



The Maltese Environment and the Maltese Economy - A zero-sum Game?



A Social Policy Paper by **ELSA Malta**



The European Law Students' Association

MALTA

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Foreword

ELSA, the European Law Students' Association, aside from being a human rights organisation, it also seeks to be at the forefront of all legal discussions especially when it comes to controversial topics with contrasting opinions. In fact, ELSA's main purpose is *“to contribute to legal education, to foster mutual understanding and to promote social responsibility of law students and young lawyers”*.

ELSA Malta strives to promote this vision of ELSA in all its projects. In order to do this, it publishes a number of research and policy papers, of which, are done not only to promote this vision of ELSA but also in order to be an active part of the discussion on certain pressing legal and human rights issues. A matter which feels very pertinent to one's everyday life at the moment, especially as a Maltese citizen but certainly not limited to the Maltese islands, is that of over development. This topic brings about many consequences which we, at ELSA Malta, feel need to be analysed closely, discussed and eventually bring about change. Such consequences that come to mind are the deterioration of the environment which contributes to climate change, the loss of culture and identity and, as often seen through this topic, loss of life. Thus, the scope of this policy paper is to bring certain issues to light after gathering information and research, and finally to propose changes that may be implemented to improve upon the situation and guarantee the human rights of each individual.

This project would not have been possible without the many hours of work and dedication of a highly dedicated group of people, to whom I would like to express my personal gratitude to. First and foremost, I would like to especially thank Sarah Xuereb and Elisa Micallef Peplow, ELSA Malta's former Director for Social Policy and her successor respectively, for ensuring that such a project saw its conclusion in a manner of the highest standard of work. I would also like to extend my gratitude towards Ms. Bethany Caruana, Mr John Paul Buttigieg, Ms. Maria Scicluna, Ms. Naomi Spiteri, Mr Samuel Buttigieg for their all-important assistance in the actual writing of the policy paper itself. I would also like to greatly thank Dr. Tonio Borg for taking the time to carefully review the research paper and for giving us feedback and guidance accordingly. Finally, I would like to thank Katrina Cini and Amy Saliba, ELSA Malta's Vice President for Marketing and Director for Public Relations respectively, for the design of the paper.

On behalf of ELSA Malta, we sincerely hope that you find our policy paper fruitful as well as enjoyable, while we aspire that it brings to light to you, dear reader, the issues that are present and discussed in the policy paper and moreover, to foster a sense of proactivity within you.

Raoul Ciappara
President of ELSA Malta

Table of Contents

Acknowledgments.....	2
Foreword.....	3
Table of contents.....	5
Section 1: Introduction.....	6
Section 2: Analysing ODZ Development and Urbanisation.....	9
What is an Outside Development Zone?.....	9
Why does development still take place in Outside Development Zones?	10
Is an ODZ a speculative investment?.....	10
Limitations of development in ODZ, is there a zero-tolerance policy?	11
What is Urbanisation?	13
Section 3: Our Environment	14
How is our environment being affected?	14
Is Eco Housing the future?	20
Section 4: The Ongoing Economy versus Environment Struggle in Development:	
A Defence to both Parties	23
Economy	23
Benefits of Economic Growth	23
Drawbacks of Economic Growth.....	25
The Construction Industry and the Maltese Economy	26
Environment	27
Benefits of a Healthy Natural Environment.....	28
A Healthy Environment and a Blooming Economy: Can they coexist?	28
Sustainable Development.....	29
The Sustainable Development Act	31
The United Nation’s Sustainable Development Goals	31
The European Union Green Initiative.....	33
Sustainable Development: The Way Forward	34
Section 5: Other Impacts	35
Can Over-Development Impact One’s Mental Health?.....	35
Construction and Health Risks	36
The Socio-Economic Standard of Living in Densely Populated Countries.....	38
Section 6: Proposals	40
Section 7: Conclusion	43
Bibliography	44

Section 1: Introduction

“This is about sustainable development... this is about equality... this is about our security”

- President Ursula von der Leyen at the One Planet Summit¹

The protection of the environment and the preservation of wildlife have been two burning unceasing issues all around the world, yet not much progress has been made. Everything around us is, or is run, by the power of nature. From one generation to the next, societies have evolved by inventing new and efficient modes of living, which ultimately kept the market running. In unique ways, we not only created new practices that gave life a broader meaning, but also altered our planet.

There has been an outbreak of construction across the Maltese islands, even in small villages that still hold certain prestige for the up-keeping of ancient artifacts. The excessive mass of construction is definitely overwhelming to the public, and thus several opposing views have been expressed. One of these views was the loss of the Maltese identity which all in all gives true appreciation to our ancestors who fought industriously to be an independent country and to give importance to what the Maltese public needed. The various landscapes which are embedded in our culture and identity known to attract numerous tourists to our islands every year, are sadly being demolished. As a country known for its exquisite weather, beautiful waters and the placidity of its countryside, it is truly saddening to see how all this is slowly being affected.

The attainment of our independence in 1964 led to a mass improvement in economic development, through the usage of our island’s natural resources. Property and tourism proved to be the two main economies of Malta and Gozo, which ultimately led to a rise in urbanisation in most rural areas. However, the higher the demand for property in newly urbanised areas, the higher the cost of land. This was done so that the Maltese landscapes would not be devalued and still be enjoyed by the public. In the years after independence, the issue of the destruction of the environment was not then addressed as the islands were not in danger of losing their

¹ Leyen, *Speech By President Von Der Leyen At The One Planet Summit* (2021)

<http://file:///Users/sarahxuereb/Downloads/Speech_by_President_von_der_Leyen_at_the_One_Planet_Summit.pdf> Accessed 24 March 2021.

natural habitats. However, as of 1980, the country became aware of the negative impacts mass development created along with the significant increase in population numbers. Therefore, the Environment Protection Act was officially enacted. The Environment Protection Act serves as a monitor to the number of developments and property on the market, whilst issuing various restrictions. Article 3 of The Environment Protection Act states that:

“It shall be the duty of every person and entity, whether public or private, to protect the environment and to assist in the taking of preventive and remedial measures to protect the environment and manage natural resources in a sustainable manner.”²

The said Article clearly highlights everyone’s role in safeguarding our islands and making moral decisions that involve the life and well-being of future generations that might not experience certain liberties that our landscapes tend to offer.

In the seasons of autumn and spring, Gozo is known for its flourishing flora and fauna. However, several arguments are being raised about how unsustainable developments in the sister island are “ruin[ing] the urban fabric”³ that it is known to offer. Many individuals are opposing the sudden change, while requesting the relevant authorities to exercise better control of the situation. For an island known for its sacred holding to past traditions, architectural structures and the preservation of values, the current type of development is shattering its image. As stated by a member of the Gozo business Chamber, “It is important that our heritage is respected and that adverse impacts on our communities are avoided”, highlighting the fact that most of the development that is currently uprooting the characteristics of each village and town, does not render a service in these areas as it does not respect the texture provided by the urban areas. Thus, the government is seeking to provide Gozo with more opportunities to increase economic growth through the tourism industry, and by adequately boosting the property industry by providing more accommodation. A regional strategy was promised ensuring that this growth in development gives Gozo a new light, while increasing more job opportunities.

² Environment Protection Act, Chapter 549 Laws of Malta, 2016.

³ Nicole Meilak, 'Unsustainable Development Ruining Village Cores - Gozo Business Chamber' *Malta Today* (2021)

<https://www.maltatoday.com.mt/environment/townscapes/107941/unsustainable_development_ruining_village_cores__gozo_business_chamber#.YGbw4xMzZQJ> Accessed 26 March 2021.

As stated in an article published in February 2021⁴, “*The once tranquil villages of San Lawrenz, Għarb and Għasri, which recently saw the highest average price increase on property listings, have not escaped the scourge*” giving light to the current situation in Gozo where infrastructure corporations have taken over the island demolishing Gozo’s purpose and antique structure that gives it its prestige. Most of the development increase was found in the areas of Marsalforn and Xlendi, which explains why the mayors of these localities came forward and voiced their concerns on behalf of the residents. This economic development is highly beneficial to a certain extent as more opportunities have landed on the island, however, it needs to be properly limited and regulated as many argue that Gozo is supposedly the symbol of tradition, the fruit of those who persevere and a strong belief in simplicity.

The massive increase in infrastructure, not only caused environmental issues, but it also brought about a rise in mental health issues and pollution. Many have stated how the noise which emanates from construction sites is negatively affecting them, along with the high number of cranes seen from kilometers away, ruining the Maltese skyline. As buildings are being built higher and higher, many are being affected by the dull atmosphere they create. Apart from mental health issues, the toxic emissions coming from construction sites precipitate health problems such as cancer and asthma, which shorten the life expectancy of the people living in these areas. Schools which are situated near factories, and ongoing construction sites may leave the children highly exposed to air pollution, causing mental stress in both children and their parents and guardians. Therefore, our quality of life and happiness are threatened, along with our environment and all its wildlife.

⁴ Fiona Galea Debono, 'United Gozo Mayors 'Ignored' Over Fears About Construction' *Times of Malta* (2021) <<https://timesofmalta.com/articles/view/united-gozo-mayors-ignored-over-fears-about-construction.853436>> Accessed 24 March 2021.

Section 2: Analysing ODZ Development and Urbanisation

What is an Outside Development Zone?

An Outside Development Zone, as defined in the Development Planning Act, Chapter 356 of the Laws of Malta, is a piece of “*land outside the boundary for development in a planning scheme or local plan*”⁵. The 1990 structure plan which was adopted two years after, laid out three key goals for the Maltese islands. One of these aims was; “*To use land buildings efficiently and consequently to channel urban development activity into existing and planned development areas, particularly through rehabilitation and upgrading of the existing fabric and infrastructure thus constraining further inroads into undeveloped land, and generally resulting in higher density development than at present*”⁶. Subsequently, the Strategic Plan for Environment and Development known as SPED came into force, which upheld the objectives of protecting both the land and aquatic environment, while keeping in check with national policies. Moreover, such plan further highlights the future spatial distribution of development. Nevertheless, many people rightly question whether the current impacts and boost in developments are sustainable and fully align with the rules for conserving our natural environment.

When speaking of ODZ areas, one should note that such a term does not imply that all urban development is off limits within ODZ established boundaries. The 1990 Structure plan identifies the categories of non-urban development which will be allowed outside urban areas. Indeed, Policy S11 as well as paragraph 7.6, establish that farmhouses and other genuine agricultural buildings, reservoirs, picnic area toilets and car parks, control buildings, and walls/fences at archaeological and ecological sites are to be permitted and considered normal and legitimate inclusions in the non-urban scene. Moreover, Policy AHF 5 holds that such non-urban structures will have to either blend in with the rural landscape using natural stone or be hidden from view.⁷

⁵ Development Planning Act Chapter 356 of the Laws of Malta, 2021.

⁶ Ministry for Development of Infrastructure, 'Structure Plan For The Maltese Islands', (1990).

⁷ Development Planning Act Chapter 356 of the Laws of Malta, 2021.

Why does development still take place in Outside Development Zones?

The main difference between urban and rural areas may be highlighted in terms of the contrasting types of land uses which occur within a defined spatial context. Indeed, the former, high density of population and buildings, large settlements in which people work and live as well as a low number of open natural space is typical. On the other hand, rural areas are associated with a low population density, agriculture as well as an easy availability of natural resources. Furthermore, development in such areas is assumed to have links to facilities associated to agriculture, horticulture, countryside recreation, and fisheries.

The growing developments and impacts of urban areas in past decades have sprawled and consequently influenced the extent of urban fringes. Agricultural and undeveloped land within the established limits of development, can be considered as being rural even though they could be designated or assigned for future development. Comparably, in some established ODZ areas, some form of urban development exists in which it is due to the nature of it, such development has to be located on an ODZ area rather than in a development zone, relatively near urban districts. This shift could happen due to technical or operational requirements namely a reverse osmosis plant, waste facility, fireworks factory, an aircraft maintenance facility, or due to any hazardous and dangerous nature of certain developments in regard to health and safety.

Is an ODZ a speculative investment?

Due to a significant gap in prices between urban and ODZ areas, many take the opportunity to invest in land and developments in an ODZ area. Subsequently, an urban development planning permit in a designated ODZ area can render a substantial economic advantage over a relatively similar development in an urban zone. Indeed, this can be clearly displayed when an agricultural development with all the necessary permits becomes a forerunner for ODZ area development. This leads to numerous abuses in ODZ areas namely, stores for agricultural use half as large as the little agricultural land that they are deemed to serve, above-ground reservoirs designed to accommodate window openings, bungalow-styled stables, and pump rooms not serving any existing water source. Moreover, other abuses involve the removal of soil from agricultural plots of land, in order to cater for other uses namely parking large machinery and vehicles or vice-versa, the laying of soil on garigue land to deceive the respective authorities

into considering that the land in question is suitable for eventual development for agricultural purposes.⁸

Undeveloped land tends to have a more attractive price as such properties have no proper road access, no access to electrical and water facilities, as well as no drainage connectivity. Thus, such lands tend to carry a much lower price than the price of land found in urban areas. When one manages to obtain a permit for development in such areas, it could culminate into a highly profitable investment. With the constant growth of our population and the increasingly limited rate of land for development, many are turning away from undeveloped land. As can be seen from current market prices, the cost and demand for undeveloped land skyrocketed in recent years as many developers acquire land with the sole aim of developing it, regardless of its location, environmental impact or planning constraints. Nevertheless, these developers ought to ascertain that their application for developing and the land which will be used, shall be considered as developable.

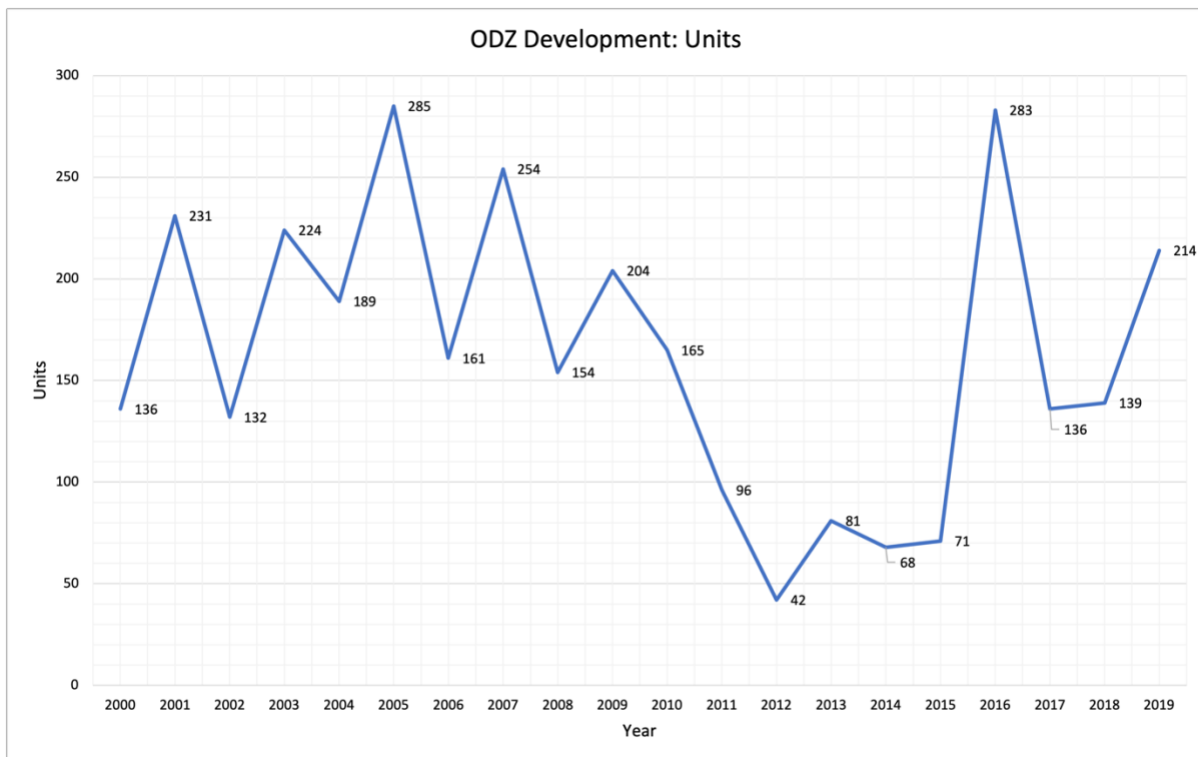
Limitations of Development in ODZ, is there a Zero-Tolerance Policy?

Throughout the years, the contexts of the strategic planning policy remained over all the same; however, the interpretation varied significantly. In regard to the inception of the structure plan, the interpretation regarding ODZ areas was quite restrictive, with some negligent observations with regards to agriculture development. There are several settlements outside the Development Zone which were established as being outside development zone, prior to the introduction and adoption of the 1992 Structure Plan. Several groups of residential settlements outside development zone, are dominated by a rural environment. In addition, in order to build in an ODZ area, the requirement that such a project and development contributes to the national economy and benefits society as a whole, is still in force. To the contrary, private activities relating to residential, industrial or tourism are strictly prohibited due to a zero tolerance towards development. However, many still question the zero-tolerance policy established for private activities. Indeed, the table below, published by the Information Resources unit within the Planning Authority on March 2020, displays the surge of ODZ developments per unit in the first decade of the 21st century, this was followed by a 5 year decrease of ODZ

⁸ (2021) <[https://www.ccmalta.com/insights/publications/outside-development-zone-\(odz\)-is-a-zero-tolerance?lang=hu-HU](https://www.ccmalta.com/insights/publications/outside-development-zone-(odz)-is-a-zero-tolerance?lang=hu-HU)> Accessed 20 April 2021.

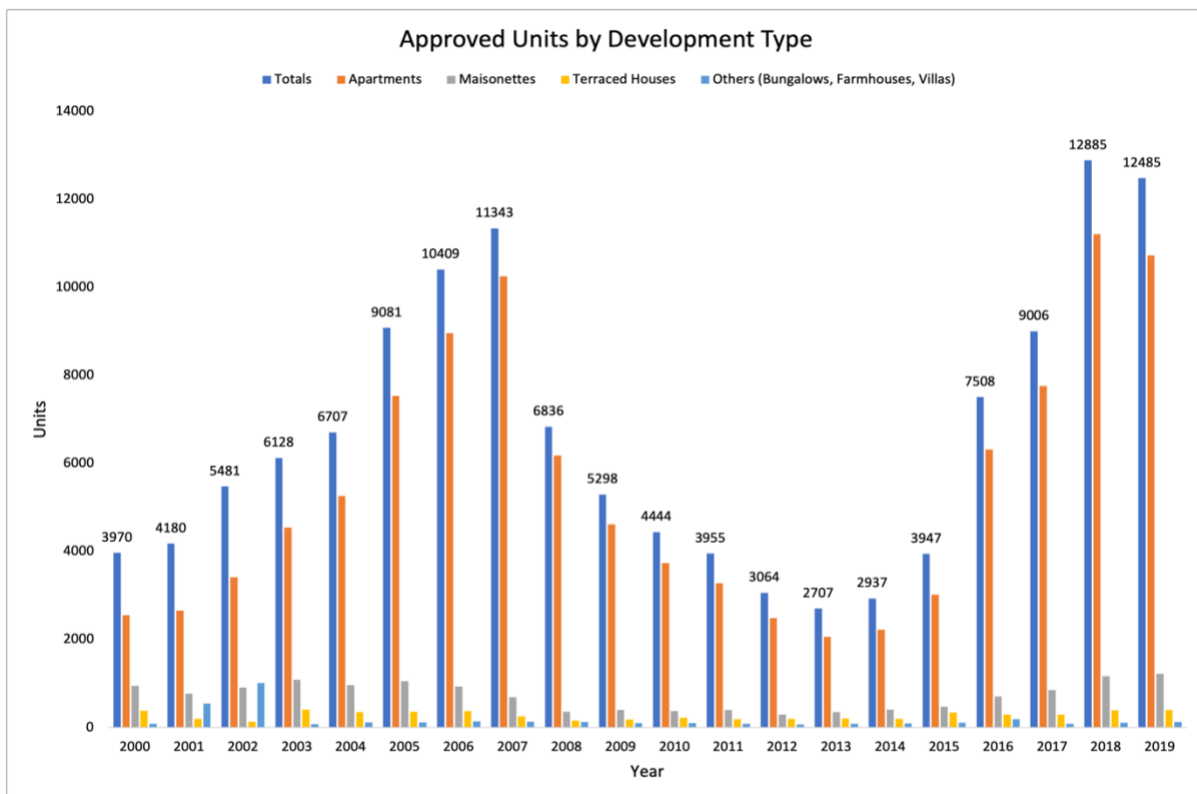
developments per unit, and finally a surge in developments per unit from 2015 till 2019 took place which mimicked the previous decade.

Some developments simply cannot take place in an established boundary of the development zone due to numerous reasons notably infrastructure and economic related factors. One might argue that designating a property to make way for the proposed development would be ideal and feasible however, due to land acquisition and identifying an alternative site to cater for all occupants might prove to be an impracticable process, with numerous socio-economic repercussions. In addition, one must also bear in mind the significance of conserving old rural developments. The neglect and abandonment of certain structures results in a loss of heritage, and although such buildings are situated in an ODZ area, they still deserve the required and proper maintenance and protection.



What is Urbanisation?

With the constant growing rate of population, urbanization has become a prevalent issue. Urbanization is the shift from rural areas to a more densely populated urban area. non-sustain is crucial, as it provides a place to work, live, educational facilities, medical related facilities, and as well as recreational areas for socialisation. However, a country’s economy crucially relies on urbanisation. Despite its significance in our society, we can face various negative impacts and repercussions.



As has been previously established, a construction boom has shaken Malta with many warning about our country’s emerging problem of over-development. Indeed, the table above, published by the Information Resources unit within the Planning Authority on March 2020, reveals the surge of dwelling units which were approved, with the year of 2018 hitting record numbers. Moreover, the Table displays the overwhelming number of apartment units granted in comparison to other types of dwellings, further intensifying the rate of urban living.⁹

⁹'How Many Vacant Properties?' - Michael Briguglio' (*Times of Malta*, 2021) <<https://timesofmalta.com/articles/view/how-many-vacant-properties-michael-briguglio.698586>> Accessed 15 May 2021.

Section 3: Our Environment

How is our Environment being Affected?

It is not an unheard-of statement that especially in recent years our planet has been facing serious issues and environmental impacts which is known as ‘environmental degradation’. Environmental degradation is defined as the disintegration of the earth or deterioration of the environment through the consumption of assets, such as, air, water and soil, the destruction of natural environments, and the eradication of flora and fauna. In other words, environmental degradation refers to any change or aggravation to natural habitats which is regarded as undesirable. Ecological effect or degradation is further enhanced by the increase in the world’s population, requiring additional urban development and use of natural resources, resulting in increased pollution.¹⁰

As humans we cannot deny our dependence on nature for food, air, water, energy and raw materials. Health benefits and life itself are made possible through nature and its biodiversity, all of which drive our economy. Furthermore, strong and dynamic eco-systems help minimise the negative impacts of climate change. It is very unfortunate that natural ecosystems on Earth and their fundamental amenities are heavily under pressure from intensive agriculture, over-development, pollution and climate change amongst other factors. Thus, the protection of nature from such threats is crucial. The European Union has brought forward a number of legislations in relation to nature, specifically the Habitats Directive and the Birds Directive. These directives are the cornerstones of biodiversity policy and provide the main legal basis for the nature protection network in the European Union.¹¹

In the last quarter of a century, the EU has succeeded in establishing the largest coordinated network of protected areas in the world, which is quite a remarkable achievement. This network, which is known as Natura 2000, encompasses 18% of the EU’s land area and over

¹⁰ 'Various Environmental Pollutants And Their Terrible Effect On Our Environment' (*Conserve Energy Future*, 2021) <<https://www.conserve-energy-future.com/various-environmental-pollutants.php>> Accessed 26 March 2021

¹¹ 'Nature And Biodiversity - Environment - European Commission' (*Ec.europa.eu*, 2021) <https://ec.europa.eu/environment/nature/index_en.htm> Accessed 26 March 2021.

6% of the EU's Sea territories, extending across all the EU member states.¹² The Natura 2000 network promotes cooperation and protection of specific regions according to their needs. Apart from Natura 2000, the European Commission also seeks to protect threatened species through actions such as the EU initiative on pollinators and its strategy to connect natural areas using environmentally friendly infrastructure with the aim of restoring ecosystems and promoting the flourishing of species in their natural habitat. Furthermore, it seeks to monitor and control any invasive alien species to protect indigenous ecosystems.¹³

The Biodiversity strategy for 2030, set by the European Commission, seeks to protect natural environment from over-development and deforestation in EU member states. The nature and biodiversity law forming part of the EU's strategy for preserving natural environments encompasses the Birds Directive, Habitats Directive, Zoos Directive, Invasive Alien Species Regulation, and the Wildlife Trade Legislation.¹⁴ The Council Directive 92/43/EEC, introduced on 21 May 1992, focuses on the *"preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora"*, amongst other objectives.¹⁵ In 2010, EU heads of State and Governments agreed on a target; *"To halt the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, restore them in so far as feasible, while stepping up the EU contribution to averting global biodiversity loss."*¹⁶

Measures to protect natural environments and biodiversity are of crucial importance especially in countries similar to Malta where land area is restricted. Despite having rural areas inhabited by indigenous flora and fauna, the Maltese islands cannot boast of extensive forestry, thick vegetation and richly populated habitats. Therefore, it is far more essential to protect the limited virgin land by enacting and enforcing the relevant legislations. In light of the current drive towards urbanisation it is necessary to abandon short-term thinking in favour of more long-term considerations. Therefore, it would be extremely beneficial if the administrative

¹² Ibid 11

¹³ Ibid 11

¹⁴ Ibid 11

¹⁵ Ibid 11

¹⁶ Ibid 11

authorities show more sensitivity towards biodiversity when it comes to decision-making and enforcement actions, in order to further protect our Maltese environment.

On another note, over-development has also led an increase in noise pollution, which is very discernible in the Maltese scenario. Excessive noise is one of the key problems for residents who live close to construction sites. The principle of good neighbourliness needs to be advocated to promote trust, tolerance and respect between neighbours, thus minimising disruption of social peace.¹⁷ In a 2019 Eurostat survey, Malta ranked as the noisiest country in the European Union after data revealed that over a quarter of the population (28.3%) complained about noisy streets and neighbours, a figure that was much higher than the 17.5% average for the EU.¹⁸ The Eurostat findings showed that noise complaints were more likely to be made by older individuals especially those who lived alone.¹⁹

The enactment of the Environmental Management Construction Site Regulations addressed a number of specific issues with regards to Malta on noise pollution emanating from construction sites. These recently established regulations seek to protect neighbours by limiting the hours when construction work is permissible.²⁰ In its totality, these regulations are aimed at protecting neighbouring residents and maintaining control on the effects of demolition, excavation and construction works with particular reference to dust, noise, construction waste, and the storage of building materials. The law dictates that construction activity can be carried out between 7am and 8pm, meanwhile certain activities which generate a considerable amount of noise have to stop between 2 and 4pm, allowing neighbouring residents a two-hour break between morning and afternoon works.²¹ Moreover, no construction works can be carried out on Sundays and public holidays. In specific areas which are frequently visited by tourists, defined as “*tourism zones*”, demolition and excavation works are not allowed between the 15th of June and the 30th of September.

¹⁷ Rebekah Cilia, 'How Loud Is Loud? A Maltese Citizen's Guide To Construction Sites Noise' *Malta Independent* (2018) <<https://www.independent.com.mt/articles/2018-07-28/local-news/How-loud-is-loud-A-Maltese-citizen-s-guide-to-construction-sites-noise-6736193773>> Accessed 27 March 2021.

¹⁸ (*Appsso.eurostat.ec.europa.eu*, 2021)

<https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mddw01&lang=en> Accessed 27 March 2021.

¹⁹ *Ibid* 18

²⁰ Subsidiary legislation 552.09, Environmental Management Construction Site Regulations, 2007.

²¹ *Ibid* 20

The Building Regulations Act prohibits the use of pneumatic drills and excavators with hydraulic hammers before 8am, from 2 to 4pm, and after 8pm. The usage of these drills is also banned on Sundays and public holidays. Furthermore, those managing construction sites' ought to avoid unnecessary noise such as, leaving noisy operating machinery idle, shouting, loud radios, or excessive revving of engines. The law requires owners to ensure that the least nuisance is caused when construction work is carried out; nuisance in this case also refers to that which is generated by the work being carried out.²² However, the law does not apply if the nearest habitation is more than one kilometre away from the construction zone. Despite all these regulations, a request to the competent Authority may be submitted in order to obtain permission to carry out construction work beyond the stipulated times. One ought to keep in mind the level of noise which emanates from construction sites, that can be regarded as acceptable whilst also taking into consideration the duration of the excessive noise. The law at hand does not currently establish any limits on noise specifically stemming from construction sites; however, the Workplace (Minimum Health and Safety Requirements for The Protection of Workers from Risks Resulting from Exposure to Noise) Regulations²³ sets an exposure limit of 87 decibels which would be comparable to noise caused by truck traffic; thus, this limit would be exceeded if a pneumatic drill or chainsaw are used. A difficulty which is often faced by the Courts is that laws regulating noise pollution are distributed across various legislative measures, leading to a lack of enforcement as well as a lack of uniform approach.

The Environmental Management Construction Site Regulations require a large notice to be placed at every construction site displaying project-related information, as well as the contact details of the project manager responsible for the site so that he/she can be contacted by the residents at any time in case of issues or breeches of regulations. If a solution is not found, then MEPA could be involved in the matter.²⁴ Section 11 of the Environmental and Planning Review Tribunal Act, allows an appeal to be lodged against decisions which are specified in the law in contrast to the Building and Regulations Act, which permitted an appeal 'on any matter of development control' unless otherwise provided by the law.²⁵ A case to exemplify how over-

²² Ibid 20

²³ Subsidiary Legislation 424.28, Work Place (Minimum Health and Safety Requirements for the Protection of Workers from Risks resulting from Exposure to Noise) Regulations, 2006

²⁴ 'New Rights For Neighbours Of Building Sites' (*Flimkien ghal Ambjent Ahjar*, 2021) <<http://faa.org.mt/new-rights-for-neighbours-of-building-sites/>> Accessed 28 March 2021.

²⁵ Chapter 551 of the Laws of Malta, Environmental and Planning Review Tribunal Act, 2016.

development was refused is **Anthony Attard vs L-Awtorità ta' Malta dwar l-Ambjent u l-Ippjanar**. In this case four grounds of refusal were laid by the Environment and Planning tribunal:

"1. The total floorspace of the class 5 offices exceeds the maximum allowable area of 75m² permitted in a Residential area and therefore the proposal runs counter to policy CG 07 of the Central Malta Local Plan which seeks to protect the amenity of the residential areas.

2. The extension to the class 5 offices would lead to an over development of the site. This would not be in the interests of the amenity of the area as a whole and it would exacerbate the problems of over development in the area. The proposal is therefore unacceptable and runs counter to Structure Plan policy BEN 1.

3. The proposed development will remove the existing parking spaces for the building and so it would conflict with Structure Plan policy TRA 4 and PA circular 3/93 which seek to ensure that appropriate provision is made for off- street parking.

*4. The existing ramp encroaching onto the public pavement obstructs the free flow of the pedestrians on the pavement, and therefore runs counter to Structure Plan policy BEN 1."*²⁶

In Malta, construction and development have been rapidly driven by economic growth and an increase in population and urbanisation, in which both reasons have led to an increase in resource consumption, and a rise in the production of construction waste. This necessitates adequate resource and waste management by adopting a holistic approach that addresses all of the development stages, starting from product design, the retrieval of raw materials, manufacturing processes, consumption, recycling of materials, and waste management. Currently, efforts that address resource management and waste reduction are somewhat isolated and perhaps not adequate for a long-term sustainability.²⁷

In recent decades, a significant percentage of the world's population has benefited from improvements in their lifestyle and wellbeing due to a number of economic advancements and an increased rate of urbanisation. However, these have also led to a dramatic increase in resource consumption and the production of a considerable amount of waste that is damaging

²⁶ *Attard anthony vs l-awtorita' ta' Malta dwar l-Ambjent u l-Ippjanar* [2013] Court of Appeal (Civil)

²⁷ Jagdeep Singh, 'Progress And Challenges To The Global Waste Management' (2014) 32 Waste Management & Research.

to the environment. The American National Academy of Sciences calculates that 94% of the materials extracted from the earth are only used for months before being released as waste.²⁸ Despite of the recent operational and technological improvements in the management of resources and waste, the primary focus is still on reducing the impact of the generated waste, rather than preventing it from being produced.²⁹

A global perspective has been adopted in light of the effect of waste-related emissions on global issues, such as climate change. In fact, in 2011, greenhouse gas emissions which were related to waste were estimated to increase from 5% to 9% in 2020, if a business-as-usual approach were to be resumed.³⁰ This necessitates the demand for action that does not only focus on safe waste disposal or recovery of waste through recycling; but a more holistic approach is needed by identifying the roots of the problem, and also focusing on production and consumption to prevent waste. However, the way waste management has been addressed in different countries depends on various factors including social, political, economic, and environmental issues. For instance, in developing countries, waste collection was driven by a motivation to improve public health, whereas in Europe, where public health is not seen as an issue, the focus is on managing resources more efficiently to reduce waste. In fact, improvements in waste disposal technologies have been particularly recorded in low- and middle-income countries. Better feedback information or data demonstrating the link between consumption and waste generation is required to address the issue.³¹ In developed high-income countries, resources are available to collect and analyse waste-related information, such as quantity and composition which can be achieved through the use of computer-based simulation programs. Due to lack of financial resources, such research is not common in developing (low- and middle-income) countries, therefore data on waste generated is limited, making it harder to plan and adopt a sustainable waste management system.

²⁸ Ibid 27

²⁹ Ibid 27

³⁰ Ibid 27

³¹ Ibid 27

Is Eco Housing the Future?

Ecological housing seems to be an effective solution to protect the environment whilst also permitting urban development to provide shelter for the ever-increasing population. Various countries and regions are showing interest in ecological housing to further implement the idea of long-term sustainability. A very interesting and captivating idea developed in Brøndby Haveby or Brøndby Garden City. Located just outside Copenhagen, Denmark, this ‘garden city’ is a place of many community gardens that are known for their unique circular arrangement. The houses in Brøndby Haveby, have large yards that provide a retreat from the noisy and densely populated city and also giving the opportunity to indulge in the hobby of growing plants and crops.³²

Since eco-housing is a relatively new concept, more awareness needs to be raised and a clearer definition is required due to the existing various parameters which can pose a difficulty for consumers. Nevertheless, eco-housing is not a simple concept to define, however it can be said that to have an environmentally friendly house, two features are required, namely energy efficiency and sustainable materials. Still, these can be further defined through additional specifications relating to comfort, including renewable energy-generation, management of wastewater and temperature control amongst others.³³ Water consumption for example, can be reduced by collecting rainwater or installing wastewater recycling system. Solar panels can be installed to generate electricity from a renewable source. However, comfort is a priority for the residents by ensuring that criteria such as bright spaces and a comfortable temperature are present.

³² 'Circle Garden Communities' (*Urban Projectization*, 2021) <<https://urbanprojectization.com/2019/12/15/circle-garden-communities/>> Accessed 28 March 2021.

³³ Stephen Claus, 'What Is Eco-Housing?' (*Foire Écosphère Environnement et ecohabitation*, 2020) <<https://foireecosphere.org/en/what-is-eco-housing/>> Accessed 29 March 2021.

As mentioned above, a key element of eco-friendly housing is energy efficiency. Such houses are built to reduce consumption in order to respect the environment by capping the emission of greenhouse gases. The market offers various options for consumers whose aim is to make their property eco-friendly. At planning stage, one needs to consider the building's orientation, as property facing the south can capture more heat and save more energy. When it comes to building materials, wood is popularly used as the main material in eco-houses since trees are a renewable resource. Lime is also preferred to cement as paint or coating since it is non-toxic and does not include too many chemicals. Recyclable and sustainable materials are also chosen for the construction of ecological houses as opposed to the use of plastic, in particular PVC, which has a detrimental effect on our health and the environment when it is disposed of.

Walls ought to be insulated in order to reduce costs and energy losses. Double glazed or triple-glazed apertures increase efficiency by 20% to 50% when compared to traditional windows. Energy and costs can also be saved by installing efficient lighting that lowers electricity bills while reducing environmental impact. This also applies to household appliances including refrigerators, washing machines and dishwashers. In addition to these, there are many other eco-friendly solutions on the market which simultaneously help consumers to save on their electricity bills, whilst also protecting the environment. Eco-homes are proven to reduce energy consumption by 20%, in comparison to traditional houses, however, the percentage can change depending on the eco-friendly features installed.³⁴

The introduction of the Sustainable Development Act, Chapter 521 of the Laws of Malta³⁵, was definitely one step forward in trying to ensure sustainability in the numerous developments taking place, whilst also providing a legal backing to the works conducted by the government. Moreover, the Planning Authority has recently introduced a scheme with funds allocated for turning built-up urban areas into greener spaces.³⁶ As various studies have shown, green buildings can positively affect air quality, water management, as well as biodiversity protection in urban and densely populated areas. Additionally, the presence of plants and greener façades in cities improves mental well-being and promotes physical activity.

³⁴ Ibid 32

³⁵ Chapter 521 of the Laws of Malta, Sustainable Development Act, 2012.

³⁶ 'Planning Authority - Green Your Building' (*Planning Authority*, 2021) <<https://www.pa.org.mt/www.pa.org.mt/green-your-building>> Accessed 29 March 2021.

The Planning Authority's Green Your Building Scheme allocated €2 million to property owners for installing green façades, walls and front gardens overlooking a public street or space. The scheme covered 100% of the works involved, including costs associated with material, the hiring of equipment and a five-year plan for the maintenance of the area, at a capping of €10,000 per property. Owners of shops and offices which have a front garden also benefited from this scheme. The installation of a green wall that includes panels, plants and an irrigation system in the front garden was capped at €500/m², while green façades having climbing plants growing in garden beds at its base was capped at €250/m², and €35/m² were allocated for the inclusion of a trellis. The increase of the area of soil space and planting were allocated up to €500/m².

Last year the Environmental Resources Authority (ERA) published a report on its intent of developing the National Strategy for the environment for the year 2050. In the public consultation, which was held between 26 April 2019 and 19 May 2019, a number of points were raised in regard to the environmental challenges Malta will face in the next three decades. Participating stakeholders mentioned various challenges but the most common were, the need to improve air quality and the quality of urban areas, particularly by controlling excessive construction and traffic, the need of conserving biodiversity, the necessity of managing waste more effectively, and the protection of water resources.³⁷

As a community, both nationally and internationally, we should find the right balance where industries can benefit without going to the extreme. One cannot deny the long-term impacts on the environment as a result of present actions and therefore it is up to the present generation to try to address the issue in the best way possible for ourselves as well as for future generations.

³⁷ 'Recognizing Malta's Environmental Challenges National Strategy For The Environment For 2050' (Era.org.mt, 2020) <<https://era.org.mt/wp-content/uploads/2020/07/Recognising-Maltas-Env-Challenges.pdf>> Accessed 29 March 2021.

Section 4: The Ongoing Economy versus Environment Struggle in Development: A Defence to both Parties

Economy

Economic development means an increase of national output, input and expenditure values, that is, an increase in real Gross Domestic Product (GDP),³⁸ and consequentially higher living standards.³⁹ The GDP is ‘a broad measure of overall domestic production, [and] functions as a comprehensive scorecard of a given country’s economic health’⁴⁰ within a period of time. It is calculated by summing up the total consumption, government spending, investment, and net exports (GDP = Consumption + Investment + Government Spending + (Exports – Imports)).⁴¹

Malta’s GDP has been growing exponentially up till the year of 2020, in which growth was forecasted to decline as a consequence of the COVID-19 pandemic. Indeed, the International Monetary Fund (IMF) has classified the Maltese economy as advanced within the Euro Area.⁴² Although such classification is not dependant and determined on an established numerical convention,⁴³ it is normally defined as having a high GDP *per capita* and a ‘significant degree of industrialization’.⁴⁴ Industrialization is defined as a shift from a primarily agricultural one, to the manufacture of goods and services.⁴⁵

³⁸ Tejvan Pettinger, 'Benefits of Economic Growth - Economics Help' (*Economics Help*, 2019) <<https://www.economicshelp.org/macroeconomics/economic-growth/benefits-growth/>> Accessed 21 March 2021.

³⁹ Ibid 38

⁴⁰ Jason Fernando, 'Gross Domestic Product (GDP)' (*Investopedia*, 2020) <<https://www.investopedia.com/terms/g/gdp.asp>> Accessed 21 March 2021.

⁴¹ Elvis Picardo, 'The Importance of GDP' (*Investopedia*, 2020) <<https://www.investopedia.com/articles/investing/121213/gdp-and-its-importance.asp#why-gdp-is-important>> Accessed 23 March 2021.

⁴² International Monetary Fund, 'World Economic Outlook' (2008) 236.

⁴³ Daniel Liberto, 'Advanced Economies Definition' (*Investopedia*, 2019) <<https://www.investopedia.com/terms/a/advanced-economies.asp>> Accessed 21 March 2021.

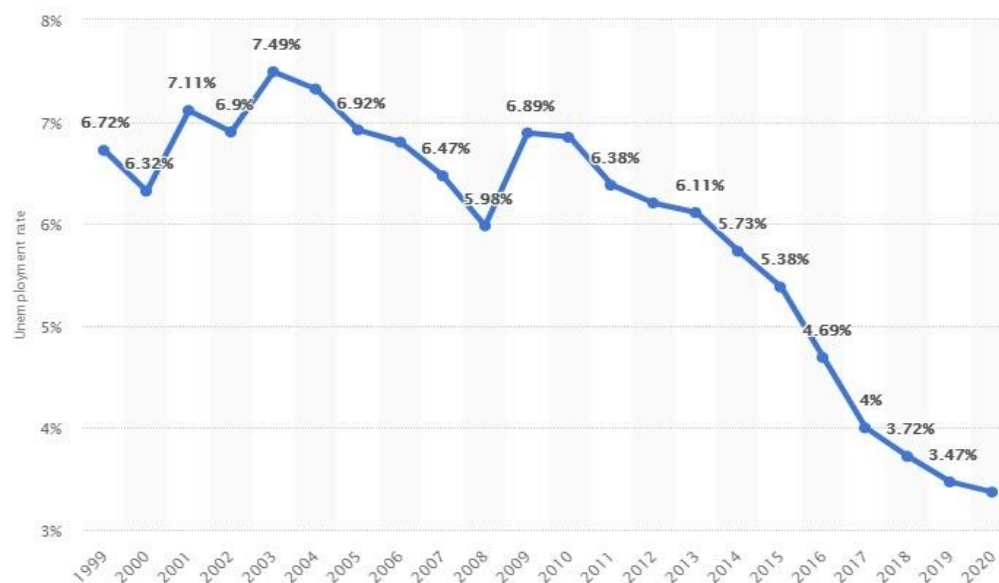
⁴⁴ Ibid 42

⁴⁵ Erika Rasure, 'Industrialization' (*Investopedia*, 2021) <<https://www.investopedia.com/terms/i/industrialization.asp>> Accessed 21 March 2021.

Benefits of Economic Growth

A high GDP signals a growing economy, hence a growing production of goods and services.⁴⁶ This results in a higher standard of living, and a way forward in the reduction of poverty in a given country.⁴⁷ Economic growth brings forth higher income for workers, and with a higher production of good and services, employment increases considerably.⁴⁸

Fig 1: Malta Unemployment Rate from 1999 till 2020.⁴⁹



Due to the increase in consumption of goods and services, economic growth also leads to higher tax revenues (such as income tax and VAT),⁵⁰ in which revenue can be used to contribute to the improvement of public infrastructure projects and public services, such as health and education, which are the pillars of a developed society.⁵¹ This provides for a higher life expectancy, better health equipment, better academic and educational background,⁵² and again investing that knowledge within the State's economy.

As is highlighted in other sections of this policy paper, economic growth can have beneficial elements to the environment⁵³ (although there are environmental costs to it too) by devoting

⁴⁶ Tejvan Pettinger, 'Pros and Cons of an Increase in Economic Growth - Economics Help' (*Economics Help*, 2018) <<https://www.economicshelp.org/macroeconomics/macroessays/evaluate-benefits-growth/>> Accessed 23 March 2021.

⁴⁷ Ibid 45

⁴⁸ See Fig 1.

⁴⁹ 'Malta - Unemployment Rate 1999-2020 | Statista' (*Statista*)

<<https://www.statista.com/statistics/731234/unemployment-rate-in-malta/>> Accessed 24 March 2021.

⁵⁰ Pettinger (n 9).

⁵¹ Pettinger (n 1).

⁵² Ibid 50

⁵³ Section 3.2.2.

more resources towards recycling and renewable energy.⁵⁴ It is costly for countries to transition to renewable energy, especially for developing countries (a developing country is defined as ‘a country with little industrial and economic activity and where people generally have low incomes’⁵⁵). For example, under Article 4(5) of the United Nations Framework Convention on Climate Change,⁵⁶ a list of developed countries are obliged to take the practicable steps to promote, facilitate, and finance the transition to a more renewable and environmentally friendly technology in developing countries, the latter whom would find it more costly to do so because of a struggling economy.

Drawbacks of Economic Growth

As anything that comes with benefits, economic growth also has its costs, such as the possibility of inflation.⁵⁷ Inflation is the decline in the purchasing power of a given currency, as the prices of goods and services rapidly rise. This is primarily caused by the increase in the supply of money, and as the supply of money increases, its value diminishes.⁵⁸ Inflation should be kept under a moderate rate, and therefore fiscal policies to control inflation come into place.⁵⁹ Prices in the real estate and construction industries in Malta have been rapidly increasing. For example, in 2019, apartment prices rose by 11.02%, and when inflation-adjusted, by 9.7%. Similarly, terraced houses rose by 15.34%, and then adjusted to an increase of 13.96%.⁶⁰

Economic growth can have possible drawbacks to the environment as well.⁶¹ In the early 1970s, a group of academics pointed out that due to the overuse of resources and the growing effects of pollution, the planet was being pressured towards a breaking point.⁶² The environmental problem, in relation to the economy, has been described to be an externality, which concept is defined as ‘a side effect of economic activity that affects people or companies not directly

⁵⁴ Ibid 52

⁵⁵ 'Developing Country' Cambridge Dictionary

<<https://dictionary.cambridge.org/dictionary/english/developing-country>> Accessed 25 March 2021.

⁵⁶ (adopted 9 May 1992, entered into force 21 March 1994) (UNFCCC).

⁵⁷ 'Causes, Advantages and Disadvantages of Economic Growth' (*UK Essays*, 2018)

<<https://www.ukessays.com/essays/economics/causes-advantages-disadvantages-economic-8990.php>> Accessed 26 March 2021.

⁵⁸ Lawrence Zammit, 'Insight into Inflation Control' *Times of Malta* (2011)

<<https://timesofmalta.com/articles/view/Insight-into-inflation-control.366216>> Accessed 27 March 2021.

⁵⁹ 'Measures for Controlling Inflation (With Diagram)' (*Economics Discussion*)

<<https://www.economicsdiscussion.net/inflation/measures-for-controlling-inflation-with-diagram/4075>>

Accessed 27 March 2021.

⁶⁰ Maria De Guzman, 'Robust House Price Hikes Continue in Malta' (*Global Property Guide*, 2019)

<<https://www.globalpropertyguide.com/Europe/Malta/Price-History>> Accessed 27 March 2021.

⁶¹ Section 3.2.2.2.

⁶² John Beardshaw and others, *Economics: A Student's Guide* (5th edn, Pearson Education Limited 2001) 182.

involved in that activity'.⁶³ By the use of the externality principle, many of the adverse and ongoing natural consequences, that is, third party consequences, where traced back to economic activities, such as energy consumption, burning of fossil fuels, and transportation.⁶⁴

The Construction Industry and the Maltese Economy

The term 'construction' generally encompasses the construction of: infrastructures, such as roads, railways, and harbours; other civil-engineering work, such as dams, irrigation projects, and power plants; building works, including housing and commercial premises; and maintaining and repairing existing structures.⁶⁵ This industry '*clearly plays a very vital role in the process of economic growth*'.⁶⁶ Not only does the construction industry directly impact the economy, but it indirectly enhances other investments and nourishes other sectors within the economy as well.⁶⁷

The technological advancements that have come forth with industrialization have transformed the construction industry into a pioneering sector of the economy. A decade prior to Malta's European Union (EU) accession, the construction and real estate sectors were one of the five sectors that made up 39% of the increase in Malta's Gross Value Added (GVA)⁶⁸ (GVA is a measure of the contribution of a company to an economy).⁶⁹ With Malta growing its tourism sector, and attracting foreign businesses, the construction and real estate industries have intensively grown, especially within the residential and commercial sectors, therefore it became an opportunity of great investment.⁷⁰

The KPMG report, titled the 'Construction Industry and Property Market Report' of 2017 found that:

'[t]he construction industry is still one of the main drivers of the Maltese economy with core construction activities contributing €694.12 million in gross value added. When considering the direct and indirect impact, the Construction and Real Estate

⁶³ Ibid 61

⁶⁴ Ibid 61

⁶⁵ Jill Wells, 'The Construction Industry in the Context of Development: A New Perspective' (1984) 8 *Habitat International* 9, 9.

⁶⁶ Ibid 61

⁶⁷ Ibid 61

⁶⁸ Aaron G Grech and others (eds) Central Bank of Malta, 'Understanding The Maltese Economy'(2016) 18.

⁶⁹ Will Kenton, 'Gross Value Added (GVA) Definition' (*Investopedia*, 2021)

<<https://www.investopedia.com/terms/g/gross-value-added.asp>> Accessed 24 March 2021.

⁷⁰ 'Construction, Property & Development Industry Malta | CSA Group' (*CSA Group*) <<https://csagroup.mt/construction-malta/>> Accessed 24 March 2021.

sectors contribute around 13.5% of Malta's GVA and from 2016 to 2017, direct, indirect and induced output grew by 8.9% to €2.56 billion. Full-time employment in the sector also grew by 8.9% to 37,428.⁷¹

Environment

The term 'environment' does not simply mean the natural landscape of a country. In its most literal sense, environment is all the circumstances, objects, elements, and conditions that make up the surroundings of an individual.⁷² This wide definition of the word 'environment' is interpreted by some to also mean the urbanized cities.⁷³

In ecological terms, environment is the natural surroundings of non-human characteristics. This latter remark is also limited, to some extent, to man-made features, such as agricultural land.⁷⁴ Furthermore, 'the term 'environment' is often used interchangeably with an ecological term 'ecosystem',⁷⁵ the latter which is the complex of living organisms within a physical environment.⁷⁶ Under Article 2 of the Maltese Environmental Protection Act,⁷⁷ 'environment' is defined as:

'the whole of the elements and conditions, natural or man-made, whether together or in isolation, and in particular:

- (a) the air, water, land, soil and sea, including their bedrock, aquifers and subsurface features;
- (b) all the layers of the atmosphere;
- (c) all biodiversity; and
- (d) the landscape and its features.'

'Biodiversity is the key indicator of the health of an ecosystem'.⁷⁸ It is defined under the aforementioned Act as '*the variability among living organisms from all sources... and includes*

⁷¹ Malta Developers Association, 'Construction Industry Still Backbone of the Economy' <<http://mda.com.mt/pr050419/>> Accessed 21 March 2021.

⁷² 'What is 'The Environment'?' (*Soas.ac.uk*) <https://www.soas.ac.uk/cedep-demos/000_P500_ESM_K3736-Demo/unit1/page_08.htm> Accessed 30 March 2021.

⁷³ Ibid 71

⁷⁴ Ibid 71

⁷⁵ Ibid 71

⁷⁶ 'Ecosystem | Definition, Components, Examples, Structure, & Facts' (*Encyclopaedia Britannica*) <<https://www.britannica.com/science/ecosystem>> Accessed 31 March 2021.

⁷⁷ Environmental Protection Act, Chapter 549 of the Laws of Malta (EPA).

⁷⁸ Prof E O Wilson, 'Why do we Need to Protect Biodiversity?' - Environment - European Commission' (*Ec.europa.eu*, 2010) <https://ec.europa.eu/environment/nature/biodiversity/intro/index_en.htm> Accessed 30 March 2021.

diversity within species, between species and of ecosystems'.⁷⁹ From the State of the Environment Report of 2018, published by the Environmental and Resources Authority (ERA), it was pointed out that Malta's biodiversity is experiencing pressures from several factors, including *'human interference and disturbances'*.

Benefits of a Healthy Natural Environment

There are a multitude of benefits that come forth with a thriving natural environment. A healthy environment hosts better water and air qualities, a richer biodiversity, healthier populations, and a reduction in greenhouse gas (GHG) emissions, the latter which contribute to climate change.⁸⁰ As pointed out in previous sections, the construction and infrastructure industries have major setbacks to the well-being of the environment, which ultimately do contribute to climate change.

Environmental benefits also affect the economy at large. For example, the World Health Organization (WHO) pointed out that workplaces can benefit from reduced sick leave, due to workers' improved health. Moreover, with the construction industry being one of the largest energies consuming sectors, therefore shifting to a sustainable and more energy efficient approach⁸¹ is highly advisable as it would greatly reduce energy costs.

A Healthy Environment and a Blooming Economy: Can they Coexist?

Malta's strong economic growth has posed both challenges and opportunities vis-à-vis the infrastructure and environment. By nature, infrastructural development is not environmentally friendly,⁸² and the persisting call for sustainability within development planning legislation has become familiar with the general public, more so because of Malta's limitations of land and natural resources.⁸³ Considering an island whose economy supports an urban density and a high population, striking a balance of sustainability is indeed challenging.⁸⁴

⁷⁹ EPA, art 2.

⁸⁰ 'Environmental Benefits - CMAP' (*Cmap.illinois.gov*, 2013)

<<https://www.cmap.illinois.gov/about/2040/supporting-materials/process-archive/strategy-papers/parks-and-open-lands/environmental-benefits>> Accessed 30 March 2021.

⁸¹ Brian Lagas, 'Five Benefits of Embracing Sustainability and Green Manufacturing' (*NIST*, 2015) <<https://www.nist.gov/blogs/manufacturing-innovation-blog/five-benefits-embracing-sustainability-and-green-manufacturing>> Accessed 31 March 2021.

⁸² Hal Levin, 'Systematic evaluation and assessment of building environmental performance (SEABEP), paper for presentation to 'Buildings and Environment' (1997).

⁸³ 'Malta - Eco-Innovation Action Plan - European Commission' (*Eco-innovation Action Plan - European Commission*) <https://ec.europa.eu/environment/ecoap/malta_en> Accessed 25 March 2021.

⁸⁴ 'A Sustainable Development Vision for Malta' (*Sustaineurope.com*, 2018)

<<https://www.sustaineurope.com/a-sustainable-development-vision-for-malta-20181106.html>> Accessed 31 March 2021.

The term ‘development’ has a wide range of meaning. In generic terms, it is the advancement and transformation: a state of growth.⁸⁵ It does not solely focus on the physical attribution of buildings and infrastructure per se, but development of a society as a whole, including environmental development and economic development.⁸⁶ It is pertinent to note that with the ongoing urbanization, urban areas require resources that will eventually pollute the natural environment in the process.⁸⁷ However, such urbanized areas are also where most of the economic development is concentrated.⁸⁸

In this paper the term ‘development planning’ comes to mean the development, transformation, and growth of the construction and infrastructure sectors, whilst keeping in mind other factors composing development.⁸⁹

Sustainable Development

Sustainable development has been defined by the Brundtland Report⁹⁰ as *‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’*.⁹¹ It was pointed out, by the same report, that since changes to the environment and the consumption of natural resources are inevitable, it does not mean that such consumption must come to an end, for future generations to meet their own needs.

A balance must be met: *in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional changes are all in harmony and enhance both current and future potential to meet human needs and aspirations.*⁹²

⁸⁵ Michael Gauci, 'The Effectiveness of Current Maltese Development Planning Legislation in Achieving Sustainable Development' (Postgraduate, University of Malta 2013) 17.

⁸⁶ Ibid 84

⁸⁷ UN Habitat, 'Global Report on Human Settlements 2009: Planning Sustainable Cities' (2009) 113.

⁸⁸ Ibid 84

⁸⁹ Ibid 50

⁹⁰ Report of the World Commission on Environment and Development: Our Common Future (Oxford University Press 1987).

⁹¹ Ibid 50

⁹² Ibid 50

This approach can be applied to development planning legislation, to meet any social, cultural or economic requirements without prejudicing the possibility of future generations to meet the same requirements.

The three pillars of sustainability are: the economy, society, and environment. These are interrelated and interdependent,⁹³ and focusing in improving just one of these will render non-sustainability. Indeed, *'[s]ustainable development is achieved, theoretically at least, when the right balance between these three is achieved'*.⁹⁴ Environmental sustainability means consuming natural resources in a sustainable manner: anything that eventually comes to an end is by definition, not sustainable.⁹⁵ Therefore, consuming land and natural resources uncontrollably and without making up for the used resources, is not sustainable. Economic sustainability complements the former, requiring that a State makes use of its resources sustainably and consistently, *'to produce an operational profit'*.⁹⁶ Lastly, social sustainability is the ability of a society to achieve social well-being.⁹⁷

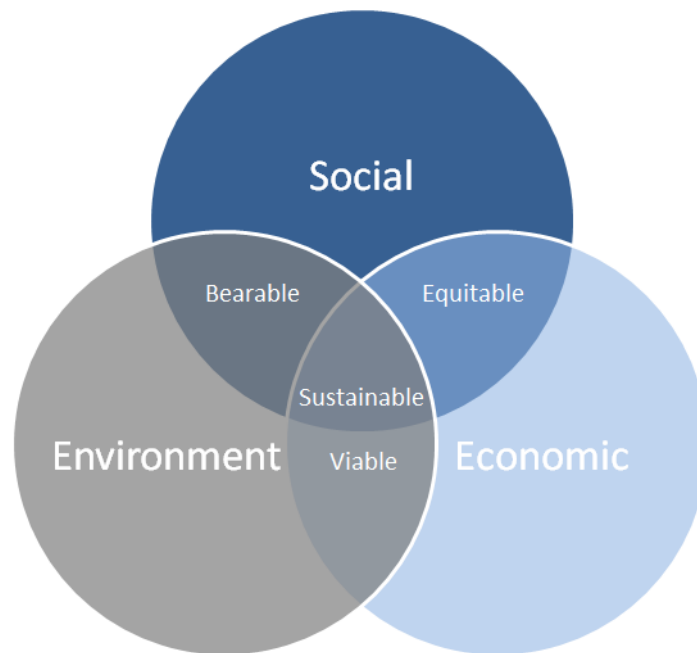


Fig 2: The three pillars of sustainability.⁹⁸

⁹³ OECD Insights, 'Sustainable Development: Linking Economy, Society, Environment: Summary in English' (2008).

⁹⁴ Alan Pulis, 'Sustainable Development' *Times of Malta* (2017)

<<https://timesofmalta.com/articles/view/Sustainable-development.654605>> Accessed 31 March 2021.

⁹⁵ 'Sustainability and Sustainable Development - Circular Ecology' (*Circular Ecology*)

<<https://circularecology.com/sustainability-and-sustainable-development.html>> Accessed 31 March 2021.

⁹⁶ Ibid 94

⁹⁷ Ibid 94

⁹⁸ 'Sustainable Development' (*Titan Advocacy*) <<https://titanadvocacy.wordpress.com/sustainable-development/>> Accessed 31 March 2021.

The Sustainable Development Act

In 2012, Malta enacted the Sustainable Development Act,⁹⁹ which has a twofold objective: to mainstream sustainable development within the government, and to enhance and adopt awareness amongst the public at large on sustainable development.¹⁰⁰

Article 4 of this Act provides that the office of the Prime Minister shall be considered as the competent authority, who may designate another entity as such. The competent authority's functions are to: develop and implement Malta's Sustainable Development Strategy¹⁰¹; measure the progress of sustainable development; promote sustainable development within the administration and private sectors, and the society at large; counter unsustainability; and engage in active consultation with stakeholders.

However, this Act falls short in implementing sustainability *per se*, but more generally it promotes the concept of sustainability by teaching and raising awareness.¹⁰² This can be further envisaged in the functions of the public administration under Article 7 of the Act, and those of the 'Guardian of Future Generations' (the Guardian) under Article 8.¹⁰³ The latter's functions, amongst those of promoting, proposing, and advocating for sustainable development, also encompasses the function to '*develop a scientific research network that could positively contribute towards the sustainability of society*'¹⁰⁴ and '*develop audits of various areas or sectors which are deemed to contribute towards sustainable development*'.¹⁰⁵

The United Nation's Sustainable Development Goals

The United Nations (UN) General Assembly, in September of 2015, adopted the 2030 Agenda for Sustainable Development,¹⁰⁶ which includes seventeen sustainable development goals (SDGs). These SDGs promote sustainable development within the three sectors that make up

⁹⁹ Sustainable Development Act, Chapter 521 of the Laws of Malta (SDA).

¹⁰⁰ Ibid, 62 art 2.

¹⁰¹ Section 3.3.4.

¹⁰² Ibid 71

¹⁰³ Ibid 71

¹⁰⁴ SDA, art 8(4)(b).

¹⁰⁵ Ibid, art 8(4)(c).

¹⁰⁶ '#Envision2030: 17 Goals to Transform the World for Persons with Disabilities | United Nations Enable' (*United Nations Enable - Disability*)

<<https://www.un.org/development/desa/disabilities/envision2030.html>> Accessed 30 March 2021.

sustainability, that is, economic development, environmental development, and sociological development. The seventeen SDGs are:

1. Goal 1: No Poverty;
2. Goal 2: Zero Hunger;
3. Goal 3: Good Health and Well-Being;
4. Goal 4: Quality Education;
5. Goal 5: Gender Equality;
6. Goal 6: Clean Water and Sanitation;
7. Goal 7: Affordable and Clean Energy;
8. Goal 8: Decent Work and Economic Growth;
9. Goal 9: Industry, Innovation, and Infrastructure;
10. Goal 10: Reduced Inequalities;
11. Goal 11: Sustainable Cities and Communities;
12. Goal 12: Responsible Consumption and Production;
13. Goal 13: Climate Action;
14. Goal 14: Life below Water;
15. Goal 15: Life on Land;
16. Goal 16: Peace, Justice and Strong Institutions;
17. Goal 17: Partnerships for the Goals.

For example, Goal 9 is to *'build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation'*.¹⁰⁷ Amongst several targets, this goal aims that by 2030, the infrastructure industry will enhance its sustainability, its efficiency in resource-using, and adopting cleaner and greener technologies.¹⁰⁸ To meet this aim, each State should act within its own capabilities.¹⁰⁹

Goal 11 aims to *'make cities and human settlements inclusive, safe, resilient and sustainable'*.¹¹⁰ It targets that by 2030, urbanization is enhanced in a sustainable manner, the efforts to safeguard the world's cultural and natural heritage are strengthened, and universal

¹⁰⁷ '#Envision2030 Goal 9: Industry, Innovation and Infrastructure | United Nations Enable' (*United Nations Enable - Disability*) <<https://www.un.org/development/desa/disabilities/envision2030-goal9.html>> Accessed 30 March 2021.

¹⁰⁸ Ibid 106

¹⁰⁹ Ibid 106

¹¹⁰ '#Envision2030 Goal 11: Sustainable Cities and Communities | United Nations Enable' (*United Nations Enable - Disability*) <<https://www.un.org/development/desa/disabilities/envision2030-goal11.html>> Accessed 30 March 2021.

access to green public places is provided.¹¹¹ It also promotes the reduction of the adverse impacts of urban cities on the environment, especially regarding waste management and air pollution,¹¹² and promotes the well-being of the three pillars of sustainability (economy, environment and society) by strengthening national and regional development planning.

Importantly, Goal 15 targets to *'protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'*.¹¹³ It targets to ensure that by 2020, the natural environment is used sustainably, preserved, restored, and to *'integrate ecosystem and biodiversity values into national and local planning, development processes'*.¹¹⁴ Furthermore, it targets to ensure that species facing extinction are protected¹¹⁵ and the ecosystems and biodiversity are preserved and protected, to promote sustainable development.¹¹⁶

The European Union Green Initiative

The EU has brought forth the agenda of preserving the natural environment within its Member States (MSs). Preserving the environment has also grown into importance due to the increasing concerns on climate change. Indeed, the EU is considered as a global leader in the fight against climate change and environmental degradation.

The European Green Deal (COM/2019/640 final) provides an action plan to boost the ecosystem and the biodiversity of its MSs and to create an EU sustainable economy by turning environmental challenges into opportunities.¹¹⁷ The European Green Deal states that *'there is a need to rethink policies for clean energy supply across the economy, industry... large-scale infrastructure, transport... construction...'*. It also promotes the need for a cleaner construction sector.

The EU will invest €100 billion within the period of 2021-2027, to help those most affected by the transition to a green economy, by the Just Transition Mechanism (JTM).¹¹⁸

¹¹¹ Ibid 106

¹¹² Ibid 106

¹¹³ '#Envision2030 Goal 15: Life on Land | United Nations Enable' (*United Nations Enable - Disability*) <<https://www.un.org/development/desa/disabilities/envision2030-goal15.html>> Accessed 31 March 2021.

¹¹⁴ Ibid 106

¹¹⁵ Ibid 106

¹¹⁶ Ibid 106

¹¹⁷ 'A European Green Deal' (*European Commission - European Commission*)

<https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en> Accessed 31 March 2021.

¹¹⁸ Ibid 106

Sustainable Development: The Way Forward

The answer to the question of whether a thriving economy and environment can coexist, is that not only that they can coexist, but in the long-run it is the only way how they can survive: by reinforcing the three pillars of sustainability equally. It would be an innovative approach to turn environmental challenges into opportunities of investment and economic growth. *'We may be able to ignore that' the environment, the economy, and society are interdependent 'for a few years or decades, but history has shown that before long we are reminded of it by some type of alarm or crisis'*.¹¹⁹ Whether the COVID-19 pandemic could be considered as such an alarm is open up for discussion. What is indisputable is that the consequences of climate change are already globally felt, and if the situation remains ongoing in the same pace, future generations will witness a more hostile environment.

¹¹⁹ OECD Insights (n x).

Section 5: Other Impacts

Can Over-Development Impact One's Mental Health?

Mental health has a significant burden on the health of populations. Common mental health disorders such as non-psychotic depression and anxiety are well associated to socio-economic characteristics, on an individual level as well as pertaining to the neighbourhood as a whole. Regarding this matter, little is known about the influence of urban structure. However, the geographical region of Turin, and the Northwest Italian population, were analysed in regard to different urban structure characteristics and consumption of antidepressants. The urban structure characteristics were noted within the study, whilst also including accessibility by public transport, accessibility to services, green and public spaces, and the region's density. Estimates were adjusted by individual socio-demographic variables such as employment, housing tenure and education, and contextual social environment variables, namely crime rates and social and physical disorders.¹²⁰

The study showed that individual characteristics presented the strongest association with antidepressant drug consumption, whilst among the built environment indicators, accessibility by public transport and urban density were solely associated with mental health as being slightly protective factors. Results from this study, in agreement with previous literature, suggested that the built environment has a stronger effect on mental health for people who spend more time in their neighborhood. For this reason, it was suggested that good accessibility to public transport is crucial in a dense urban structure, as it could greatly contribute and reduce the risk of depression, especially for women and elderly, by increasing opportunities to move around and have an active social life.

¹²⁰ 'The Effects of the Urban Built Environment on Mental Health: A Cohort Study in a Large Northern Italian City'. (Melis, G., Gelormino, E., Marra, G., Ferracin, E., & Costa, G., 2015). *International Journal of Environmental Research and Public Health*, 12(11), 14898–14915. <<https://doi.org/10.3390/ijerph121114898>> Accessed 28 March 2021.

Construction and Health Risks

Albeit the recent improvements in the reduction of injuries to construction workers, this industry remains a rather high-risk one and is deemed to have a high percentage of major and fatal injuries. Moreover, construction is considered to be a high-risk industry for health issues in kind.

In 2020, more working days were lost in Britain due to work-related illnesses, in comparison to injuries. In turn, a study carried out by the Health and Safety Executive, unveiled the fact that construction workers have a high risk of being subject to developing numerous diseases.¹²¹

Being responsible for over 40% of occupational cancer deaths and cancer registrations, construction has been proven to have the largest burden of occupational cancer amongst industrial sectors. It has been estimated that over the period of a year, past exposures within the construction sector are the cause of over 5,000 occupational cancer cases and about 3,700 deaths. The naturally occurring mineral of asbestos accounted for 70% of these cancers, followed by silica which catered for 17%, and diesel engine exhaust, which accounted for 6-7% of these cases.

Another significant collection of health risks emanates from being in the constant surrounding of hazardous substances. Dust from quarries and building sites contributes to pulmonary diseases and creates air pollution. Such chemicals and potentially harmful mixtures (such as paints) are no stranger to the construction industry and have a number of detriments on our health. Additionally, certain processes undergo an emission of dusts, fumes, gases as well as vapours into the air, making them a potentially significant cause of breathing problems and pulmonary diseases. Numerous occupations involved with or relating to the construction industry, have been found to also have excessive rates of dermatitis from skin exposures to hazardous substances.

One of the occupations with the highest estimated prevalence of back injuries and upper limb disorders would be that of skilled construction and building trades. In addition to this, manual handling was the most commonly reported cause of injuries lasting longer than a period of

¹²¹‘Construction Statistics in Great Britain, 2020’ (HSE, 2021) <<https://www.hse.gov.uk/statistics/industry/construction.pdf>> Accessed 2 April 2021.

seven days within the industry. Overall, construction has one of the highest rates of significantly ill health caused by noise and vibration.

The elemental causes of the aforementioned large scale health risks are vast, and there are quite a number of reasons as to why construction workers have a high risk of developing occupational diseases. Unlike your typical desk job, construction work may take place in varied environments. Different sites can in turn present an assortment of risks to one's health, such as asbestos. The extent of these risks may also vary within areas of the same site. What is more is that construction sites are changing at a constant rate, and quite the numerous amounts of trades may all be carrying out tasks which are potentially perilous to one's health overall. Not to mention that on a societal scale, there is little to no awareness of the health risks and the knowledge of the controls needed. Serious health conditions may develop over a number of years, and the sudden consequence of a harmful workplace exposure may often be dismissed as insignificant when in comparison to the immediate impact of injuries caused by accidents in the workplace. An even lesser discussed situation is that of employment situations. Certain construction workers tend either work for small companies, change employers, are self-employed, or work from home. This may result in workers taking their own health for granted and ultimately putting their own occupational health at the back seat.

There are several tried-and-tested methods and principles aiding in the management of ill health prevention. It is vital to remember that health should be '*treated like safety*', as managing health risks is indifferent to the management of safety risks.¹²² All those involved in construction have their own role to play, and every individual must take ownership of their part of the process. Health surveillance programs and monitoring are an effective part of managing health risks but are not enough on their own. The initial priority would be to terminate the exposure to the risk in the first place, as the inadequate control of health risks has the potential to cost any developer a productive rate of employment. By having skilled workers and workers which are gaining experience, can render the health of the workplace safe and effective, as highlighted in the Construction 2025 Strategy.¹²³ This Strategy, also aids the employees in properly

¹²²'Managing essentials - Managing occupational health risks in construction' (HSE, 2021) <<https://www.hse.gov.uk/construction/healthrisks/managing-essentials/managing-essentials.htm>> Accessed 28 March 2021.

¹²³'Construction 2025: Strategy' (GOV.UK, 2013) <https://www.gov.uk/government/publications/construction-2025-strategy>> Accessed 28 March 2021.

maintaining themselves in their productive employment. Let us keep in mind, that every case of an occupational related disease, would contribute to an individual's needless and preventable suffering. This may in turn affect their loved ones, and on a less humbling note, the reputation of the company or employer in question.

The Socio-Economic Standard of Living in Densely Populated Countries

Looking at some of the most densely populated countries in the world, Macau, China has been seeing a decennial rise of about 100,000 residents since the 1960s, rising by 1.7% every year. The country welcomed an influx of Chinese residents fleeing to it during the Chinese Civil war between the late 1920s and the late 1940s. Having previously been leased as a trading post by the Ming Dynasty in 1557 prior to falling under direct Portuguese control in 1887, China had regained full control in the year 1999. Nowadays, this territory has come to be recognised as an imperative escort city and one of the world's top destinations in the industry of gambling tourism, having up to 38 million visitors each year. For some reference, Macau's population in 2019 had gone up to roughly 623,000, with a population density of 21,340/km.¹²⁴ Today, nearly 90% of Macau is made up of Chinese people, and not even 2% of which claim to have Macanese or Portuguese heritage. Despite having the world's densest population, the population of Macau carries on with its unceasing growth.¹²⁵

The pipeline building project has evidently resulted in added pressures on human resources, which are essential provided that such projects are to be delivered within a tight budget, within the established time limits and that the professional standards are maintained at all times in order to safely complete the construction works.¹²⁶

Such projects have readily been tainted with serious allegations of abuse of power, where public land has been expropriated and granted to private entrepreneurs with terms that may not reflect today's market realities. What is more is that, a copious amount of large service

¹²⁴ 'World Population Prospects - Population Division - United Nations' (UN, 2021)

<<https://population.un.org/wpp/>> Accessed 4 April 2021.

¹²⁵ Ibid 123

¹²⁶ 'Consequences of Overdevelopment' (*Times of Malta*, 2021)

<<https://timesofmalta.com/articles/view/consequences-of-overdevelopment.702617>> Accessed 14 May 2021.

contracts has bypassed public procurement regulations by including them in an opaque public-private partnership agreement.

It is safe to say that our Islands may be walking into a nightmare of harsh consequences of overdevelopment unless policymakers wake up to the realities of this phenomenon that is already affecting the lives of many people. There are various indications that little planning is accompanying large-scale projects.

Section 6: Proposals

Developing our Economy Sustainably

ELSA Malta recommends that;

- The rate of development is alarmingly high. We believe that a fair balance can be reached between our economy and development, through sustainability. Therefore, by issuing numerous incentives for those who choose to develop sustainably would be highly beneficial.
- Apart from introducing incentives for those who wish to develop their property sustainably, incentives could also be introduced for businesses in order to implement sustainable practices, by eliminating waste and the extra burdens that are placed on the environment.

Construction and Health Safety

ELSA Malta recommends that;

- The number of deaths and injuries which result from unsafe working conditions has been exponentially increasing over the last few years. We believe, that by having the relevant authorities physically present on construction sites, the health and safety of workers would be ensured and looked after all while efficiently carrying out their work.
- Although fines are already being issued if anyone reports workers working in unsafe working conditions, however, unregulated and unsafe work is still occurring and therefore, sanctions must be harsher in order to act as a proper deterrent.
- Employers within the construction sector ought to ensure that their workers are properly trained or else they must be provided with the proper training in order to reduce fatalities and work diligently and not carelessly.
- Sadly, lives have been lost due to nearby unsafe construction work, which was taking place in close proximity to their homes. Therefore, before any development ought to take

place, contractors must make sure that any of the proposed work will not affect the surrounding environment and will ultimately not put anyone's life or home at risk.

Planning and Conservation

ELSA Malta recommends that;

- Permits for development are being issued carelessly without proper consideration, therefore more restrictions need to be implemented in order for a permit to be issued in line with all the requirements and that ultimately the development is smart and sustainable.
- The Planning Authority Board ought to have representatives from Environmental NGOs, in order for the environment to be placed at the forefront of every decision.
- Gozo is also facing a massive crisis at the moment, with a relatively high number of large-scale properties being proposed. In order for this to be regulated, a separate planning authority, which is solely responsible for approving or refusing permits in Gozo ought to be established.
- Currently, non-aesthetically pleasing properties are becoming the newly recognized Maltese building style, instead of the old, classic houses which represent our culture and heritage. Therefore, stones from old buildings, ought to be extracted and used for constructing new ones. This incentive would tackle 2 different issues; the issue of the current lack of natural resources, and also building aesthetics.
- In order to conserve the aesthetics of Maltese houses and neighborhood's, individuals who are experts in the historical and aesthetical fields, ought to form part of the Planning Authority Board to further aid in the permit decision-making process.

The Environment

ELSA Malta recommends that;

- More trees need to be planted all over the islands, to increase the amount of greenery and solve the congestion issues faced on our islands given the high rates of respiratory diseases as a result of traffic congestion and construction.
- Instead of being chopped down, trees which are removed for upcoming developments ought to be carefully uprooted and planted elsewhere.
- Green spaces and green belts have been decreasing over the last years, therefore, more public green spaces need to be protected and conserved, to serve as a friendly space for families to enjoy. The natural environment has been confirmed as a form of treatment for those suffering from mental health issues, therefore, this initiative would also further aid those individuals.
- The limits of ODZ areas are not being observed and rather than protected are being developed. Policies surrounding ODZ areas need to be stricter in order to deter constructors from building in ODZ areas.
- As mentioned in the paper, more local and EU funds need to be invested into green construction such as the EU Green Deal and EU Bauhaus Movement. More advertising of these green initiatives needs to be done to Maltese stakeholders, in order to be made aware of these funds and ultimately begin the shift to greener, and more sustainable development.

Section 7: Conclusion

ELSA Malta, as a voluntary organisation, for law students all over Europe, believes that it is our role as future generations to actively involve ourselves in issues that matter, especially when they relate to our beloved environment. Over the years we have seen Malta and Gozo's rural landscapes evolving and as our economy grew and flourished, so did the rates of urbanisation and development. Although evolving our economy is for the betterment of the entire country and everyone's standard of living, however, everyone can arrive to the same conclusion that the current rate of over-development and destruction is worrying.

With development permits being issued in abundance, tower cranes becoming the new natural landscape of Malta and Gozo, green and un-developed land is nowadays a rare phenomenon, and buildings resembling our culture and heritage are being replaced by concrete shapes. Therefore, as ELSA Malta, we felt that it was necessary to conduct this policy paper and present our stand on the issue, whilst also putting forward our proposals for change.

As established throughout the paper, over-development does not give rise to issues pertaining only to our environment, but also to our health, both physical and mental, and also to workers' safety and more. Therefore, the issue of over-development needs to be tackled holistically, giving obvious special attention to conserving our natural environment but also to other issues which arise. ELSA Malta encourages legislators to expand their horizons before acting in order to tackle the issues at hand, to safeguard Malta and Gozo's beauty.

On a final note, we call on you, the reader, to take a stance before it is too late, for yourself and for the upcoming generations.

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