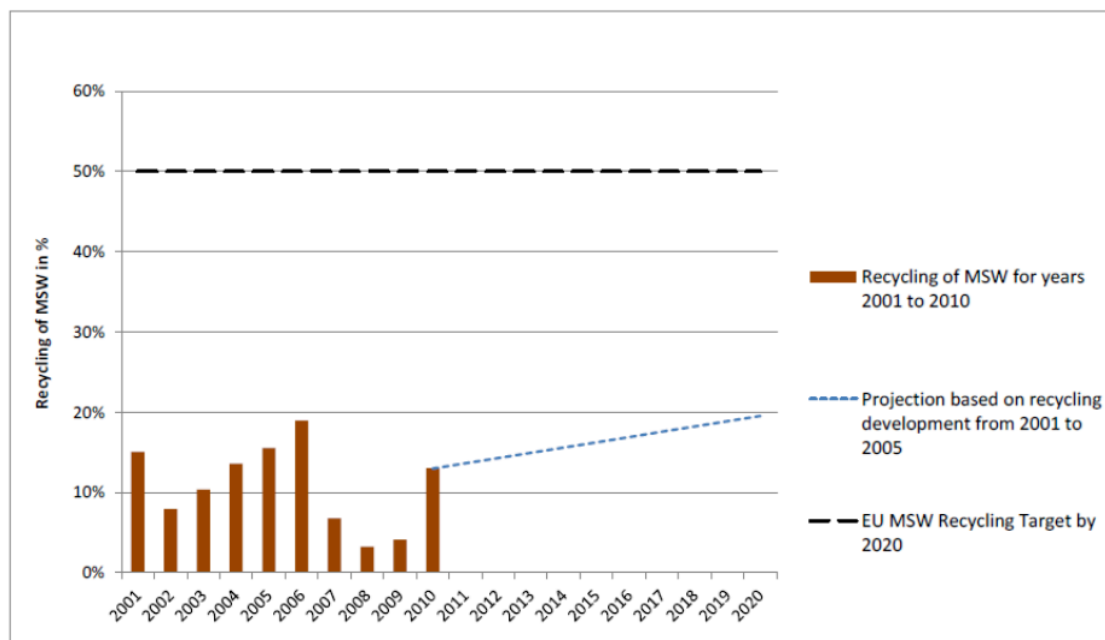
Figure 3. Issues paper. Towards sustainable waste management 2013. (Gov 2014.)

Figure 3 shows the percentages of recycled waste and the targets set by EU. One can see that only 23 % of household waste was recycled in year 2011 and it has to increase



to 50 % by 2020. It also shows a notable difference between plastic recycling and glass recycling. In 2010 Malta recycled only 5, 8 % of its glass and by year 2013 the target is 60 %. The figure also shows that 22 % of plastic was already recycled by the year 2010 even though the requirement for year 2013 was 22, 5 %.

**Figure 2.2 Three scenarios for future recycling of MSW in Malta**



Source: Calculation by Copenhagen Resource Institute (CRI), based on Eurostat, 2012

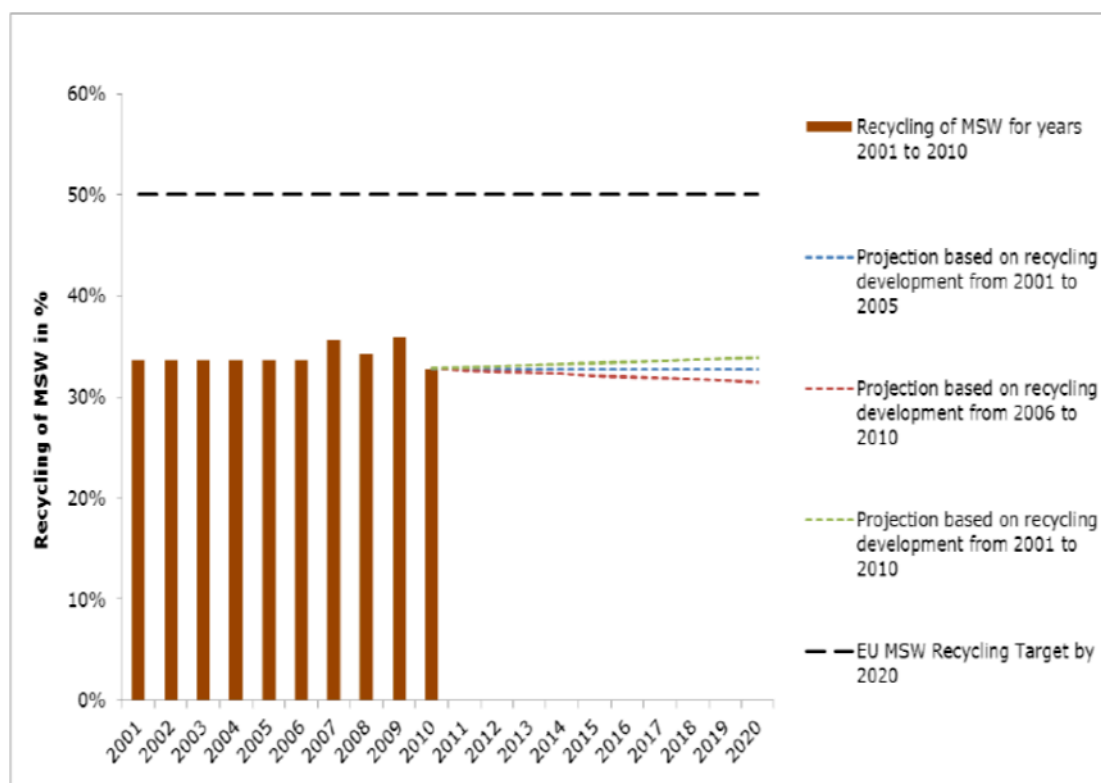
Figure 4. Municipal waste management in Malta. (EEA 2014a.)

In figure 4 one can see the fulfilled percentage of recycling and the target set by the EU. There is also an estimated percentage that can be fulfilled by year 2020, however it is less than the requirement. The estimated figure is 20 % and the requirement 50 %. Nevertheless anything can happen, since estimation is based on years from 2001 to 2005 and the last certain amount of recycled waste is from year 2010.

#### 4.3.1 Waste management statistics in Finland compared to Malta

Statistics about waste management and recycling in Malta cannot be fully comprehended without comparing them to another country, especially to one that is more developed in that area. Here we show statistics about bottle recycling, municipal household waste management and statistic of the usage of landfilling sites.

**Figure 2.2 Future recycling of MSW in Finland**



Source: Calculation done by Copenhagen Resource Institute (CRI) based on Eurostat, 2012

Figure 5. Municipal waste management in Finland. (EEA 2014b.)

In figure 5 one can see that Finland has kept its municipal waste management almost at the same level from year 2001 until 2010. Most notable peaks have been in 2007 and in 2009, however it has to be kept in mind that these statistics are just rough estimations based on one calculation methodology. Nevertheless, statistics show that Finland has had its waste management level at approximately 35 %. Last calculation has been done in 2010, therefore it cannot be said at which level Finland is currently. Compared to the statistics of municipal waste management in Malta, one can see that the projection based on the development during 2001 – 2010 in Finland, has a lower growth rate than in Malta. In our opinion Finland is already more developed in waste management than Malta, therefore Malta has more room to grow and develop the recycling and waste management systems. We think this might be the reason for the higher estimated growth rate in Malta.

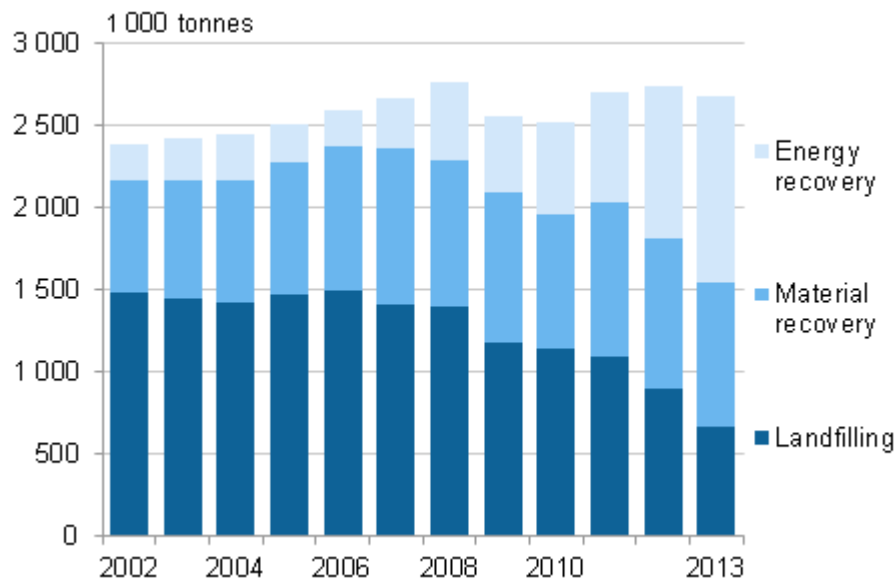


Figure 6. Municipal waste by treatment method in 2002 – 2013. (Stat 2014.)

Figure 6 shows how Finland has decreased the use of landfill waste. In year 2002 the amount was 1 500 tons and by 2013 the amount has decreased over a half. The amount of material recovery has stayed almost at the same level during the years only showing few peaks, however the recovery of energy has increased steadily during the years. In 2011 the landfill waste amount in Finland was 40 % (Environment 2014). In comparison the landfill waste in Malta in 2011 was 78 % and it can be seen in the figure 3.

### **Return rates in Finland:**

Refillable glass bottles  
approx. 100%,  
cans 96%, plastic bottles  
94%, recycled glass bottles  
nearly 90%.

95% of Finns say that they  
recycle all or nearly all of  
their beverage containers  
that contain a deposit.

Deposits equal some EUR  
310 million annually.

Picture 4. Return rates in Finland. (Good news Finland 2014.)

Picture 4 shows the bottle and can return rates in Finland. One can see that all the rates are over 90 % and one of the reasons is that the most of the bottles and cans are based on a deposit-refund system. In figure 3 one sees that the amount of recycled glass is only 5, 8 % in Malta in 2010.

### **‘Recycling scheme for plastic bottles’**



Picture 5. Bottles and cans in Malta. (Times of Malta 2014d.)

Malta's government wishes that people could deposit their empty plastic bottles to supermarkets and petrol stations and therefore is seeking for proposals that would enable it. The picture 5 is an illustration of the article that shows the amount of plastic waste that is generated.

In our point of view this article is a great news, since this would reduce the amount of plastic bottles we witnessed during our trip. Perhaps the government would even issue the deposit-refund system as in Finland.

## **5 Research methods**

In this chapter we concentrated on our data collection in Mellieha. We decided to do an empirical study and use interviews as a tool. We did the theoretical part of the study in Finland and the observational part in Malta. We made a practical study and observed the life in Mellieha from a tourist perspective. We wanted to involve our group of friends, which consists of seven people, to this study by presenting them our research and what is the current situation in Malta. Feedback form is in the attachments number 2. We wanted to make an experiment on how our briefing (attachment 1) about environmental sustainability issues affects their attitudes during the trip to Malta. We were interested to know whether the briefing had an effect on the group members after six months. The feedback form in attachment 3 explains did the briefing have any long lasting effect.

### **5.1 Qualitative study and participant observation as a method**

Qualitative study is a systematic approach to conducting a study. It offers richer, more in-depth representation of people's beliefs, attitudes and experiences. In qualitative research there are issues about objectivity, it is inductive, not generalizable and it has more words than quantitative research, which offer more numbers to a study. (Altinay & Paraskevas 2008, 75.) Our intention is to gather seven interviews and analyze them in depth, not looking at the answers from "yes or no" perspective.

The idea was to use a participant observation as a research method. The idea is that researches will observe from the perspective of members but they are also the participants. There are seven features of participant observation, but here are included only those which directly can be seen in our research. One is that there is an interest as well as interaction from the perspective of subjects who are the members of certain situation or settings. It has to be open-ended, opportunistic, and flexible process, which requires constant redefinition of the problem. The process has to be based on facts that are gathered in detailed settings of human existence. The research has a qualitative in-depth case study approach. The research is based on direct observation as well the use of other methods of information gathering. (Flick 2009, 226.) This method was

best for us, since we were researches and participants at the same time. We have been defining the problem throughout this thesis and analyzed the results we have gathered. We had to use another method for gathering information, since only observing would not suffice.

Like every method also participant observation has its limits. One has to be capable of understanding whether one has observed a group or individuals. Are the activities individual choices or are they choices of the whole group? Sometimes it is easier to rely on spontaneous actions, since they have not been altered by researcher's direct questions. It is also problematic for the researcher to observe the subjects, if she cannot observe them in a closed area such as an institution. One might miss an important behavior or cannot separate the relevant ones from regular ones. (Flick 2009, 228 – 232.) The reliability issues for this study come from the fact that the group we studied had shared attitudes. All the members of the group were from developed countries, all were students of University of Applied Sciences of HAAGA-HELIA and seven out of nine were studying tourism. This group already had their own perspective for sustainability issues and was not unfamiliar with the word.

## **5.2 Empirical study**

Empirical studies are based on experiment, experience or observation. (Cooper 2008, 683.) The way to conduct a good empirical study is firstly to state the problem and by that find out what exactly is the aim of the research. Secondly gather as much theory as you can about the study and it is vital to use relevant literature. After that you have to find the variables that you can concentrate on and do a hypothesis about them and discover how they are connected. Hypothesis has to be something that can be tested with the empirical data. Then you choose definitions and measurements on how the variables are measured. Next step is research design and methodology. It is vital that the chosen design of the research will let you find the answer to the research question. Following, one must start sampling. One needs to know which persons or events are beneficial for the research. Therefore instrumentation will help to choose the devices or tools that can be used to record observations. When the tools are decided, data collections will take place. In the data collection process one must know if multiple

groups, different instruments or time periods affect the process. Can there be a conflict between those elements that can pose a potential problem? To understand the collection process it has to be analyzed thoroughly. One must decide what analytical process will be used to analyze the data to find out whether to reject or accept the existing hypothesis. To end a research, the last step is to make a conclusion, interpretations and recommendations. The results will show if the initial hypothesis was relevant. Did the results show any differences for the theory and the literature that was used conducting this research? Did the research present any new ideas that can be recommended for public policies or programs? (Csulb 2014.)

Doing the hypothesis was rather difficult, for we had to combine three different approach. Firstly we were quite certain that the results would not be 100 % objective, since the subjects interviewed were our friends. There could be a conflict between the hypothesis that tourists may not be interested in hearing about sustainability issues while on holiday and that the subjects would still think about the issues, since they were our friends. However, the one united prediction was that one briefing will not have a long lasting effect on tourists.

We started to plan a trip to Malta with our friends at the end of 2013 and in the class Sustainable Tourism our lecturer mentioned that tourists in Malta are over consuming fresh water supplies. The whole process from the beginning to the end is in the thesis process schedule and it can be found in the attachment 4. From that our idea for this project materialized and we decided to do this trip as a part of our project. Our first idea for the project was that we want to study how sustainable is Malta as a tourist destination and partly from the tourists' point of view. We decided to interview locals and local entrepreneurs. After arriving at the destination we changed the approach for the project.

Before the trip we started to collect information about Malta and its water crisis. We were so fixated on the water issues, that we did not pay that much attention to other issues. One of the reasons for this was the fact we heard about the problem during class. It was rather easy to find information about Malta in general and all the information was found from the Internet. We explained what sustainable tourism was in

general and brought out the positive and negative side of tourism in Malta. During the spring we decided the research methods we are going to use and explained the theory in the report.

In May 7<sup>th</sup> until the 15<sup>th</sup> in 2014 we were in Malta and we collected study material. After the trip we analyzed the feedback, compared the results and derived conclusions. We were the only ones who were conducting the study for school purposes. We used our friends as test subjects to gather information about how much does pre-given briefing affect their choices concerning the environment during holiday. This was the moment when we realized what the topic we actually wanted to study was.

During the trip to Malta we all had our own attitudes toward sustainability. We all acted upon those attitudes and for example decided to use less water and electricity. Unfortunately we could not be that sustainable, since we could not recycle our waste for we had not been given the instructions or bins for doing it. So many of the choices were made in the limits what the destination offered us.

After the trip and returning the report in for the course of Sustainable Tourism, we decided that this would be a great topic for a thesis. During the summer we did not have any time to work on the thesis, so the work had to be left for autumn. In the autumn we improved our thesis by adding more information about sustainability issues in Malta. Since the topic for the thesis had changed, we wanted to know how long lasting effect one briefing could have on tourists. After six months we decided to make another feedback form for the subjects to fill in. We were impressed how quickly the subjects responded to the feedback form, since it was sent through Facebook. After receiving the forms, we analyzed them and made a summarized chart from the results.



## **6 Research results**

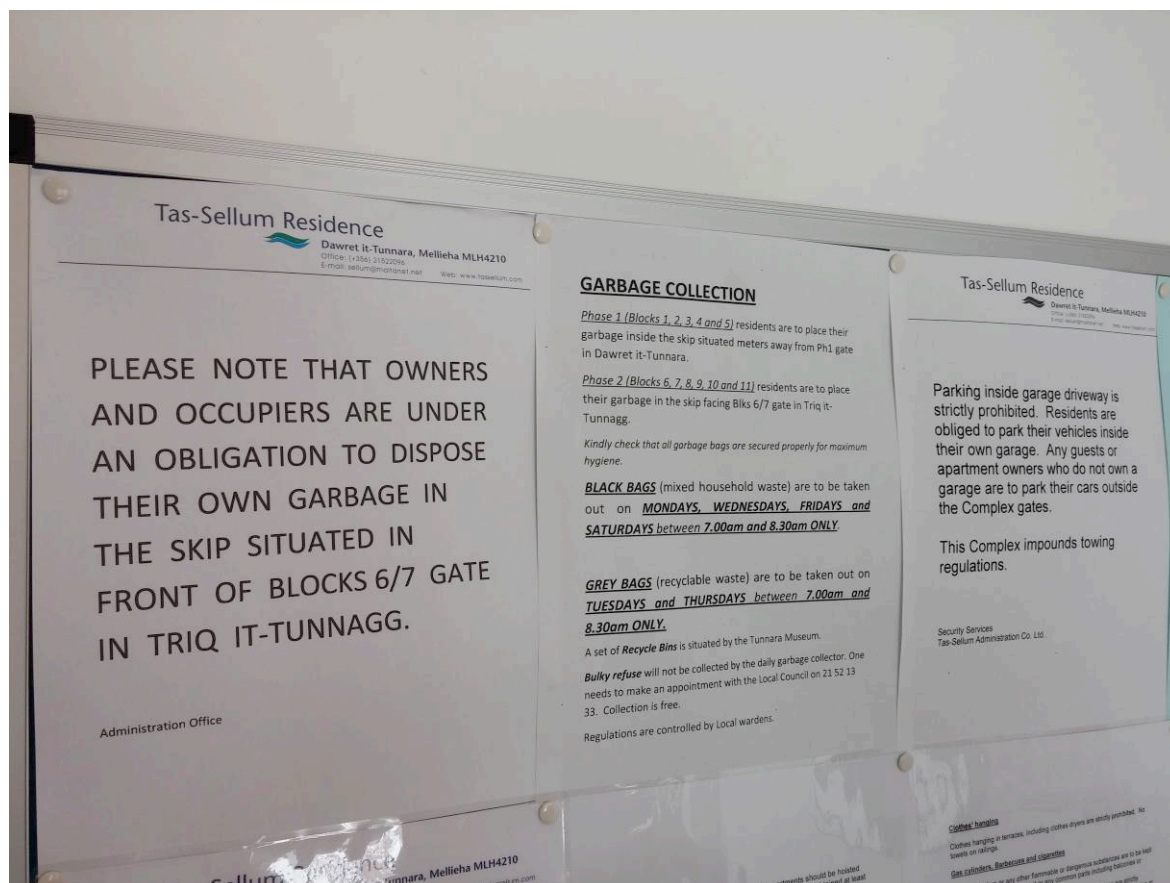
In this chapter we will explain the results we gathered during the trip to Malta. Chapter contains a lot of pictures, since it was essential to our environmental sustainability study to present visible observations for they will show what we actually saw there. We included the replies from the feedback form that was collected directly after the trip, as well as, the replies we collected after six months.

### **6.1 Results of observations**

After we arrived at the hotel in Mellicha on May 7th, one member of the staff came to greet us and gave us keys to the apartment. He came inside with us and gave a little description of the apartment. He suggested not to drink tap water and drink bottled water instead. For our taste the description was too brief and did not cover all the general information. We are not sure if it was because of the language barrier since he did not understand our questions. We asked him about units he had given us for water and electricity. We did not know how much one unit was. Therefore it became a problem since we had to pay the exceeded amount of usage.

In general we noticed many differences in that hotel compared to hotels in Finland. Electricity plugs had to be switched on before the current started running and the boiler which was located in the utility room had to be turned on before getting any hot water. Water pressure in the hotel was not even and sometimes we did not get water at all for about a half an hour. This situation occurred about three times during the week. In our opinion the apartment was not fully equipped for there was only few rolls of toilet paper and for example we had to buy our own dish soap. In the kitchen there was only one trash bin so the recycling of the waste was not possible. General information about recycling was found in the lobby area. There were only certain dates and times when the trash could be taken out. From that we noticed that there should be two kind of trash bags, black bags for mixed household waste and grey bags for recyclable waste. Unfortunately in our apartment there was only one black bag available and during the week we had to use shopping bags for collecting the trash. On the last

day the member of the staff came to check the condition of the apartment and check the units of electricity and water we had used. We were quite sure that electricity did not exceed since we had not used any air conditioning and we only watched television about three times. Every time we left the apartment we switched off the lights, the electricity plugs and the boiler. It came as a surprise to hear that electricity was indeed exceed but fortunately it only exceeded for about seven euros. We were quite shocked about the fact that what if we had actually used air conditioning how much it would have been exceeded.



Picture 6. Waste collection information in the apartment lobby (Oinonen, O. 8.5.2014)

In the picture 6 one can see the recycling plan for the apartment hotel. It shows the dates when garbage is collected. It also shows what kind of bags are used for household waste and for recyclable waste. As it was mentioned before in our apartment there was only one black bag and it was rather impossible to follow the recycling suggestions. It is positive that this information can be found in the hotel lobby, however the information does not suffice if there are no actual means to follow the instructions.

After we had settled in we gathered our group for a little briefing, which can be found in the attachments, about the situation in Malta. We wanted to raise awareness but we did not want them to feel like we were pressuring them with our project. Our apartment was on the fifth floor and every time we left the house we used the stairs. A good thing was that the lights at the corridor were not always on but they had motion sensors in every floor. We noticed the same thing in the elevators.

On the first day we had to find a supermarket to buy water and breakfast supplies. We had to ask directions from the locals and they said that the restaurants and shops were located up on the hill. We went to the supermarket but we noticed that Maltese supermarket was about the size of the shop in the gas station in Finland. Selection of goods was quite narrow and the food was rather expensive. When paying for the items the cashier gave us plastic bags that resembled trash bags used in Finland since they were blue and did not have handles. We bought big canisters of water that we used to fill up smaller bottles.

During the week we visited fair amount of restaurants and it came to our attention that they did not serve any ice in the drinks, even in the cocktails that are usually served with few cubes of ice. Menu consisted of pizzas, burgers, fries and pastas and those were the cheapest items on the menu. For example a burger with fries was approximately six euros and a chicken salad was around eight euros. If the portion had any vegetables in it, it was only one piece of cucumber and two slices of tomato. We think that the issue with the vegetables is that it is fairly hard to grow them due to the water situation. They sold some vegetables in the supermarket but we had no idea where they came from since it had no label. Caroline Muscat had wrote an article in the Times of Malta on Saturday May 10th 2014 about farmers who wish that people would stop using sewage on their farmlands to protect farmers' reputation. One farmer had said that even though he does not use slurry on his lands, people do not wish to buy his vegetables for he his from Burmarat which is one place that the problem has occurred. Therefore we could not make any decisions based on locality of the product and be sustainable towards the farmers who do not use slurry on their lands.

We bought wine from a different shop and the cashier made a note about few of the wine bottles that can be returned to the shop and get 25 cents back. It never occurred to us which bottles were refundable. We noticed that there was at least one shop, which took back all the bottles made of glass. During the week we saved all the wine bottles and on the last day we took them to the shop and returned them. We were surprised that the owner was not eager to see the amount of bottles we took back for we thought that we made a good deed. She probably wanted to choose only the refundable bottles. Despite the uncomfortable situation we had a positive opinion about the shop since it offered shopping bags made of fabric. They even offered us cardboard boxes to carry our groceries.



Picture 7. Recycling point at tourist attraction Popeye Village (Oinonen, O. 10.5.2014)

We took the picture 7, since it shows that there are some recycling points available. This picture was taken in Popeye Village and it is one of tourist attractions in Malta. We presume that the brown bin in the far left is for mixed waste. In our opinion it is very important to have bins for plastic, because tourists usually carry plastic water bottles.

During our stay at Mellicha and visiting the capital Valletta we saw only two recycling centers, which included all the main recycle bins. Nearest recycling center was not in walking distance so it was quite impossible for us to go there without a car. There were couple trash bins in the beach area, which had one hole for paper, plastic and metal and other hole for other waste. When we walked around Mellicha there was a lot of trash on the pavements and in the bushes. It gave us a dirty impression of the town. When we took our trip to Valletta we used public transportation. The ticket cost 1, 50 euros and it was valid for the whole day. In general the public transportation was good and efficient. The roads were quite narrow but still in a good condition. Maltese preferred using roundabouts instead of traffic lights, which in our opinion is better for the fluent traffic since it does not pollute so much. We resided at the Tas Sellum residence, which consisted of 11 blocks which were divided into apartments. While we were staying at our balcony we saw that the opposite apartment was totally empty and has not even been taken into use. This was not the only apartment left empty but there were many more in the area. A building next to the residence had not even been fully constructed for it did not even have walls around it. The local government still wishes to build new apartments even though they have around 3000 vacant properties in Mellicha (Maltatoday 2013).

Since our group was our test subject, we had to observe their behavior and see how sustainable the choices they made were. While staying at the apartment we made a remark about the fact that our group members took very shorts showers. Even though the guys took usually two showers per day but the time they spent was equivalent to one girl's shower. There was a dishwasher and also a washing machine but we did not use either of them. Although we should not have pressured the group towards sustainable choices we were shocked about the fact that one of our group members wanted to take a long hot bath. Therefore we had to step in and remind her about the amount of



water we can use during the stay. On the last day we asked our group to fill out a form with feedback questions.



Picture 8. Litter in the bushes (Oinonen, O. 11.5.2014)

Picture 8 shows the ugly side of Malta as there were many sites like this. For example the route we took from the hotel to the shop (around 2km) was not the cleanest one. Many bushes were full of plastic bottles and other trash. Usually it was quite hard to find trash bins.



Picture 9. Blue water in Mellicha Bay and litter in the water in Popeye Village (Oinonen, O. 10.5.2014)

On the left side of picture 9 one can see how clear the sea around Mellicha Bay is. Even though the picture is taken in the area where a lot of tourists are spending their holiday and where many boats are situated, it shows that the cleanliness of the sea is been taken care of. Unfortunately there is a lot of rubbish outside of the Bay what can be seen in the picture on the right. We also saw a lot of rubbish and plastic in the water when we took boat tour to the Blue Lagoon.





Picture 10. The main road of Mellicha. (Oinonen, O. 7.5.2014)

Picture 10 shows that there were also places where no trash was to be seen.



Picture 11. An uninhabited apartments in Mellicha (Oinonen, O. 7.5.2014)

In the picture 11 one can see the beautiful view over Mellicha bay but also uninhabited apartments. Around Mellicha were many buildings that were left unfinished, some even had only few walls and that was that. There were also many buildings that had few apartments occupied but mainly they were empty.



## 6.2 Analyzing the feedbacks

In this chapter we will analyze the feedback our group gave us. The aim is to bring forth all the ideas, opinions and attitudes the group members experienced during the trip. We were really appreciative that the group gave us versatile replies and we could see that they had taken the time to fill in the form that can be found in attachment 2. We wanted to know how long lasting effect one briefing could have on tourists, therefore we made another feedback form six months after the trip and it also included five questions and this form can be found in attachment 3. Both analysis have figures to show the summarized results.

### 6.2.1 Feedback directly after the trip

Firstly we wanted to know what the subjects were thinking about the briefing and what kind of emotions it raised. Mostly it had raised positive feelings, since one subject did not know about the water situation in Malta and one thought that the briefing was well planned. From another perspective, one of the subjects was little bit depressed to be reminded of the bad situation the world is in, but the subject still thought that raising awareness is more important, than her personal feelings. *“Positive, I have few minutes to spare for awareness, but at the same time it is little bit depressing to be reminded of what a shitty situation our world is in, when you just want a holiday from all the stress, still I think spreading awareness is more important.”* (Subject D.) One of the subjects said that it did not raise any feelings, but it made the subject think rationally about the water and electricity consumption. One said it did give something to think about.

Secondly, we were interested in whether or how the subjects acted upon the fact, that Malta has water and electricity crisis. Every subject kept the situation in mind and did not waste water or electricity. While showering the subjects turned the water off while shampooing, subjects did not let the water run while washing dishes as well. Almost everyone turned off the electricity plugs after using them. One of the subjects said that he/she has not ever been so cautious while using water or electricity than in Malta. *“I usually try to act environmental anyhow the situation in Malta is present all the time. This influenced my behavior significantly and I tried this week to spend as less of both as I probably ever have.”* (Sub-

ject B.) One of the subjects wanted to take a hot long bath as he/she usually takes while being on a holiday, but let the idea go after the researchers and other subjects' intervened. *"Yes. Well first of all I did not even bring that many electronic devices with me and I did not turn on the TV for background noise and I did not have that long hot bath what I usually have when I see a hot tub."* (Subject D.)

Thirdly we wished to know whether the briefing had affected subjects' holiday in general. Mainly it affected the subjects' attitudes and actions toward water and electricity consumption. Few answered that they were more aware of Malta's waste problem. *"It made more perceptive towards possible problems in governmental actions towards conservation."* (Subject F.) Another perspective was given by those who said that they are "green" always while travelling and those who thought it did not affect that much, since they were on holiday.

Next, we were keen on knowing whether the subjects noticed any specific differences in sustainability between Malta and Finland. All except one noticed the most notable difference in the way the countries recycle their waste. Subjects felt that Malta did not have enough recycling points and did not separate that well the household and biodegradable waste. Few of the subjects also brought up that they did not see recycling points for plastic bottles and very few places that accepted glass bottles. *"There were no recycling points – bio-degradable waste? Waste transportation system was weird, since locals left the trash on the pavements from where they should be collected. I do not think that the recycling is very efficient."* (Subject A.) *"At least in Finland we try to recycle. In Malta they had only two/three places you can bring metal or plastic containers. They did not recycle any plastic bottles and only few of the glass bottles."* (Subject G.)

Malta did have some positive sides also such as: few shops gave out fabric bags instead of plastic ones for free and the off switches in electric plugs. One of the subjects paid more attention to the current economic difference between Finland as a more developed country and Malta as the less developed country.

Finally we hoped that the subjects have some suggestions and ideas for us. Subjects did not have ideas for us, how to continue with the study but rather gave us suggestions

what Malta could do. They suggested that Malta should improve their recycling, lessen the number of cars and make public transportation more efficient. One suggested that government could give taxation eases to public sector and private sector based how much they recycle. One of the subject' did not have any suggestions and ideas for us.

I like that do to the lack of resources, especially water, some good attempts are visible. I noticed only seawater pools, farming areas which watered the plants with seawater that was possessed to take out the salt. Also the fact that tourists only get a limited amount of electricity and water is a good attempt. Some recycling is visible, but especially this should be increased. I like that public transportation is insanely cheap. Anyhow the amount of cars should be decreased and public transportation could be made more sustainable. (Subject B.)

### **6.2.2 Feedback after six months**

Firstly we wanted to know whether the subjects had travelled abroad after the trip to Malta. Since the idea of the study was to know whether pre-given briefing affects the behavior of tourists while they travel abroad, it was important to know if the subjects have travelled abroad during six month period. All except one have been travelling abroad and especially in Europe for example in Great Britain, Denmark, Austria, Spain, Italy, Portugal and Iceland.

Secondly we wished to know whether the subjects remembered what the context of the briefing was. All the subjects apart from one were certain they remembered the context. One subject said he/she cannot remember but guessed it correctly. The subject was clearly aware of the current situation in Malta and therefore could guess the theme of the briefing. *"About how tourism affects Malta? I remember the part where you were talking about the fresh water."* (Subject C.) *"I remember that you held a briefing, but I am unsure what it was about. Water conservation in Malta is my best guess. The island is dry, because of deforestation and it is very important to use water wisely."* (Subject F.)

Thirdly we were interested in whether the briefing had changed the attitudes of the subjects in general in the long run. Five out of seven said that the briefing had changed their attitudes at least in some areas of life. The subjects also gave few examples for us such as: concern for problems that can occur during waste management and recycling, being more efficient with water and electricity consumption. One subject also said that

during a holiday he/she uses the same towels more than a few times and takes showers rather than baths. *‘For example I use the same towels at the hotel several times. Meaning that some people just throw the towel on the floor to get a new one from the cleaning lady and that is just unnecessary. The other example could be for example baths that people take when they are on holidays, if the destination is having problems with fresh water, people should not take baths.’* (Subject C.)

Few said that they have always been conscious about sustainability issues while traveling and our briefing did not make a difference. One of the subjects confessed that the briefing changed their attitude only during the one trip. *“The briefing changed my attitude for the duration of the trip, but hasn't impacted my actions in the long run.”* (Subject F.)

Finally we wished to know what would be the best channel for the subjects to receive the briefing – on-site, by leaflets or via e-mail. Three out of seven thought the best way to hold a briefing would be on-site. They suggested that the tour guide would be a good choice for the speaker. The others suggested the best way would be by leaflets, since tourists can read them during flights, nevertheless one of the subjects said that it would be more efficient to hear it on-site, but would still have it on the leaflet. None of the subjects wanted to have the briefing via e-mail, since many of them would consider it as a spam mail.

Being honest, I think e-mails would be considered as spam mail and just ignored. Which might also happen with leaflets. I think these "environment talks" should be held by tour guides in order to get the full attention of the travelers. And what comes to the leaflets, they might work best when placed at airports and planes. During the flights people usually are bored and flicker through the catalogues, so why not get educated meantime. (Subject D.)

## 7 Conclusion

From the part that tourists do not want to think about sustainability issues during their holiday was mostly incorrect. We cannot be sure did the subjects took their time to fill in the forms just because we were their friends, or they genuinely felt the need to express their feelings and opinions. We assume that similar background and the fact the group members were students at a university had some effect on their world view. We had made a correct assumption that the briefing did not have long lasting effect on the group members. The feedback replies after six months explains that the subjects did remember what the briefing was about, but it did not change their behavior permanently. On the other hand the study had the effect we hoped for and it did change the group members' attitude for one trip. It shows us that these kind of briefings should be held every time and perhaps on a longer course it will have more permanent effect on tourists who take trips that have these briefings. It is rather impossible to brief every tourist, since many tailor their own trips and therefore, these briefings could be introduced to tourists that take part in package trips. For example holiday flights can have leaflets of the issues that the certain destination has, since all the tourists on the same flight flies to the same destination. We thought also that at the destination where one bus takes tourists to their hotel, could have a small briefing held by the tour guide. Our assumption is that there is no reason to hold these briefings for example tourists that are on eco-tours, for they are probably more aware of the sustainability issues. Clearly one study is not enough to show how briefings affect tourists, therefore we hope that someone would see this study as a cornerstone and wishes to develop it further.

Since this experiment took place in Malta, it shows the current issues the tourists notice. Malta is improving itself all the time which can be seen in the chapter 4.3 where is an example of waste management plan made for 2014 – 2020, however it also shows that there is still room for improvement. It has to be kept in mind that the group members came from more developed counties, therefore are more prone to notice differences in for example recycling. We assume that tourists that come from less developed countries than Malta may be rather unaccustomed to making a difference in

recycling points etc. The previous statement means not to generalize tourists but rather to show that everything is not black and white. It is understandable that Malta has environmental issues that still need improvement, since it is part of the EU and it has a set requirement that have to be met. This study shows how tourists see Malta and what kind of emotions it raises. It is vital to remember that everything was not seen in a negative light for example the use of plastic bags, since it is something that is not yet perfected even in Finland.

<b>Problem</b>	<b>Current situation</b>	<b>Solution</b>
<b>Electricity</b>	Producing energy by using fossil fuels	The use of solar, wave wind energy
<b>Waste</b>	Few recycling points, trash on the ground	More recycling points and bins, information about recycling, green campaigns.
<b>Fresh water</b>	Overconsumption of fresh water, drinking from the tap is not suggested- nitrates	Avoid the use of nitrates while farming, more effective desalination system

Figure 7. Problems and solutions of environmental issues based on theory

Figure 7 shows the main problems of the environmental sustainability based on the theory in chapter 4.3. Beside the often mentioned overconsumption of fresh water supplies, the use of fossil fuels came up in the theory. The solutions to the problems are based on our own perceptions. The aim of the figure is to show what could be done in a governmental level. The solutions in the figure are more of a suggestion than concrete solutions.

Problem	Current situation	Solution
<b>Electricity</b>	Usage is costly	Turn off electricity plugs, use less electronic devices, and use A/C only when necessary.
<b>Waste</b>	Few recycling points, trash and bottles on the ground	Recycling points should be more easily accessed for tourists to find them. Shops should accept plastic and glass bottles
<b>Fresh water</b>	Tab water is not drinkable, Overconsumption.	Tourists should buy big containers of water and fill in smaller bottles. Take shorter showers and close the tap when not using for example while shampooing, washing dishes

Figure 8. Problems and solutions on environmental issues based on observation

In figure 8, are problems that are mostly gathered by observation except the cost of electricity. The high tariff of electricity is due to the expensive cost of oil as it is explained in chapter 4.2. The idea of this figure is to show what tourists can do and how they can be sustainable while being on a holiday. As it was said in chapter 4.3.1 the government of Malta wishes to enable a system where people could return their plastic bottles to shops. This is something we also thought about while on a trip to Malta. This would be a way to reduce the amount of plastic waste. Since Malta has a problem of overconsumption of fresh water, tourists could take shorter showers which also would reduce the amount of water being overused. In our opinion this figure could be used to inform the tourists beforehand, for letting them to act in a more sustainable way.

## References

- Altinay, L. & Paraskevas A. 2008. Planning research in hospitality and tourism. First edition. First edition. Elsevier.
- BBC 2012. Malta. URL: <http://www.bbc.com/weather/features/18035291> Accessed: 24.3.2014
- BL 2014. Qualitative and quantitative Research. URL: <http://www.bl.uk/bipc/resmark/qualquantresearch/qualquantresearch.html> Accessed: 5.5.2014
- Cohen, L., Manion, L., Morrison K. 2011. Research Methods in Education. 7th edition. Routledge.
- Cooper, C., Fletcher, J., Fvall, A., Gilbert, A. & Whanhill, S. 2008. Tourism Principles and practice. Fourth edition. Pearson Educated Limited. Harlow.
- Csulb 2014. Steps in empirical research. URL: <http://www.csulb.edu/~msaintg/ppa696/696steps.htm> Accessed: 6.5.2014
- EEA 2014a. Municipal waste management in Malta. URL: <http://www.eea.europa.eu/publications/managing-municipal-solid-waste/malta-municipal-waste-management> Accessed: 27.10.2014
- EEA 2014b. Municipal waste management in Finland. URL: <http://www.eea.europa.eu/publications/managing-municipal-solid-waste/finland-municipal-waste-management> Accessed: 18.12.2014



Environment 2014. Recovery of municipal waste in 1997 – 2011. URL:  
[http://www.environment.fi/en-US/Maps\\_and\\_statistics/The\\_state\\_of\\_the\\_environment\\_indicators/Natural\\_resources/Less\\_than\\_one\\_half\\_of\\_municipal\\_waste\\_en%2828268%29](http://www.environment.fi/en-US/Maps_and_statistics/The_state_of_the_environment_indicators/Natural_resources/Less_than_one_half_of_municipal_waste_en%2828268%29) Accessed: 18.12.2014

Flick, U. 2009. An introduction to qualitative research. Fourth edition. SAGE Publications Ltd.

Good news Finland 2014. URL:  
<http://www.goodnewsfinland.com/archive/news/finland-tops-the-list-of-bottle-recycling-countries/>

Gov 2014. Issues paper. Towards sustainable waste management. URL:  
[https://gov.mt/en/Government/Press\\_Releases/Documents/pr1399a.pdf](https://gov.mt/en/Government/Press_Releases/Documents/pr1399a.pdf) Accessed: 27.10.2014

Greenfudge 2014. Malta's "black dust" pollution. URL:  
<http://www.greenfudge.org/2014/03/21/maltas-black-dust-pollution/> Accessed: 27.10.2014

Independent 2014. High fuel costs mean paying more than they save on energy bills. URL: <http://www.independent.com.mt/articles/2014-12-11/local-news/High-fuel-costs-mean-people-losing-more-than-they-save-on-energy-bills-PN-6736127165> Accessed: 19.12.2014

Index Mundi 2014. Malta economy profile 2014. URL:  
[http://www.indexmundi.com/malta/economy\\_profile.html](http://www.indexmundi.com/malta/economy_profile.html) Accessed: 23.09.2014

Lonely Planet 2010. Malta & Gozo. First edition. Lonely Planet Publications Pty Ltd.

Malta Today 2013. Malta's empty houses up by massive 36% in six years. URL:  
<http://www.maltatoday.com.mt/news/national/28165/malta-s-empty-houses-up-by-massive-36-in-six-years-20130706#.U3nl-sZje91> Accessed: 19.5.2014

Malta Independent 2013. Malta suffers from EU's worst nitrate pollution. URL:  
<http://www.independent.com.mt/articles/2013-10-21/news/malta-suffers-eus-worst-water-nitrate-pollution-2936176645/> Accessed: 19.5.2014

Mellicha Local Council 2012. Mellicha- An introduction to a destination for all seasons. URL: <http://mellicha.gov.mt/mellicha-an-introduction-to-a-destination-for-all-seasons/> Accessed: 26.3.2014

Mepa 2014. Malta already meeting 2015 EU car emission targets. URL:  
<http://www.mepa.org.mt/newslet38-article15> Accessed: 27.10.2014

Ministry for foreign affairs of Finland 2014. Malta. URL:  
<http://formin.finland.fi/public/default.aspx?nodeid=17259&contentlan=1&culture=fi-FI> Accessed: 31.3.2014

Ms Dec 2014. Waste Management Plan for the Maltese Island. URL:  
<http://msdec.gov.mt/en/Document%20Repository/Waste%20Management%20Plan%202014%20-%202020%20-%20Final%20Document.pdf> Accessed: 19.12.2014

MTA 2014. Tourism in Malta-Statistical report. URL:  
<http://www.mta.com.mt/page.aspx?id=105> Accessed: 27.10.2014

Muscat, C. 2014. Farmers: Stop sewage use to protect our reputations. Times of Malta 24,422, 44.

Oinonen, O. 2014. An uninhabited apartments in Mellicha. Picture 7.5.2014

Oinonen, O. 2014. The main road of Mellicha. Picture 7.5.2014

Oinonen, O. 2014. Waste collection information in the apartment lobby. Picture 8.5.2014

Oinonen, O. 2014. Mellicha. Picture 8.5.2014

Oinonen, O. 2014. Blue water in Mellicha bay and litter in the water Popeye Village. Picture 10.5.2014

Oinonen, O. 2014. Recycling point at tourist attraction in Popeye Village. Picture 10.5.2014

Oinonen, O. 2014. Litter in the bushes. Picture 11.5.2014

Oinonen, O. 2014. The Grand Harbor of Valletta. Picture 12.5.2014

Page, S & Connel, J. 2014. Tourism A Modern Synthesis. Fourth edition. Cengage Learning EMEA, Cheriton House, North Way, Andover, Hampshire SP10 5BE, United Kingdom.

Stat 2014. Municipal waste by treatment method 2002 –2013. URL:  
[http://www.stat.fi/til/jate/2013/jate\\_2013\\_2014-11-27\\_tie\\_001\\_en.html](http://www.stat.fi/til/jate/2013/jate_2013_2014-11-27_tie_001_en.html) Accessed: 18.12.2014

Sustainable Development. Tourism and Sustainable Development Unit. 2014. URL:  
<https://secure2.gov.mt/tsdu/sustainabledevelopment?l=1> Accessed: 24.3.2014.

Sustainable Development Plan for the Locality. 2011. URL:  
[http://lc.gov.mt/mediacenter/PDFs/1\\_Sustainable%20development%20plan%20for%20the%20locality.pdf](http://lc.gov.mt/mediacenter/PDFs/1_Sustainable%20development%20plan%20for%20the%20locality.pdf) Accessed: 25.3.2014

A Sustainable Development Strategy for the Maltese Islands. 2006. URL:  
[http://www.um.edu.mt/\\_\\_data/assets/pdf\\_file/0003/64812/SD\\_Strategy\\_2006.pdf](http://www.um.edu.mt/__data/assets/pdf_file/0003/64812/SD_Strategy_2006.pdf)  
Accessed: 31.3.2014

The Guardian 2014. Chris Packham: Malta is a bird hell. URL:  
<http://www.theguardian.com/environment/2014/apr/28/chris-packham-malta-is-a-bird-hell>. Accessed: 23.10.2014

The Malta Independent 2013. Increasing female participation in workplace. URL:  
<http://www.independent.com.mt/articles/2013-09-26/news/increasing-female-participation-in-the-workforce-2726363141/> Accessed: 23.09.2014

Timsaxon 2014. URL: <http://www.timsaxon.co.uk/Maltaguide.html>

Time 2011. Malta says “We do” to legalise divorce.  
URL:<http://content.time.com/time/world/article/0,8599,2074721,00.html> Accessed:  
23.09.2014

Times of Malta 2014a. Ugly face of racism. URL:  
<http://www.timesofmalta.com/articles/view/20140507/opinion/Ugly-face-of-racism.517999> Accessed: 24.09.2014

Times of Malta 2014b. Malta has the highest dependence of imports for power generation. URL: <http://www.timesofmalta.com/articles/view/20140217/local/malta-has-highest-dependence-on-imports-for-power-generation.507155> Accessed: 23.09.2014

Times of Malta 2014c. Malta has far higher asthma symptoms among children than Sicily. URL: <http://www.timesofmalta.com/articles/view/20141023/local/malta-has-far-higher-asthma-symptoms-among-children-than-sicily.540868> Accessed: 27.10.2014

Times of Malta 2014d. URL:  
<http://www.timesofmalta.com/articles/view/20141118/budget2015/-Recycling-scheme-for-plastic-bottles-.544652>

Tourism Excellence 2014. Benefits of Tourism. URL:  
<http://www.tourismexcellence.com.au/Growing-Destinations/Benefits-of-Tourism.html> Accessed: 31.3.2014

UNEP 2014a. Socio-cultural impacts. URL:  
<http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFiguresaboutTourism/ImpactsofTourism/Socio-CulturalImpacts/tabid/78780/Default.aspx> Accessed: 31.3.2014

UNEP 2014b. Negative Economic Impacts of Tourism. URL:  
<http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFiguresaboutTourism/ImpactsofTourism/EconomicImpactsofTourism/NegativeEconomicImpactsofTourism/tabid/78784/Default.aspx> Accessed: 31.3.2014.

UNEP 2014c. Tourism and environmental conservation. URL:  
<http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/TheTourismandEnvironmentProgramme/FactsandFiguresaboutTourism/ImpactsofTourism/EnvironmentalImpacts/TourismandEnvironmentalConservation/tabid/78779/Default.aspx> Accessed: 31.3.2014

UNESCO 2014. Malta. URL:  
[http://whc.unesco.org/en/list/?search=malta&searchSites=&search\\_by\\_country=&region=&search\\_yearinscribed=&themes=&criteria\\_restriction=&type=&media=&order=country&description=](http://whc.unesco.org/en/list/?search=malta&searchSites=&search_by_country=&region=&search_yearinscribed=&themes=&criteria_restriction=&type=&media=&order=country&description=) Accessed: 2.12.2014

Visit Malta 2014a. About Malta. URL: <http://www.visitmalta.com/en/about-malta>  
Accessed: 24.3.2014

Visit Malta 2014b. History. URL: <http://www.visitmalta.com/en/history> Accessed: 24.3.2014

Visit Malta 2014c. Modern Malta. URL: <http://www.visitmalta.com/en/modern-malta>  
Accessed: 23.3.2014.

Visit Malta 2014d. UNESCO World Heritage Sites. URL:  
<http://www.visitmalta.com/en/unesco-sites> Accessed: 23.3.2014.

Visit Malta 2014e. Valletta. URL: <http://www.visitmalta.com/en/valletta> Accessed:  
24.3.2014

Visit Malta 2014f. History of Valletta. URL: <http://www.visitmalta.com/en/valletta-history> Accessed: 24.3.2014.

Visit Malta 2014g. European Capital of Culture. URL:  
<http://www.visitmalta.com/en/european-capital-of-culture-2018> Accessed: 24.3.2014.

## **Attachments**

### Attachment 1. Briefing

Hello everybody!

We would like to bring to your attention the situation in Malta. Just imagine annual rainfall is 530 mm and this is highly variable. Only fresh water resource in viable quantities for use is ground water. Malta is a Mediterranean island so climate is hot and dry. Sometimes the locals do not even comprehend the actual situation even though there is a water crisis going on; therefore it is vital that tourists are informed beforehand so they can make good and sustainable choices.

As you already have noticed that our hotel has a limit of water and electricity usage. When the amount of water and electricity we can use is reached then we have to pay for extra. Please notice that we are all in this together so all for one and one for all.

We would like to encourage you to think about your choices during the week. Enjoy your holiday and remember to be green but not jealous!

## Attachment 2. Feedback form

1. What did you think about our brief introduction? Did it raise any negative or positive thoughts?
2. When you used water and electricity did you keep the situation in mind?
3. Did our speech about sustainability affect your holiday in general?
4. Did you notice any specific differences in sustainability between Malta and Finland?
5. Do you have any suggestions or ideas?



### Attachement 3. Feedback after six months

#### **Feedback after six months.**

Helooo! Oonariina and Gerda here again with the questions.

Would you be so kind and find a time to answer to these questions. It would make a big difference to our thesis. We support social media, so Facebook it is ;)

- 1) Have you been travelling abroad after the trip to Malta on 7th of May 2014?  
Where?
- 2) We held a briefing there, do you remember what was it about? Explain briefly.
- 3) If yes, has the briefing changed your attitudes in general while traveling abroad?
- 4) If yes, please give few examples. If no, why?
- 5) Would you rather have these briefings on-site, by leaflets or by e-mail before the trip?

#### Attachment 4. Schedule of the thesis process

January	Sustainable Tourism course began and we got the idea for the course report – Malta
February	Gathering information about Malta as a destination and writing theory about sustainability issues.
March	Continued writing theory and added research methods
April	Decided to continue the course report as thesis.
May	Created the first feedback form, trip to Malta took place. Completed the course report.
June	Holiday
July	Holiday
August	Commissioner confirmed. Subject analysis was turned in
September	Back to school and the confirmation of the thesis supervisor. First thesis seminar took place and the decision for the other feedback form was made
October	Got the replies for the second feedback form and the writing of the thesis continued
November	Second thesis seminar took place.
December	Third thesis seminar and the maturity test took place. The completed thesis was turned in