



**The Impact of Social Media Activities on Marine and Coastal Litter:
A Case Study of Northern Cyprus**

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**By
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Özet

Bu çalışma, deniz kirliliği ile mücadelede sosyal medya gruplarının etkinliğini değerlendirmeyi amaçlamaktadır ve bu grupların uluslararası yasal çerçeveleri somut eylemlere dönüştürmedeki dönüştürücü gücünü vurgulamaktadır. Araştırma, sosyal medyanın plastik kirliliğinin zararlı etkileri konusunda farkındalık yaratmada ve düzenli plaj ve okyanus temizliği gibi faaliyetler aracılığıyla toplumsal tutumları iyileştirmede kritik rolünü vurgulamaktadır.

Ana hedef, tek kullanımlık plastikler gibi büyük bir kirlilik kaynağı olan maddelere yönelik uluslararası mevzuat ve politikaları incelemektir. Bu çerçeveleri inceleyerek, çalışmalarının etkinliği hakkında kapsamlı bir anlayış sağlanması amaçlanmaktadır.

Ayrıca, bu araştırma, sosyal medya gruplarının hedeflerine ulaşmada karşılaştıkları zorlukları belirlemekte ve analiz etmektedir. Toplum davranışlarını iyileştirmek ve bu grupları desteklemek için çözümler önermektedir.

Çalışma hem birincil hem de ikincil kaynakları kullanan karma bir yöntem yaklaşımı benimsemektedir. Birincil veriler, sosyal medya gruplarındaki günlük paylaşımlar aracılığıyla toplanacak ve ilk elden iç görüler sunacaktır. İkincil veriler ise bilimsel makaleler, internet kaynakları, önceki araştırmalar ve multimedya içeriklerini içerecek olup, mevcut literatürdeki boşlukları doldurmak ve araştırma sorularını yanıtlamak için kullanılacaktır.

Anahtar Kelimeler: Atık Yönetimi, Çevre Bilinci, Deniz Kirliliği, Kıyı Çöpleri, Plastik Kirliliği

Abstract

This study aims to assess the effectiveness of social media groups in addressing marine pollution, emphasizing the transformative power of these groups in translating international legal frameworks into actionable measures. The research highlights the critical role of social media in raising awareness about the detrimental effects of plastic pollution and enhancing societal attitudes through activities like regular beach and ocean clean-ups.

The primary objective is to explore international legislation and policies related to marine and ocean governance, particularly those addressing single-use plastics, a major pollution contributor. By examining these frameworks, the study aims to provide a comprehensive understanding of their effectiveness.

Additionally, this research identifies and analyzes the challenges social media groups face in achieving their goals. It proposes solutions to improve societal behaviors and support these groups in their efforts.

The study employs a mixed-method approach, utilizing both primary and secondary sources. Primary data will be collected through daily postings in social media groups, offering firsthand insights. Secondary data will include scientific articles, internet sources, prior research, and multimedia content to fill gaps in the existing literature and address the research questions.

Keywords: *Coastal Litter, Environmental Awareness, Marine Pollution, Plastic Pollution, Waste Management,*

Table of Contents

Declaration

	IV	Özet
	VI	

Abstract

	VII
--	-----

1. Introduction	2
-----------------------	---

1.1. International Legal and Policy Frameworks Addressing Marine and Coastal Litter Issues	3
--	---

1.2. The 1972 London Convention and the 2006 London Protocol.....	3
---	---

1.3. The MARPOL Convention.....	4
---------------------------------	---

1.4. International Legal and Policy Frameworks Implemented by Cyprus and Their Effectiveness on Coastal Litter.....	6
---	---

1.4.1. The Political Situation and Environmental Policies of Cyprus	6
---	---

1.4.2. International Treaties to Which the Republic of Cyprus is a Party	8
--	---

1.4.3. European Union Policy Framework.....	9
---	---

1.4.4. The EU Waste Management Law	9
--	---

1.5. The Purpose and Objectives of the Study.....	12
---	----

1.6. Research Questions	12
-------------------------------	----

1.7. Research Methodology	13
---------------------------------	----

2. Current EU Laws and Cyprus Legislations.....	13
---	----

2.1. Waste	14
------------------	----

2.2. Landfill Waste	
---------------------------	--

2.3.	Incineration of Waste	
16		
2.4.	Packaging Waste	
17		
2.5.	Gaps in Cyprus Legislation	
19		
2.6.	Plans of Northern Cyprus	
21		
2.7.	Harmonization with European Union norms and standards.....	21

2.8.	Objectives of Northern Cyprus	22
2.8.1.	Administration in Northern Cyprus	25
2.8.2.	Recycling Policies of Northern Cyprus	27
2.8.3.	Change in Behaviors	29
2.9.	Collaboration.....	31
2.10.	Waste Amounts Collected by the Municipalities	32
2.11.	Measures	34
2.12.	Capacity of Northern Cyprus and Waste Management	35
2.13.	Importance of Composting at Home.....	37
2.14.	Collection Services.....	38
2.15.	Regional Transfer Systems	40
3.	Social Media Posts on Marine and Coastal Litter	42
3.1.	Selection Criteria: A Deliberate Curation.....	43
3.2.	The Variegated Landscape of Tables: A Visual Narrative	43
3.3.	Visual Narratives: Harnessing the Power of Imagery	44
3.4.	The Prelude: Setting the Stage for Unfolding Events	45
3.5.	Interconnected Threads: Weaving Social Media with Events	45
4.	Policies into Action	54
4.1.	Empowering Coastal Communities: Yesil Baris Hareketi's Beach Cleaning Initiative...56	
4.2.	Local Action, Global Impact: Teneke Cocuk's Segregation Event in the Context of EU Waste Management Law	58
4.3.	Spot Turtle Project's Alagadi Fest: Blending Conservation, Community, and Recycling in Northern Cyprus.....	61
4.4.	Transformative Actions: Alagadi 2 Clean-Up Session Unveils Northern Cyprus' Commitment to Waste Management Objectives.....	62
4.5.	Yesil Baris Hareketi's Warning: Unraveling the Menace of Coastal Violations and Neglected Marine Analysis	65

4.6. Urgent Environmental Action: Yesil Baris Hareketi's Call Amidst Global Legal Frameworks	67
5. Discussion	69
5.1. Resource Limitations.....	70
5.2. Financial Austerity.....	71
5.3. Expertise Challenges	71
5.4. An Approach to Overcome Challenges	72
5.5. Strategic Alliances and Collaborations:	72
5.6. Grant Procurement and Fundraising Prowess:.....	73
5.7. Skill Augmentation Programs:	73
5.8. Advocacy for Governmental Endorsement:	73
5.9. Need for Recycling Systems: A Crucial Nexus for Sustainable Waste Management....	73
5.10. Spotlight on Community Initiatives.....	75
5.11. Addressing the need for recycling systems in Northern Cyprus demands strategic interventions that consider the region's unique challenges and opportunities	75
5.11.1. Legislative Enhancements:	75
5.11.2. Market Expansion Strategies:.....	76
5.11.3. Public Awareness Campaigns:	76
5.11.4. Technology Adoption:	76
5.11.5. Collaborative Initiatives:.....	76
5.12. Creating Awareness is Not Effective Enough	77
5.13. The Need for Regulatory Measures	78
5.14. The Role of International Legal Frameworks	79
5.15. The Imperative of Sponsorship for Sustainable Environmental Initiatives in Northern Cyprus	81
5.16. Financial Constraints and Community Action	81

5.17.	The Role of Sponsorship in Environmental Initiatives	82
5.18.	Overcoming Environmental Challenges: The Imperative of Enforcement Systems ..	84
5.19.	Societal Attitudes and Environmental Responsibility: Bridging the Awareness Gap	86
5.20.	Societal Attitudes, Interactive Engagements and Challenges.....	87
5.21.	Behavioral Change Initiatives in Northern Cyprus	88
5.22.	Addressing Beach Litter Challenges and the Role of Marine Litter	88
5.23.	Recommendations for Effective Beach Litter Management.....	92
6.	Conclusion	94
7.	References	97

Figure of Contents

<i>Table 1. Requirements Assessment.....</i>	<i>31</i>
<i>Table 2. Predicted Waste Collected by the Municipalities, in tons.</i>	<i>34</i>
<i>Table 3. Measures</i>	<i>34</i>
<i>Table 4. Regional Waste Transfer Systems.....</i>	<i>40</i>
<i>Table 5. Beach Cleaning Event- Instagram post 12 October 2021.</i>	<i>46</i>
<i>Table 6. Segregation event- Instagram post 17 September 2017.</i>	<i>47</i>
<i>Table 7. A Post Made by Spot Turtle Project’s Instagram Page to engage in beach clean-up in Alagadi-2 beach. Instagram Post Made on the 22 August 2023.</i>	<i>48</i>
<i>Table 8. Alagadi 2- clean up session. Instagram post made on the 30 August 2023.</i>	<i>49</i>
<i>Table 9. Yesil Baris Hareketi warns that coastline declaration is violated, and sea water analyzes are not carried out. Instagram post made on the 17 May 2022.</i>	<i>52</i>
<i>Table 10. Yesil Baris Hareketi shares a photography of a newspaper article and warns that marine results are frightening. Instagram post made on the 20 May 2022.</i>	<i>53</i>

1. INTRODUCTION

Marine litter is any persistent, manufactured or processed solid material discarded into the sea or rivers or on beaches; brought indirectly to the sea with rivers, sewage, storm water or winds; or discarded or lost at sea. Marine litter poses environmental, economic, health, aesthetic and cultural threats, including degradation of marine and coastal habitats and ecosystems that incur socioeconomic losses in marine-based sectors.

Marine litter is a transboundary challenge that is rooted in unsustainable production and consumption patterns, poor solid waste management and lack of infrastructure, lack of adequate legal and policy frameworks and poor enforcement, including on interregional cross-border trade of plastic waste, and a lack of financial resources. An estimated 80 per cent of all marine pollution is caused by human activities on land in the form of solid waste leakage including plastic from inadequate waste management; sewage compounds in rivers and coastal waters; urban storm-water run-off; sediment mobilization; inadequately treated waters from industries; discharges of phosphorus and nitrogen used in agriculture; and dumping of heavy metals and persistent organic pollutants. Sea-based marine pollution include abandoned, lost or otherwise discarded fishing gear (ALDFG), pollution from aquaculture, oil spills, and pollution from sea-based activities such as shipping and tourism that threaten marine and coastal ecosystems.

1.1. International Legal and Policy Frameworks Addressing Marine and Coastal Litter Issues

The issue of marine and coastal litter has become increasingly concerning for our world. Various types of plastics, including macro, micro, and nano plastics, consistently pose a threat to the environment, particularly the health of marine ecosystems (Sheridan et al., 2020).

Numerous international legal and policy frameworks focus on addressing marine pollution and the problem of coastal litter. Within this framework, there exist treaties, agreements, regulations, strategies, programs, and guidelines. However, in line with the aim and scope of this research, only a subset of these regulations will be reviewed, rather than an exhaustive examination of the entire framework.

1.2. The 1972 London Convention and the 2006 London Protocol

In the 1950s, numerous countries began to address the adverse impacts on human life (Kaypak, 2012). The oldest global treaty with the objective of safeguarding the marine environment from human-induced pollution came into force in 1975 (Kaypak, 2012). The goal here was to promote effective solutions for all sources of marine pollution and to take pragmatic steps to prohibit pollution resulting from the indiscriminate discharge of all wastes and other substances. Additionally, services that could pose a threat to human health, jeopardize marine ecosystems, and violate the legitimate use of the oceans also fall within the purview of this treaty.

The Convention represents a contemporary approach to waste management. The London Protocol has more recently incorporated environmental approaches, such as the disposal of single-use plastics and the preservation of ecosystem biodiversity and sustainability. This development, welcomed by the signatory countries, positions the London

Protocol as a mechanism that addresses gaps in the well-established and emerging threats to the marine environment.

While there is no concrete evidence of the intention to further amend the London Convention, this remains a possibility. Several scholars suggest certain transitional measures in their studies. For instance, according to Jambeck (2015), 80% of plastic pollution is land-based, yet the international arena still places more emphasis on plastic pollution originating from ships. Nyka (2018) also contends that plastic waste has come to constitute a significant portion of plastic demand over the years, presenting a greater threat to the environment than waste from both land and sea.

1.3. The MARPOL Convention

The MARPOL Convention, in Annex V, focuses on different aspects related to the prevention of pollution caused by garbage from ships, including the amount of garbage, proximity to the shore, and the method of disposal. However, Annex V explicitly prohibits the disposal of all forms of plastics into the sea. Raha et al. (2021) argue that Annex V of the MARPOL Convention could be a versatile solution to the problem of plastic pollution. Nevertheless, upon closer examination, an essential point comes to light; Annex V does not address many activities leading to plastic pollution, and its practicality might be challenging as plastic waste accumulates in significant quantities on the coast.

According to various studies, when it comes to plastic waste, Annex V is considered a relatively effective system for addressing pollution originating from ships, but the feasibility of mitigating land-based pollution is more complex. From this perspective, the governance of marine litter is founded on various principles. Notably, the issue of terrestrial plastic pollution has been long neglected by legally binding international frameworks and has only been

assessed based on soft laws. Some authors have gone further to provide recommendations on how the international arena can be improved in this regard. These recommendations can be summarized under two main headings: the need for more comprehensive research and the establishment of practical frameworks.

Firstly, a new international legislative effort concerning land-based marine debris, including marine litter, should be initiated (Tessnow-Von et al., 2019). The proposed second option is to amend and broaden the existing frameworks concerning marine litter (Raubenheimer and McIlgorm, 2017). Vince and Hardesty (2016) also address most of the institutional challenges related to marine plastic pollution governance within the scope of legally binding national and international regulations. At the international level, legal frameworks will promote and enhance synergy among parties. According to this approach, national-level reforms are incentivizing in terms of the approach to plastic waste management at the international level. National reforms are seen as particularly encouraging in terms of protecting oceans, conserving seas, and using plastics in a sustainable manner, which consequently aids in mitigating marine pollution to some extent.

According to Vince and Hardesty (2018), the emergence of legally binding international frameworks targeting plastics is undoubtedly a lengthy process, as states party to the conventions usually take a considerable amount of time to agree on issues related to capacity levels, such as financial resources, waste management infrastructure, or jurisdictional authorities. Haward (2018) also asserts that international agreements are not easily formulated and often require a significant amount of time to reach a consensus.

Regarding the challenges in reaching an acceptable consensus for shaping the outcomes of international legal frameworks, Şeker (2018) emphasizes that the existing international legislation is likely to take time to rectify, as the inconsistencies they contain do not align with the urgency of the implementation problem.

1.4. International Legal and Policy Frameworks Implemented by Cyprus and Their Effectiveness on Coastal Litter

1.4.1. The Political Situation and Environmental Policies of Cyprus

Cyprus is situated at the crossroads of Africa, Asia, and Europe and is regarded as one of the oldest civilizations in the Mediterranean. Throughout centuries, due to its geostrategic location, the island became a meeting point between the East and the West. Until 1960, an independent Republic had not been established. In 1960, the Republic of Cyprus was established as a bicomunal republic, comprising Greek-speaking Orthodox Christian Cypriots and Turkish-speaking Muslim Cypriots. Nationalist movements between the two ethnic groups escalated into violence in 1963. Since then, in 1974 the island has remained divided, and this situation is defined as the Cyprus issue. The southern part of the island is known as the Republic of Cyprus, also referred to as the Cyprus Greek Administration, while the northern part has been administered as the Turkish Republic of Northern Cyprus (TRNC) since 1983. In TRNC, there is a specific population, region, and government, but no state recognizes this administration except the Republic of Turkey, which acts as its legal representative.

The European Union (EU) has a policy of non-recognition regarding the authorities in the north, and this policy signifies more than mere non-recognition (Coppieters, 2018). Therefore, it is essential to examine the nature of the EU's policy. Since the EU's policy is one of non-recognition, it is essentially grounded in rejecting the statehood of the de facto authority, and in this context, what the EU fundamentally avoids is strengthening the state institutions of the TRNC. This pragmatic approach requires extreme sensitivity. For instance, within this

policy, no official position will ever be given for statements or declarations by the authorities of TRNC since such a stance would imply an enhancement of the legal status of TRNC.

According to Kyris (2018), the way the EU addresses the conflict and establishes close relations with Cyprus and the northern community is largely determined by sovereignty narratives. In the 1990s, when the Republic of Cyprus applied to join the EU, the main assumption was that EU membership would trigger a political settlement. However, in 2004, the UN's Annan Plan was rejected in a referendum held across the island. While the northern part of Cyprus voted in favor of the plan with 65%, 76% of Greek Cypriots voted against it. Consequently, in May 2004, a divided Cyprus was represented in the EU. As George Kyris (2018) contends, initially, the participation of the Republic of Cyprus in the EU was hoped to serve as a catalyst for a united Cyprus. Nevertheless, today, EU law cannot be applied in the TRNC because the northern part of the island is not within the EU, and the EU still does not recognize the northern part as a state, with interactions limited to Brussels (Kyris, 2018). More importantly, despite the comprehensive environmental policy of the Union, this political situation on the island obstructs the Union's efforts to address environmental issues.

Undoubtedly, the issue necessitates a holistic approach, as environmental conditions have historically played a significant role in determining the security of individuals and societies. Individuals' life spans and disease rates are influenced by environmental changes (McDonald et al., 2009). While environmental conditions could have been better in modern societies today, human activity, unprecedented in recent years, threatens the security and sustainability of life forms and ecosystems worldwide. In this regard, the EU faces several challenges, and in this context, it is expected to develop environmental policies.

In our quest to understand the EU, we must primarily ask the following question: Who will ensure the security of the environment in Cyprus? Such a thought leads us to seek alternative actors beyond the state who can address threats to human life. In this context, the

EU is a significant global actor in the field of the environment, utilizing various governance structures. However, due to the suspension of the “acquis Communautaire” in the northern part, community rules cannot be enforced in the north, and the EU still does not recognize the northern region of Cyprus as a state. As a result, the northern region’s interactions with Brussels continue (Kyris, 2018). More significantly, despite the Union’s comprehensive environmental policy, this political situation on the island impedes the Union’s efforts to address environmental concerns.

This study will primarily shed light on the environmental policies of the north and the south separately. However, in relation to these policies, environmental cooperation in Cyprus promoted by the EU and the significance of the EU for the TRNC in terms of environmental governance will be discussed in more detail.

1.4.2. International Treaties to Which the Republic of Cyprus is a Party

The Republic of Cyprus has signed numerous international treaties that address waste, marine pollution, and plastic pollution issues:

- In 1979, Cyprus ratified the Barcelona Convention.
- In 1979, Cyprus ratified the London Convention and Protocol.
- In 1988, Cyprus ratified the United Nations Convention on the Law of the Sea.
- In 1989, Cyprus ratified the MARPOL Convention and implemented Annex V. In the southern part of Cyprus, the Department of Merchant Shipping carries out ship inspections under the MARPOL Regulations (both domestic and foreign vessels).
- In 1992, Cyprus ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

- In 2015, Cyprus participated in the United Nations meeting that set sustainable development goals. These goals included a significant reduction in marine pollution, leading to systematic planning for both maritime and land-based activities in line with this objective.

1.4.3. European Union Policy Framework

At the European level, the Framework Directive for the Marine Strategy has nine main objectives. The primary goal is for the EU to achieve a Good Environmental Status (GES) in its marine areas. The Directive provides various qualitative descriptors to determine if an area has achieved GES. In the context of implementing the EU Directive, every Member State with marine waters must develop a Measures Program. Cyprus has several general objectives in this regard, including reducing the amount of marine litter that threatens marine life in its coastal areas and seabed. The program includes two main objectives related to marine litter:

- Minimizing and, where possible, effectively removing the amount of marine litter on its coasts and seabed.
- Minimizing and, where possible, effectively removing the death rate of *Caretta caretta* turtles and their nesting on its shores.

To achieve these goals, Cyprus has a National Marine Strategy and an existing National Action Plan on marine litter, which also includes measuring the proportion of plastics in the sea (as part of the program). Cyprus also plays a crucial role in raising awareness about combating marine litter among the public. Special activities are conducted for schools and fishermen to emphasize the importance of addressing marine litter.

1.4.4. The EU Waste Management Law

Directive 2008/98/EC, also known as the Waste Framework Directive, establishes a legal framework for waste processing and management within the European Union (EU). It defines fundamental concepts and terms related to waste, including recycling and recovery. Article 4 of this directive establishes a hierarchy for waste prevention and management, prioritizing waste prevention as the most desirable option and disposal as the least desirable. Article 9 introduces important provisions and timeframes for waste management. Article 10 focuses on reuse, recycling, and recovery, while Article 12 addresses waste disposal. Other provisions concern self-sufficiency, the "polluter pays" principle, and extended producer responsibility. The directive references significant targets for waste management plans and prevention programs by competent national authorities of EU Member States. It sets objectives related to the waste hierarchy, such as establishing recycling goals and preparing plastic waste materials for reuse and recycling.

Directive 94/62/EC specifies regulations for packaging and packaging waste management within the EU. The directive is designed to prevent the production of packaging waste and encourage its reuse. It promotes the recycling and recovery of packaging materials over their ultimate disposal. Member States are obligated to implement national programs and incentives as per this directive, with a strong emphasis on producer responsibility programs and other economic tools to minimize the environmental impact of packaging waste. EU Member States are also required to promote reusable packaging without compromising food safety, and specific targets for recycling have been set, including a 70% recycling rate for packaging by December 31, 2030, and a 55% recycling target for plastics.

Directive 2019/904, also known as the Single-Use Plastics Directive, is a significant part of the EU's strategy to reduce the environmental impact of certain plastic products, particularly single-use plastics. Its aim is to prevent and reduce the harmful effects of plastics. This directive encompasses a mix of measures, including prohibitions on specific plastic

products, the promotion of alternatives, and the establishment of constraints on labelling. It also addresses market restrictions and product marking rules. The directive outlines extended producer responsibility measures and prescribes specific product design requirements, particularly for beverage containers.

Directive 1999/31/EC focuses on the management of waste landfill sites, aiming to prevent or reduce adverse environmental effects stemming from landfills. Member States are required to establish a national strategy for implementing this directive. Reducing the disposal of biodegradable waste in landfills, particularly through methods like recycling and composting, is a crucial aspect of this strategy.

Directives 2000/76/EC and 2008/98/EC set requirements for waste incineration, particularly emphasizing performance standards, critical operating conditions, and technical specifications for facilities engaged in waste incineration. These directives are vital for ensuring the efficiency of waste-to-energy processes while minimizing their environmental impact.

Directive (AB) 2019/883 pertains to waste from ships using EU ports, aiming to protect the marine environment from the adverse effects of waste generated by ships. It seeks to enhance port infrastructure and facilities affected by maritime waste, contributing to the EU's economic policies and plastic strategy. This directive has been in force since 2019 and plays a significant role in these policy frameworks.

1.5. The Purpose and Objectives of the Study

The purpose and objectives of this research are to assess the effectiveness of social media groups in addressing the issue of marine pollution. Social media groups in many countries are of vital importance due to their activities, as these action-oriented groups translate the intentions of international legal frameworks into actions. This research holds significant importance as it will demonstrate how such actions should be carried out in our country. Undoubtedly, the relevant social media groups have the potential to raise awareness within communities about the adverse effects of plastic. They have the potential to improve societal attitudes and perceptions, such as discouraging the indiscriminate disposal of waste, through activities like regular beach and ocean clean-ups.

The primary aim of this study is also to gain access to all relevant international legislation and policies. Frameworks that are debated for their effectiveness in marine and ocean governance will be examined in detail. The reduction of the impact of single-use plastics, a significant contributor to pollution, will also be discussed extensively. Another objective of this study is to outline the challenges faced by social media groups in achieving their goals. In addressing these challenges, the research also aims to propose solutions regarding how society behaves.

1.6. Research Questions

- To assess the efficacy of social media groups.
- To ascertain the objectives and regulatory frameworks governing social media groups.
- To scrutinize the impediments encountered by social media groups.
- To proffer prospective recommendations for ameliorating the challenges confronted by social media groups.

1.7. Research Methodology

The study will employ both primary and secondary sources. Data will be gathered through observations of daily postings in social media groups. This method of data collection is of particular significance as it has the potential to offer firsthand observations and essential information that can address the research questions.

Secondary sources will also be utilized in the study since examining approaches of social media groups and their efforts in preventing marine and coastal litter, as documented in well-written scientific articles, is valuable. The study will collect data from internet sources, published articles, relevant publications, prior research, newspapers, and YouTube videos to address certain gaps observed in the relevant literature and answer the research questions.

2. CURRENT EU LAWS AND CYPRUS LEGISLATION

The harmonization of European Union law with national legislation is a pivotal aspect of the EU integration process. This part of the study critically examines the process of harmonization in the context of Cyprus, an EU member state, focusing on the mechanisms, challenges, and implications of aligning its legal system with EU standards. By analysing case studies and scholarly perspectives, this essay underscores the delicate balance between integration and national sovereignty that characterizes the harmonization process in Cyprus.

The harmonization of EU law with national legislation is essential for the functioning of the internal market and the promotion of uniform legal standards across the EU (Tryfonidou, 2017). Cyprus, as a small island nation and EU member state, navigates the complexities of harmonization while preserving its unique legal traditions and national identity. This part of the dissertation firstly delves into the mechanisms, challenges, and consequences of harmonization in Cyprus, highlighting the multifaceted interplay between EU integration and national sovereignty.

The harmonization process in Cyprus is achieved through the incorporation of EU directives into its national legal framework. Directives provide a framework for common objectives while allowing member states to adapt measures to their domestic legal systems. Cyprus transposes directives into its national legislation, ensuring alignment with EU standards.

However, harmonization poses several challenges to Cyprus. One significant challenge is the need to balance EU requirements with national interests. Language and cultural differences also impact the process, requiring careful adaptation of EU provisions to ensure they are compatible with Cyprus' legal and cultural context.

Harmonization ensures a uniform legal framework across the EU, enhancing legal certainty and predictability for businesses and citizens engaging in cross-border activities. However, while harmonization promotes integration, concerns arise about the potential erosion of national sovereignty (Constantinou, 2015). Cyprus grapples with maintaining its distinct legal traditions and identity while aligning with EU norms. Examining the harmonization of environmental regulation in Cyprus showcases the challenges of balancing national priorities with EU requirements. The harmonization of EU law and Cyprus legislation reflects the delicate equilibrium between integration and national sovereignty. While challenges persist, the benefits of harmonization in terms of market integration and legal consistency are substantial. Cyprus' ability to navigate these challenges and maintain its unique legal identity highlights the intricate dance between EU integration and the preservation of national sovereignty. The harmonization process in Cyprus serves as a testament to the complexity of modern European governance.

2.1. Waste

Waste management is a critical environmental concern, and its efficient regulation is imperative for sustainable development. This essay delves into the waste management laws and practices in Cyprus, examining the legal framework, key regulations, and their impact on environmental sustainability. By analysing the country's waste management policies and comparing them to international standards, this part of the study aims to shed light on Cyprus' efforts to mitigate the environmental impact of waste generation and disposal.

Waste management is a global challenge, and its effective regulation is essential for preserving natural resources and mitigating adverse environmental impacts. Cyprus, a Mediterranean island nation, has been actively working to establish a comprehensive legal framework for waste management in line with European Union directives. This part of the study provides an in-depth analysis of Cyprus' waste management laws, regulations, and their implementation, while also highlighting the nation's efforts to promote sustainable waste practices.

Within this framework EU legislations in this area can be listed as:

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives.
- Directive (EU) 2018/851 on the impact of plastic products on the environment.
- Decision 2000/532/EC establishing the Waste Catalogue and a list of hazardous wastes.

Within this framework, adaptation of Cyprus legislation towards these measures can be listed as: Waste Law 6(I)/2012 supplemented with The Solid and Hazardous Waste Decree of 2003 and The Solid and Hazardous Waste Act (Waste Catalog) Decree of 2003.

2.2. Landfill Waste

Landfill waste management is a critical environmental concern, and its effective regulation is crucial for safeguarding ecosystems and public health. This part of the thesis examines the legislative framework for landfill waste management in Cyprus and its efforts to harmonize these regulations with European Union waste management directives. By evaluating the challenges, benefits, and implications of harmonization, this part sheds light on Cyprus' commitment to environmental sustainability and alignment with EU waste management standards.

Landfill waste poses substantial environmental risks, making its proper management a priority. Cyprus, as an EU member state, seeks to ensure the effective regulation of landfill waste while harmonizing its laws with EU waste management directives (Zorpas, 2016). This part of the dissertation explores Cyprus' legislative framework for landfill waste management and its endeavor to align its regulations with EU standards, underscoring the country's dedication to environmental preservation and sustainable waste management.

Within this framework, EU legislations in this area can be listed as:

- Directive 1999/31/EC on landfill of waste.
- Directive 2018/850 on landfill of waste.
- Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills.

Within this framework, adaptation of Cyprus legislation towards these measures can be listed as: The Solid and Hazardous Waste (Landfill) Regulations of 2003; The Solid and Hazardous Waste (Landfill) (Amendment) Regulations of 2007 (Act 618/2007); The Solid and Hazardous Waste (Sanitary Landfills) Amendment Regulations of 2014 (Act 147/2014); Decree on establishing criteria and procedures for the acceptance of waste at landfills of 2007 (Act 282/2007).

2.3. Incineration of Waste

The main EU legislation in this area is Directive 2000/76/EC on the incineration of waste and Cyprus legislation adapted this Directive to the national legislative system by The Water Pollution Control (Disposal of Waste from Incineration) Regulations (Act 535/2004).

2.4. Packaging Waste

Packaging waste poses a significant environmental challenge globally, demanding effective regulations and management strategies. This part of the thesis delves into the legislative framework for packaging and packaging waste management in Cyprus, highlighting the country's efforts to harmonize these regulations with EU standards. By examining the challenges, benefits, and potential outcomes of harmonization, this title sheds light on Cyprus' commitment to environmental sustainability and alignment with EU waste management directives.

Packaging waste is a pressing environmental concern, demanding the adoption of sustainable waste management practices. Cyprus, as an EU member state, endeavors to regulate and manage packaging waste while aligning its legislation with EU waste management directives. Therefore, this part of the thesis explores Cyprus' legislative framework for packaging and packaging waste management, focusing on its journey toward harmonization with EU standards. Harmonizing packaging and packaging waste management in Cyprus with EU law reflects the nation's dedication to sustainable waste practices and environmental protection (Christodoulidou, 2019). Despite challenges, Cyprus' commitment to align with EU directives yields tangible benefits, including reduced packaging waste impact and improved market access. By focusing on infrastructure enhancement and raising public awareness, Cyprus can continue to advance its harmonization goals and contribute to a more environmentally sustainable future.

Within this concept, EU legislations in this area can be listed as:

- Directive 91/692/EEC standardizing and rationalizing reports on the implementation of certain directives on the environment Directive.
- 94/62/EC on packaging and packaging waste, establishing an identification system for packaging materials.
- Directive 2003/35/EC on public participation in the drawing up of certain environmental plans and programs and amending Directives with regard to public participation and access to justice.
- Directive 2004/12/EC of the European Parliament and of the Council of 11 February 2004 amending Directives on packaging and packaging waste.
- Directive 2005/20/EC of the European Parliament and of the Council of 9 March 2005 amending Directives on packaging and packaging waste.
- Decision 2005/270/EC of the Commission of 22 March 2005 laying down the matrices of the database system on packaging and packaging waste.
- Decision 1999/177/EC laying down the exemption conditions for plastic crates and plastic pallets in relation to the heavy metal concentration levels established in Directives of the European Parliament and of the Council on packaging and packaging waste.
- Decision 2001/171/EC laying down the conditions for a derogation for glass packaging in relation to the heavy metal concentration levels established in Directives on packaging and packaging waste.
- Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of eco-design requirements for energy related products.

Within this framework, adaptation of Cyprus legislation towards these measures can be listed as: The Law on Packaging and Packaging Waste Law (N. 32(I)/2002). By regulations:

The Packaging and Packaging Waste Regulations of 2002 (Act 183/2002) (In accordance with Articles 9 and 13 of the Packaging and Packaging Waste Law); The Packaging and Packaging Waste (Liability Financial Agents); Regulations of 2003 (Act 747/2003) The Packaging and Packaging Waste (Inspectors Powers and Duties) Regulations of 2003 (Act 746/2003). Additionally, law laying down eco-design requirements for energy related products (N. 17(I)/2011).

2.5. Wastes and Cyprus Legislations

The disparities between Cyprus' waste management legislation and EU law highlight the urgency of addressing these gaps. By aligning waste management practices with EU standards, Cyprus can contribute to a greener and more sustainable future. Legislative reforms, capacity building, and enhanced enforcement mechanisms are essential for achieving effective waste management practices and ensuring Cyprus' alignment with EU waste management directives (Zachariadis, 2019). Despite laws stated above, Cyprus still faces problems in implementing the relevant EU waste policy that are stated in previous section of this study and this is mainly due to the lack of systems for collecting recyclables, the lack of coordination between different administrative levels and the lack of capacity at local level.

As it can be seen in above analysis, the Cyprus laws establishes the responsibility for the local authorities to meet specific targets for recycling and developing separate collection systems. However, the main problem with these laws is the absence of clear responsibilities placed on local authorities, as there are no clear sanctions for the local authorities in case they fail to implement the foreseen separate collection systems or fail to meet the collection and recycling targets. However, it is true that prior to the adoption of these laws, local authorities

were merely responsible for waste collection, without any responsibilities to develop separate collection systems or meet specific targets.

Furthermore, there seems to be no EU standards required for waste collection. Eventually, this results in problematic monitoring issues of the collection activities, which may result in not acceptable environmental standards. However, the current overall situation reveals that moderate progress has been made especially in relation to municipal solid waste management, especially in relation to recycling of packaging waste, while the country still lacks sufficient infrastructure for waste treatment and disposal, and separate waste collection is yet to be developed. Whilst the legal framework seems to be complete, having transposed all European Directives, the results of the system are relatively poor, especially in relation to waste treatment and separate waste collection.

In the 2017 Environmental Implementation Review, the main challenges identified for The Republic of Cyprus for the implementation of EU environmental legislations were to address waste management issues, in particular illegal landfills. Following the publication of the Environmental Implementation Review in 2017, Cyprus has not yet organised a national dialogue that would help to address the above challenges. The Environmental Implementation Review in 2019 shows that there has been some progress, as the strategic framework for waste is now in place and the national waste management plans have been adopted. Furthermore, new economic instruments have been set out in the national waste management plan, but there is a significant delay in their adoption and implementation.

According to the ‘Early Warning Report’ of the European Commission in 2018, the Republic of Cyprus failed to meet the 2020 municipal waste recycling target. Moreover, the European Commission stated that the reasons for this outcome are Cyprus’ lack of systems for recyclables and the lack of incentives to prevent waste and improve recycling. Experience from

other countries suggests that these limitations cannot get better merely by enforcing such legislation that are listed above.

2.6. Northern Cyprus Plans for Waste Managent

Future waste management plans play a crucial role in shaping environmental sustainability and public well-being. This part of the study explores the anticipated waste management strategies and plans of Northern Cyprus, highlighting the region's commitment to addressing waste-related challenges. Through an analysis of potential approaches, innovations, and stakeholder involvement, this part envisions a sustainable waste management future for Northern Cyprus.

The future waste management plans of Northern Cyprus hold the potential to usher in a new era of environmental sustainability and resource efficiency. By embracing circular economy principles, investing in advanced technologies, and fostering stakeholder collaboration, Northern Cyprus can pave the way for a waste-free future. As the region navigates these challenges, a holistic and integrated approach will be pivotal in shaping waste management practices that contribute to a cleaner and healthier environment for generations to come.

2.7. Harmonization with European Union Norms and Standards

Environmental law harmonization is a key aspect of modern governance, ensuring a consistent approach to environmental protection and sustainable development. Northern Cyprus, although not internationally recognized, seeks to align its environmental laws with EU norms and standards. Transition of waste sector in the Turkish Republic of Northern Cyprus

(TRNC) to European Union norms and standards is in the process (Anastasiou, 2019). Knowing that TRNC is a non-member state, it is very important to note that waste management systems should be tailored to the local situation. Local waste management systems that are going to be developed to ensure applicability and sustainability should take these into account:

- **Suitability:** The system is suitable for the special needs of the Turkish Republic of Northern Cyprus and must comply with waste specifications.
- **Applicability:** Planned waste management measures should be locally applicable.
- **Affordable:** The cost of the system should be within the range that can be afforded by the society.

Waste Management Plan to implement the European Union waste management acquis determines measures related to local, environmental, economic and political situations (Gungor, 2008). To fulfill the requirements of the European Union acquis, collaboration and sharing of information with EU experts would be beneficial (Gungor, 2008).

2.8. Objectives of Northern Cyprus

Waste management is a critical facet of environmental protection and public health. This part of the dissertation delves into the waste management objectives of Northern Cyprus, examining the region's commitment to sustainable waste practices. By analysing key objectives, strategies, challenges, and prospects, this part sheds light on Northern Cyprus' efforts to ensure effective waste management while preserving its unique environment. The waste management objectives of Northern Cyprus underscore its commitment to environmental sustainability and public well-being. By focusing on waste minimization, recycling, energy recovery, and infrastructure development, the region seeks to achieve sustainable waste practices that align with global environmental goals. Despite challenges,

Northern Cyprus' dedication to waste management objectives reflects its aspiration to contribute to a cleaner, greener, and more sustainable future.

The general purpose of the Waste Management in Northern Cyprus is to ensure the quality and efficiency of waste management services and to protect and improve environmental quality by increasing its efficiency (KKTC, 2019).

This plan has targeted the European Union waste management acquis. It also includes a set of objectives that reflect the harmonization of waste management practices with European Union standards and norms. Therefore, a gradual adaptation process is needed to establish these targets (KKTC, 2019):

- Recycling and Recovery targets for packaging in 2020:
 - o At least 15% of the waste weight should be recovered.
 - o At least 30% of paper and cardboard waste weight should be recovered.
 - o At least 30% of the metal waste weight should be recovered.
 - o At least 10% of aluminum waste weight should be recovered.
 - o At least 10% of plastic waste weight should be recovered.
 - o At least 0% of glass waste weight should be recovered.
 - o At least 5% of wood waste weight should be recovered.
- Recycling and Recovery targets for packaging in 2025:
 - o At least 50% of the waste weight must be recovered.
 - o At least 65% of paper and cardboard waste weight must be recovered.
 - o At least 60% of the metal waste weight must be recovered.
 - o At least 40% of aluminum waste weight must be recovered.
 - o At least 40% of plastic waste weight must be recovered.
 - o At least 60% of the glass waste weight must be recovered.
 - o At least 20% of wood waste weight must be recovered.

- Recycling and Recovery targets for packaging in 2030:
 - o At least 65% of the waste weight must be recovered.
 - o At least 75% of paper and cardboard waste weight must be recovered.
 - o At least 70% of the metal waste weight must be recovered.
 - o At least 50% of aluminum waste must be recovered.
 - o At least 50% of the plastic waste weight must be recovered.
 - o At least 70% of the glass waste weight must be recovered.
 - o At least 25% of wood waste weight must be recovered.
- Recycling and Recovery targets for packaging in 2035:
 - o At least 70% of the waste weight must be recovered.
 - o At least 85% of paper and cardboard waste weight must be recovered.
 - o At least 80% of the metal waste weight must be recovered.
 - o At least 60% of aluminum waste must be recovered.
 - o At least 55% of the plastic waste weight must be recovered.
 - o At least 75% of the glass waste weight must be recovered.
 - o At least 30% of wood waste weight must be recovered.
- Recycling and Recovery targets for bio waste in 2020:
 - o 75% reduction of the amount in 2018.
- Recycling and Recovery targets for bio waste in 2025:
 - o 55% reduction of the amount in 2018.
- Recycling and Recovery targets for bio waste in 2030:
 - o 35% reduction of the amount in 2018.
- Recycling and Recovery targets for construction waste in 2022:
 - o 35% recycling/material recovery.
- Recycling and Recovery targets for construction waste in 2027:

- o 55% recycling/material recovery.
- Recycling and Recovery targets for construction waste in 2032:
 - o 70% recycling/material recovery.

In addition to these recycling targets, the special needs of the Turkish Republic of Northern Cyprus to focus on priority areas and initiate coordinated action in relation to the following targets have been determined:

- Targets for community services from 2022 to 2025:
 - o Establishment of regional waste management.
 - o Creation of regional transfer stations.
- Targets for financial sustainability in 2022:
 - o Local government service costs for commercial waste covered by the service fee.
- Targets for financial sustainability in 2025:
 - o Waste collection service fees to be met.
- Targets for legal framework in 2020:
 - o Adoption and enforcement of the waste management regulation.
 - o Adoption of the hazardous waste management regulation and entry into force.
 - o Adoption of the construction waste management regulation and entry into force.

2.8.1. Administration in Northern Cyprus

Municipalities are responsible for organizing and regulating the management of the types of waste they collect. These services include cleaning of streets, public areas, collection of waste, recycling, treatment and/or transportation of waste for disposal. Most municipalities have staff to carry out their mandated duties, but awareness or implementation of environmental practices, norms and standards remain insufficient in terms of budget. Personnel

expenses for waste management and cleaning services in the majority of municipalities are quite high and this situation changes the waste management of the municipalities and technical system development. Moreover, the purchase of new equipment and vehicles is heavily dependent on grant support.

Legislation on waste management services in the Turkish Republic of Northern Cyprus includes:

- Law on Municipalities (1995); The law applies to municipal waste collection and disposal facilities. It defines the relevant duties and responsibilities and sets the cleaning tax forms.
- Environmental Law (2012); The law contains sections on waste management.
- Solid Waste Control Regulation (1997); Determines requirements on waste collection, transport, and disposal.
- Waste List Regulation (2014); European Waste List of waste classification (Commission Decision 2000/532/EC) and Annex III of Directive 2008/98/EC harmonization with the Northern Cyprus legislation.
- Waste Incineration Regulation (2015); Directive 2000/76/EC on waste incineration
- harmonization.
- Medical Waste Control and Disposal Regulation (2015); It determines all the requirements of medical waste from the production up to disposal.
- Packaging and Packaging Waste Management Regulation (2018); it determines all the requirements of packaging from production to disposal of waste.
- Waste Tire Management Regulation (2018); determines procedures and principles for recycling waste tires without harming the environment.

2.8.2. Recycling Policies of Northern Cyprus

Recycling policies serve as foundational pillars in the realm of sustainable waste management and environmental preservation. However, within the context of Northern Cyprus, these policies grapple with inherent constraints, including limited recycling infrastructure and economic isolation, presenting formidable challenges to their effective implementation. This section delves into the intricate landscape of recycling policies in Northern Cyprus, underscoring the urgency of overcoming existing hurdles to pave the way for a more sustainable and environmentally conscious future.

The recycling of packaging waste, a pivotal element in waste management, confronts substantial limitations in Northern Cyprus. Presently, only a handful of non-governmental organizations champion recycling efforts due to the region's economic isolation, resulting in a constrained market for recyclable products. The Packaging Waste Management Regulation, introduced on December 1, 2018, aimed to inject vitality into packaging waste recycling by providing a regulatory framework. However, the true impact of this regulation is intricately tied to the broader challenges faced by the region, setting the stage for a complex narrative.

Similarly, green waste composting, an integral facet of sustainable waste management, faces hurdles in Northern Cyprus. Despite the initiation of composting activities, the absence of a dedicated facility or a specific business model hampers the effectiveness of these projects. Many green waste composting initiatives have faced setbacks, primarily due to the lack of a fee structure for green waste, resulting in either the overutilization of existing facilities or the improper disposal of materials into the environment. This underscores the pressing need for establishing a robust framework for green waste recycling.

The recycling landscape extends to construction waste, where Northern Cyprus encounters analogous challenges. While European Union construction waste crusher equipment is accessible, the absence of a comprehensive recycling system for waste poses a

significant hurdle. This gap underscores the necessity for a more structured approach to address construction waste recycling, aligning with the broader objectives of sustainable waste management.

Despite these challenges, it is crucial to recognize Northern Cyprus's commitment to recycling initiatives as a testament to its environmental aspirations. Limited resources, barriers to public engagement, and economic considerations create a complex environment for recycling policies. However, the region's resolve to overcome these challenges signals a determination to create a cleaner and healthier environment.

To appreciate the significance of recycling policies in Northern Cyprus, it is essential to revisit the Alagadi 2 clean-up session, a transformative community-driven initiative discussed later in this thesis. This event not only showcased the dedication of local communities but also emphasized the recycling targets outlined in the Waste Management Plan. The limited recycling of packaging waste, as highlighted in the thesis, becomes a critical component when considering the broader waste management goals set by the region.

Furthermore, the legal phenomenon of International Environmental Market Instruments (IEMEIs), discussed later in the thesis, adds another layer to the recycling policies. The exploration of IEMEIs as mechanisms for extending EU environmental legislation beyond its borders highlights the interconnectedness of recycling policies with broader legal frameworks. While IEMEIs primarily focus on regulatory competition and market power, they indirectly influence recycling practices by shaping global environmental governance.

The challenges outlined in the recycling policies are not isolated; they intersect with various dimensions explored later in this thesis. The lack of a comprehensive recycling system for construction waste aligns with the legal and policy frameworks, emphasizing the need for structured approaches to waste management. The economic isolation impacting the market for recyclable products resonates with the broader economic considerations discussed in the thesis.

Addressing the challenges in recycling policies is essential for creating a comprehensive and effective waste management system in Northern Cyprus. The region's commitment to recycling, as evidenced by community-led initiatives and regulatory frameworks, sets the stage for transformative action. Overcoming obstacles in packaging waste, green waste composting, and construction waste recycling will not only contribute to a cleaner and healthier environment but also align with the region's broader goals for sustainable waste management.

In conclusion, the recycling policies in Northern Cyprus are both a reflection of its commitment to environmental preservation and a call to address existing challenges. By revisiting the interconnected threads discussed later in this thesis, we gain a holistic understanding of the significance of recycling in the region. Seizing opportunities and overcoming obstacles in recycling policies will pave the way for a culture of recycling, ensuring a sustainable and environmentally conscious future for Northern Cyprus.

2.8.3. Change in Behaviors

Behavioral change is instrumental in promoting environmental protection and sustainability. The Turkish Republic of Northern Cyprus is home to various cultures and ethnicities from many nationalities. Therefore, there are various habits of cleaning and environmental protection throughout the country.

Environmental Protection Department raises environmental awareness with environmental activities; distributing coloring booklets and backpacks to preschool students to spread the word, preventing the use of unnecessary plastic bags and promoting the recycling of waste tires. It has prepared public spotlights for the purpose. They achieved to reduce the use of plastic shopping, replaced this with reusable cloth bags that are distributed in the

markets. Waste battery boxes were distributed to organizations. In addition, for public awareness brochures and posters are prepared and distributed from time to time. The European Union Information Center supports environmental activities and many activities have arranged; waste battery collection campaign, beach cleaning events, seminars in different institutions (mostly primary schools) and many other different events have conducted. Additionally, universities constitute an important part of the Turkish Republic of Northern Cyprus. Number of academic lecturers and researchers deal with environmental issues and waste management.

Behavioral change is at the core of Northern Cyprus' commitment to environmental protection and sustainability. Despite challenges related to limited resources and cultural factors, the region has embarked on a journey to induce a shift in citizen behaviour towards more environmentally responsible practices. By continuing to invest in education, awareness campaigns, policy support, and community engagement, Northern Cyprus aims to cultivate a culture of environmental responsibility that will contribute to a cleaner, healthier, and more sustainable future.

2.9. Collaboration

Deficiencies and requirements regarding the solid waste in Turkish Republic of Northern Cyprus are as follows:

Table 1. Requirements Assessment

Current Status Management	Deficiencies	Requirements
	Current legal legislation is insufficient.	Amendments in the Municipalities Law should be made for the application of the Polluter Pays Principle and/or bringing service prices to an extent which covers the costs.
	The capacities of the central institutions, Interior Affairs Ministry, and the Environmental Protection Office (ÇED) should be enhanced for effective functioning.	• Acceptance of the legislation and procedures which transfers the EU Directives. • Readjustment of the fines within the Environment Law and Municipalities Law to a disincentive extent. • Capacity enhancement of the Environmental Protection Office for effective functioning in compulsory planning and rulemaking areas. • Capacity enhancement of the Interior Affairs Ministry as the management body of the -regional waste transfer, decontamination, and elimination systems.
Prevention of the Waste	Large amounts of waste are produced, and the rates scale higher than many EU member states.	• Designing and implementation of the waste preventing programmes that target special waste types.
Community Services	Waste collection services by Municipal Authorities remain insufficient at most of the time.	• Changing the former waste collection means, re-determining the routes and configuring, providing mutual services and enhancing the quality and the performance of the collection services. Reforming the configurations as per the fleet management and maintenance, including mutual compensation of the maintenance services by the municipalities.
	Waste transfer points arranged by several municipalities fail to meet the standards.	• Establishment of regional transfer stations and transportation services on economically proper locations.
	Gazimağusa transfer station is not currently in use.	• Launching the use of Gazimağusa transfer station.
	Most of the 28 municipalities eliminate waste at irregular waste storing fields allocated within their regions.	• Connecting all municipalities to the regional waste management system. Closure and rehabilitation of the current dump sites.
Recycling and Recovery	Reuse, recycling and recovery activities are considerably limited. Several activities were actualised to the appreciation by the waste via recycling and other waste decontamination and processing methods.	• Implementation of the Extended Producer Responsibility as a mechanism to actuate recycling and recovery. • Development of the green waste composting plants through

Financial Sustainability	Substantial amount of green waste is eliminated at Güngör sanitary landfill. The compensation rates of the costs in waste management services are remarkably low. Structurally a donation funding is necessary for the change/renewal of the inventory. Business sector is subsidised by the public.	business/work models that would include private sector and civil society. • Increase of the Sanitation Tax Thresholds of the Municipalities to facilitate steadiness in sector finance. • Gradual increase of the service costs by the Municipalities to an extent when all costs are compensated. • Adjusting the trade effluent service costs to the waste production amounts (or an equivalent scale). Gradual launch of the entrance fee for the sanitary landfill. • Transferring waste management services to the private sector. • Developing collaborations with the private sector for the collection and recycling of specific waste types. • Designing and implementing communication strategies and awareness campaigns for waste management. Creating collaborations with universities for learning and innovation.
Collaboration	Private sector participation in waste management services is limited. Non-governmental Organisation participation is limited. The extension and effects of the Public Awareness Campaigns are limited. Current budgetary/financing for Public Awareness Campaigns remain absent.	

2.10. Waste Amounts Collected by the Municipalities

Given the numbers depicting the waste amounts collected by the municipalities that Güngör sanitary landfill records, average waste production is as follows: 793 kg/p person/year (2013); 772 kg/p person/year (2014) and 726 kg/p person/year (2015). As the Table indicates below, these rates are remarkably higher than the member states of European Union. Such high rates surfacing in Turkish Republic of Northern Cyprus can be explained by many factors that are excluded in official statistics such as tourism, international students, military personnel and illicit employees.

Therefore, waste production rates cannot be linked with official population, thus mere verifiable factor to be taken into consideration is the data recorded in sanitary landfill. Depending on the expected economic development and population dynamics, the predicted waste amounts collected by the municipalities are as follows:

Table 2. Predicted Waste Collected by the Municipalities, in tons.

Region	2016	2020	2025	2030	2035
Lefkoşa	99,986	117,905	132,859	143,127	154,189
Mağusa	46,896	54,415	58,640	63,172	68,055
Girne	68,965	81,710	90,518	97,513	105,049
Güzelyurt	12,957	14,831	15,523	16,722	18,015
İskele	13,860	17,210	18,590	20,027	21,575
Total	242,664	286,071	316,130	340,561	366,883

Within the next two decades, 50 per cent increase in the amounts of the waste collected by the municipalities is expected when compared to the current level.

2.11. Measures

Intervention acts stressed within the scope of this plan are named “measures”. The cited measures are determined as per the deficiencies and necessities defined following the evaluation of the existing conditions. Measures are *interred se* related. Measures are composed of a series of intervention acts which would change waste management implementations throughout the Turkish Republic of Northern Cyprus.

Table 3. Measures

Management	Prevention of the Waste
Legislation	Waste Prevention Programmes
Corporate Capacity	Plastic bags ban or fee Returnable
Information Systems	beverage cans/cartons Domestic
	Composting
Civil Services	Recycling and Recovery
Collection Services	Packing Wastes Green
Regional Transfer System	Waste Composting Eco-
Güngör Sanitary Landfill	Industry
Current Dumpsites	
Financial Sustainability	Collaboration
Service Costs Financial	Rendering of the Services
Management Transfer	Behavioural Changes
Systems Sanitary Landfill	Decontamination of the Beaches
Services	Learning and Innovation
Compensation of the Services	

2.12. Capacity of Northern Cyprus and Waste Management

Formation, control and monitoring of the waste sector are duties of the central management. At current central level, personnel numbers remain insufficient to carry the waste management to the EU norms and standards. For an applicable structure towards the organizations of the units functioning at the central level, technical personnel numbers should be enhanced, thus, strengthening the Environmental Protection Office. Technical developments are necessary for forcing the Rules, both current and prospecting, including the operations in the advanced stages particularly in the Chapter regarding Waste Management under the current Environment Law of the Solid Waste Branch.

Following duties and responsibilities are determined for central level:

- The capacity of the Environmental Protection Office should be increased for enforcing its duties and responsibilities highlighted in its legal legislation.
- The Interior Affairs Ministry is to carry on keeping its position as the Management Authority towards the regional components of the waste management on behalf of the Municipalities. Position of a Contracting Authority regarding the regional transfers and decontamination services within the operations and gradually enlarging scope of Güngör sanitary landfill in the prospective stages is also included. The Interior Affairs Ministry is to continue be accountable for the allocation of the budgetary funding/transfers to the Municipalities whilst the costs are fully compensated.
- Cyprus Turkish Municipalities Union is to continue to be responsible to form coordination among the Municipalities within the waste management sector and is to provide support to Municipalities accordingly. A formation of a mechanism is foreseen for the share of the waste management entities (vehicles and equipment) and evolve into creating an

information centre for sharing the experiences as well as the expertise among the Municipalities as per the duty of the Cyprus Turkish Municipalities Union.

- **Environmental Protection Office**

The responsibilities assigned to the Environmental Protection Office regarding the waste management by the 18/2012 Environment Law and the duties, authorities and responsibilities assigned to the Solid Waste Unit Supervisor by the 10/1989 Environmental Protection Office (Establishment, Duties and Operating Principles) Law currently not only are insufficient and remain outdated but also lost its currency according to the European Union standards. The duties, authorities and responsibilities of the Environmental Protection Office Solid Waste Unit should be intensified as per the following topics and sufficient technical personnel should be recruited accordingly.

- Implementing the Integrated Solid Waste Management Plan,
- Coordinating and monitoring the wastes, green wastes and industrial wastes collected by the Municipalities,
- Coordinating and monitoring the wastes managed within the scope of Extended Producer Responsibility,
- Coordinating and monitoring the industrial and hazardous wastes,
- Auditing and managing the data recorded in the database,
- Authorizing and auditing the collection-transportation actions
- Environmental Impact Statement regarding the waste management responsibilities,
- Coordination among the municipalities, civil society, governmental institutions, and non-governmental organizations

- **Interior Affairs Ministry**

The Interior Affairs Ministry where all municipalities of Turkish Republic of Northern Cyprus are linked to is the sole responsible authority which is accountable of the sole sanitary fill within the country. The scope of the Güngör sanitary fill, currently sole sanitary fill of the country, and its components should be enlarged with regional transfer stations, collection services (recycling from the transfer stations, recovery and to the decontamination fields) and recovery plants.

It is necessary that the capacity should be enhanced and developed by for the Integrated Solid Waste Management Plan to be implemented, bid documents and technical list of conditions to be prepared in accordance with the regional waste topics, a collaboration among the municipalities to be formed as well as a pricing system regarding the regional waste management services to be established by the Interior Affairs Ministry.

- **Cyprus Turkish Municipalities Union**

Cyprus Turkish Municipalities Union provides the coordination among the municipalities within the waste management sector and creates an information centre for information share among the municipalities.

2.13. Importance of Composting at Home

Food wastes compose the 40% of all wastes that are collected by the municipalities. This type of waste contaminates other recyclable wastes. It is remarkably heavy and high cost in terms of transportation as well as being an important source of greenhouse gas emission (Yan and others, 2021).

The European Union adopts compulsory objectives for the decrease in the quantity of biodegradable wastes (bio-wastes) that are collected by the municipalities (Araya, 2018). Domestic composting of kitchen wastes is another practical implementation (Araya, 2018).

This measure foreseen in the Integrated Solid Waste Management Plan aims to encourage domestic composting and thus a decrease in the greenhouse gas emissions created by the waste sector. Within this context, domestic composting requires participation of houses or neighborhoods (including houses more than one) where applicable (Edgerton and others, 2009).

2.14. Collection Services

Municipalities are accountable for providing collection services that are organized in line with the community needs (Plummer, 1999). Municipalities encounter difficulties to fulfil the collection services requests and remain inadequate to meet these at some points (Selepe, 2023).

The routine maintenance of the waste collecting vehicle fleet and the management of the municipalities should be developed (Das and Bhattacharyya, 2015). Primarily collection routes, travelled distances, fuel oil consumption and similar information should be recorded properly (Das and Bhattacharyya, 2015). A reasonable practice of the routine services, daily maintenance, and minor functional repairs to be completed within the municipalities whereas major repairs are taken into consideration by outer-services within the mutual-service-agreements among the municipalities can be adopted (Das and Bhattacharyya, 2015).

Planning developments regarding the inventory change in the waste collecting fleet of the municipalities are encouraged (Hannan and others, 2020). Both European Union and Republic of Turkey provided investments for new waste collection vehicles, however, the new

activities for the municipalities to be able to purchase civil service equipment via their own financing means rather than grants are necessary to be implemented in time (Hannan and others, 2020).

2.15. Regional Transfer Systems

The costs of recycling, recovery, and transportation of wastes to the elimination fields identified by the municipalities should be kept at a minimum level (Teece, 2018). This would require a transfer systems network implementation throughout Turkish Republic of Northern Cyprus.

Several transfer operations are actualized by the municipalities currently. These, however, are notably simple transfer points that are constructed simplistically in principle, having unpleasant outlooks that are environmentally unacceptable. Covering the capacity to provide services to Mağusa and neighboring municipalities, a regional transfer point was constructed in Mağusa with the European Union Funding however is not in use yet.

Composed of constructed and authorized in as per its objectives, a network of regional transfer systems is to be established. The transfer stations are to be surrounded by fences and equipped with required infrastructure and other necessities not to pose a health or environmental risk for the community. Weighbridges are to be established standardly in each station, thus, transferred waste quantities from different municipalities are to be weighed and just distribution of the costs are to be provided.

As per the results of the analyses for the options it is determined that there is a necessity following transfer systems in the short term for a cost-effective transportation of the wastes to the Güngör sanitary fill.

Table 4. Regional Waste Transfer Systems

	Regional Transfer System	Municipalities Receiving Services
1	Mağusa (current transfer station)	Mağusa, Yeni Boğaziçi
2	Girne	Girne, Lapta, Alsancak, Çatalköy (most probably Esentepe and Tatlısu)
3	Güzelyurt	Güzelyurt and Lefke
4	Iskele and Karpaz	Iskele, Mehmetçik, Yeni Erenköy, Dıpkarpaz, Büyükkonuk
	Total	13-15

Each of the regional transfer systems should be designed separately and require a feasibility work in addition to their secure locations (Teece, 2018). Within the transfer systems,

there may be a need for “transfer stations or points” more than one attached to each other. Each single system should be designed in terms of optimum functionality and effectivity (Teece, 2018).

All new waste transfer plans are to be established in accordance with organized standards (Teece, 2018). Current transfer stations which do not meet the standards are either to be closed or renovated accordingly. Currently located in Mağusa, European-Union-harmonized transfer station, is to be launched for services in Mağusa and neighboring municipalities.

It is envisioned in the Solid Waste Management Plan in force that the most suitable elimination system for the Turkish Republic of Northern Cyprus is one single sanitary landfill that would serve to all municipalities.

According to the studies conducted by European Union specialists, building new sanitary landfills for the municipalities remote from Güngör sanitary landfill is not deemed suitable for following reasons mainly.

- i.** Remote municipalities relatively create lower waste quantities and thus, new sanitary landfills would not be economic-wise (Weng and Chang, 2001),
- ii.** New sanitary landfills would create risks of leachate and gas emissions, thus would not be environmentally proper (Gardner and others, 1993).

One single sanitary landfill that is European Union harmonized is one of the most prioritized measures within the Integrated Solid Waste Management Plan. The transportation of all wastes that are to be eliminated after being collected by the municipalities to the sanitary landfill is the prioritized objective. All municipalities must be included to the regional waste management system prior to the establishment of previsioned regional transfer system for the municipalities that are distant from Güngör Sanitary Landfill or immediate after of its establishment.

Works conducted regarding the Güngör sanitary landfill indicate that its capacity runs short more rapidly than it's envisioned. The reason for that is the recycling system deficiencies as well as the waste production quantities of the municipalities are beyond the expected. 2. Phase of the Güngör Sanitary landfill is constructed through the funding means of the European Union and was put in force by the end of 2018.

One sanitary landfill gas management system –including gas collection, venting and potential utilization- is to be developed within the Güngör sanitary landfill. Collected gas can be utilized as a surplus regarding to the reduction of energy need within the field or off-site utilization. Additionally, given the green waste cannot be taken into consideration at the current circumstance, elimination is conducted at Güngör sanitary landfill, thus, congests the capacity of the landfill redundantly. Excluding the utilization as cover materials, the acceptance of the cited materials is to be prohibited at Güngör Sanitary landfill. Economic contribution of these materials is aimed through recovery.

Municipalities must create alternative systems regarding the management of the green waste. Municipalities and the construction sector must collaborate regarding the management of constructional waste as well.

3. SOCIAL MEDIA POSTS ON MARINE AND COASTAL LITTER

This chapter serves as a portal into the vibrant and dynamic world of social media, where environmental advocacy intertwines with digital platforms, creating a tapestry of engagement and awareness. In this exploration, we unravel the multifaceted layers of social media posts activity within the observed Instagram accounts, seeking not only to document but to deeply understand the role of these platforms in shaping the environmental narrative in Northern Cyprus.

3.1. Selection Criteria: A Deliberate Curation

The process of selecting specific posts was far from arbitrary; it was a meticulous curation guided by stringent criteria. Each chosen post needed to align with the research questions, reverberate with the legal and policy frameworks expounded in the literature review, and contribute significantly to the overarching findings of the study. This deliberate approach ensured that the selected posts were not just a random sample but a purposeful cross-section of the environmental discourse in Northern Cyprus.

3.2. A Visual Narrative of Tables

These carefully curated posts are encapsulated within tables, each table a distinct tableau contributing to the larger narrative. The themes covered by these tables are diverse, reflecting the comprehensive nature of environmental engagement. From the use of social media as a potent tool for disseminating environmental awareness to the impactful orchestration of beach clean-up sessions, collaborative efforts with public figures, highlighting the adverse impact of plastics on marine ecosystems, advocating the imperative need for recycling, to the heartening encouragement within community action groups for active participation in beach clean-ups — these tables encapsulate the spectrum of environmental activities.

Structured without a predetermined order, each table is a standalone exploration, a mosaic piece contributing to the broader canvas. The intentional lack of a specific sequence is not a haphazard choice; it's a deliberate strategy to break away from a linear narrative, encouraging readers to approach each table as an independent vignette, offering a nuanced perspective on different facets of environmental action.

Furthermore, the absence of a chronological order in presenting these tables challenges the conventional narrative structure. Instead of adhering to a linear timeline, we intentionally

disrupt the expected sequence. This departure serves a twofold purpose. Firstly, it invites readers to engage with each table as a standalone entity, freeing them from the constraints of a predetermined order. Secondly, it creates a sense of fluidity, mirroring the dynamic nature of social media, where narratives unfold in real-time, unbound by the rigidity of chronological progression.

3.3. Visual Narratives: Harnessing the Power of Imagery

Integral to these tables are visual representations — a collection of pictures capturing the essence of environmental clean-ups led by Yesil Baris Hareketi, SPOT, and Teneke Cocuk. These visuals are not mere embellishments; they are an integral part of the narrative strategy. In a world inundated with information, images become a universal language, transcending linguistic and cultural barriers. They evoke emotions, provide context, and offer a visceral connection with the audience.

The deliberate inclusion of a substantial number of pictures serves a dual purpose. Firstly, it provides an unfiltered, unvarnished portrayal of the tangible outcomes of community-led initiatives. It's a window into the beaches transformed, the waste collected, and the collective impact of these environmental endeavors. Secondly, these visuals act as a compelling call to action. They are not just images; they are catalysts for awareness, urging the audience to consider the urgency of environmental action.

Embarking on this journey through tables and visual representations is not just a visual feast; it is an odyssey of insights. It invites readers to immerse themselves in the collaborative spirit captured in these posts, feel the pulse of challenges faced, and witness the collective determination driving environmental initiatives in the region

3.4. The Prelude: Setting the Stage for Unfolding Events

Crucially, this chapter precedes the detailed depiction of events discussed later in the thesis. It acts as a prelude, establishing a foundational understanding of the social media landscape before delving into specific events like the Alagadi 2 clean-up session and the legal phenomenon of International Environmental Market Instruments (IEMEIs). This intentional structure aims to create an anticipatory atmosphere, prompting readers to approach subsequent chapters with the insights gleaned from these social media posts.

3.5. Interconnected Threads: Weaving Social Media with Events

The social media posts act as a thread, weaving through the transformative actions, legal analyses, and societal attitudes shaping the environmental landscape in Northern Cyprus. These posts are not isolated fragments; they are integral to the fabric of events that unfold, creating a seamless narrative that underscores the symbiotic relationship between community-driven initiatives, legal frameworks, and global environmental dynamics.

Beyond the tables lie the realities — the real-world impact of these social media-driven initiatives. The subsequent chapters will peel back the layers, revealing the transformative actions that sprout from these online narratives. The juxtaposition of social media insights with the unfolding events creates a narrative synergy, where digital discourse converges with tangible outcomes, presenting a holistic panorama of environmental engagement in Northern Cyprus.

In essence, this chapter is not just an introduction to social media posts; it is a preface to a comprehensive exploration of how these digital threads weave through the environmental tapestry, creating a narrative that transcends the virtual realm, permeating the very fabric of Northern Cyprus' environmental landscape. The journey has just begun, and as we traverse

through subsequent chapters, the rich insights gleaned from these tables will illuminate the path, guiding us through the challenges, the triumphs, and the evolving dynamics of environmental stewardship in this unique region.

Table 5. Beach Cleaning Event- Instagram post 12 October 2021.

TITLE OF POST:
beach cleaning activity

Likes and comments

Images

Yesil Baris Hareketi shared on the Instagram page of the beautiful Mediterranean Sea to clean up wasteful materials in the marine environment. Other members were also encouraged to act within the moment and take up harmful wastes and dispose of it adequately.

54 Likes
3 Comments



Table 6. Segregation event- Instagram post 17 September 2017.

TITLE OF POST:	Likes and comments	Images
We completed our 8th segregation event in Nicosia region	24 Likes	

Teneke Çocuk shared on the Instagram page of a photograph together with materials that are segregated after the event. Other members of the society were also encouraged to act by using public figures in their photography. In this photography we can see Mayor of Nicosia helping Teneke Çocuk community to segregate waste materials. Knowing that TRNC is not a EU member state, events like this one are very important as waste management systems should be tailored to the local situation.

Table 7. A Post Made by Spot Turtle Project's Instagram Page to engage in beach clean-up in Alagadi-2 beach. Instagram Post Made on the 22 August 2023.

TITLE OF POST:	Likes and	Images
	comments	
Alagadi Fest		
A post was made by Spot	159 Likes	
Turtle Project in community's		
Instagram platform	7 Comments	
encouraging other members		
who are willing to be part of the		
clean-up at Alagadi-2 Beach.		
Alagadi (Turtle) Beach,		
approximately 19km east of		
Girne, is where the Spot has its		
small sea-turtle conservation		
and research centre where		
people can find out about turtle		
conservation. Alagadi's sandy		
beaches are intentionally		
undeveloped, as they are		
considered turtle territory.		
Instagram post stated that		
there will be events like nest		
excavation, hatchling release,		
turtle dance, obstacle course,		
scavenger hunt, face painting		
etc.		

Table 8. Alagadi 2- clean up session. Instagram post made on the 30 August 2023.

TITLE OF POST:	Likes and	Images
We had a lot of fun at Alagadi Festival.	comments	
The clean-up session has officially kicked-off at Alagadi-2 in Girne. It was stated by the Instagram account that the clean-up session took 2 days, with the help of children who attended to the event and coastal volunteers. The harmful wastes collected by the members. Additionally, people who attended to the event had nest excavation, nest excavations and event organisers did special fun activities for both children and adults. Catalkoy-Esentepe Municipality was part of the organisation. As it can be seen from the shared photographs of the community waste that was collected in this event included plastics, glass, metal, fishing gear and bulky waste.	436 Likes 4 Comments	 





Table 9. Yesil Baris Hareketi warns that coastline declaration is violated, and sea water analyzes are not carried out. Instagram post made on the 17 May 2022.

TITLE OF POST:	Likes and comments	Images
Coastline declaration is violated and sea water analyzes are not carried out. In this post Yesil Baris Hareketi stated that they are horrified by the marine pollution created by municipalities that pursue "beach clubs" and "new hotels" without paying attention to coastal declarations and reports. Additionally, they claimed that sea water analyzes are not carried out regularly and up to date by the Ministry of Health and are not shared transparently with the public.	16 Likes	

Table 10. Yesil Baris Hareketi shares a photography of a newspaper article and warns that marine results are frightening. Instagram post made on the 20 May 2022.

TITLE OF POST:	Likes and comments	Images
Frightening marine results. In this post Yesil Baris Hareketi stated that: "We feel sorry for this country... Our seas... Those who have not announced the analyzes and taken precautions for four months... They are announcing marine pollution at a time when the sea season is getting ready to open... Everyone is worried! Reports of images of sewage flowing into our seas from every region continue to come to us... We warn many times that this country and this environment cannot handle this unplanned development! This is not development but suicide!" In the newspaper article they used in this post, it was said that in 17 of the "sea water analyses" where water samples taken from 38 different points in the Lefke, Mağusa and Girne regions were examined, contamination was observed. Enterococ and Ecoli bacilli were detected at 17 points. Marine biologists stated that this means 'there is domestic waste in the sea directly contaminated with sewage.' It was noted that Ecoli bacillus pollution is caused by sewage, while Enterococ is a different type of bacteria and both pollutions can cause intestinal infections, as announced by the Ministry of Health. Accordingly, Biologist Burak Ali Çiçek said, "If the amounts of E.coli and Enterococ are high, swimming should not be done in these areas. However, there is always risk, even if it is a small value. Even if these are low, it means that the problem has started. It may cause people who swim in the sea, especially in the summer months, to get an intestinal infection". In the April analyzes announced by the Ministry of Health, while examining the European Union Bathing Water Quality Management and microbiological criteria for Coastal Waters and Transitional Waters, 17 spots of Enterococ and Ecoli bacilli were found. It has been recorded that there is pollution, especially in the Girne Port area and at different points where environmentalists say, 'sewage is being discharged into the sea'.	10 Likes	

4. POLICIES INTO ACTION

The section focuses on evaluating the information gathered in previous chapter from various social media groups. It aims to examine how the initiatives of the community action group align with the objectives outlined in international legal and policy frameworks that oversee marine and coastal litter (examined in Chapter 1).

The ubiquity of social media platforms is a prevalent phenomenon in contemporary society, garnering active engagement from individuals, government entities, community action groups, and other organizations (Barbour, 2018). This societal shift is particularly salient against the backdrop of rapid industrialization, technological advancements, and the overarching influence of globalization (Autor, 2014). Consequently, diverse environmental issues are emerging on both local and global scales, prompting heightened awareness and discourse through various social media avenues.

The groups, as delineated in the preceding chapter, were instituted with the primary goal of regular beach and sea clean-ups in Cyprus. Concurrently, social media platforms serve as conduits for disseminating information to heighten awareness regarding the adverse consequences of marine and coastal litter.

As evident from the data presented in the preceding chapter, collaborative efforts have been established with various entities, including governmental bodies and private companies, to actively participate in combatting marine and coastal litter in Cyprus. The cumulative membership across the Instagram accounts of these groups currently stands at 7182, acknowledging that not all members are consistently active. Nevertheless, a notable portion of engaged members demonstrates dedication and commitment to the shared cause of combating marine and coastal litter in Cyprus.

The operational effectiveness of the community action groups is discernible through a heightened frequency of substantial Instagram posts addressing clean-up initiatives, as well as awareness and sensitization campaigns concerning marine and coastal litter. This is complemented by concerted efforts in combating the indiscriminate disposal of waste adversely affecting the marine environment. Positive interactions within the comment sections of these posts further underscore a collective willingness among group members to collaborate and achieve the community's objectives.

Contemporary community action groups are actively employing social media platforms as a strategic tool to promote environmental awareness and education in response to prevailing environmental concerns. This utilization is deemed essential due to the rapid dissemination of information related to mitigating environmental issues to a broad audience within a remarkably short time frame. The paramount importance of environmental education is underscored by the capacity of social media to facilitate interactive engagements among environmental educators, community action groups, governmental entities, and society at large, both at local and global scales (Rangel and others, 2020).

Social media platforms play a pivotal role in providing the public with insights into and the capability to monitor the quality of the climate, sea, and ocean (Narula and others, 2018). Accordingly, the social media platforms examined in this study have empowered their users to influence and reshape societal attitudes and behaviors concerning marine and coastal litter.

4.1. Empowering Coastal Communities: Yesil Baris Hareketi's Beach Cleaning Initiative.

Dated October 12, 2021, the Instagram post capturing Yesil Baris Hareketi's beach cleaning initiative along the picturesque Mediterranean Sea unfolds a pivotal chapter in environmental activism. While showcasing the organization's unwavering commitment to marine preservation and the effectiveness of community-driven action, it prompts a critical examination considering the deficiencies and requirements in waste management identified in the Turkish Republic of Northern Cyprus.

Composition of the image used in social media related to this event, detailing the event's specifics, including location, time, and sponsoring companies, effectively communicates essential information while leveraging visual impact. However, the image prompts critical consideration of the identified deficiencies in waste management, particularly the absence of explicit interaction with public authorities concerning marine and coastal litter.

Within the context of our earlier discussions on legal and policy frameworks, the event portrayed in the post aligns with the grassroots approach adopted by Yesil Baris Hareketi. However, the absence of explicit interaction with public authorities on marine and coastal litter gains significance when considering the identified deficiencies in waste management. The deficiency in current legal legislation is highlighted, emphasizing the need for amendments in the and alignment with EU Directives.

The post's emphasis on collective responsibility echoes the call for enhanced capacities of central institutions, such as the Interior Affairs Ministry, as identified in the requirements assessment. This underscores the necessity for the government to play a more active role in supporting community-led initiatives and strengthening institutional capacities for effective waste management.

As we explore deficiencies in waste prevention, community services, and recycling and recovery, the post serves as a testament to the proactive approach advocated for in waste management. The deficiencies in waste collection services and the need for reconfiguration align with the grassroots effort demonstrated by Yesil Baris Hareketi. Simultaneously, the deficiencies in recycling activities underscore the importance of mechanisms like Extended Producer Responsibility, a concept proposed in the requirements assessment to actuate recycling and recovery.

Financial sustainability, another crucial aspect highlighted in the assessment, finds resonance in the dissertation's exploration of potential impact when initiatives lack coordinated efforts with public authorities. Strengthening connections between environmental organizations and public authorities, as advocated in previous chapters, can contribute to the financial stability of waste management services, aligning with the identified need for gradual increases in service costs (Seah and Addo-Fordwuor, 2021).

Lastly, the collaborative nature of Yesil Baris Hareketi's initiative correlates with the deficiencies in private sector participation, limited NGO involvement, and the absence of budgetary support for public awareness campaigns. The call for developing collaborations with the private sector, universities, and designing communication strategies echoes the identified needs for expanding private sector participation, involving NGOs, and initiating public awareness campaigns in waste management.

Therefore, Yesil Baris Hareketi's beach cleaning initiative not only stands as a beacon of community-led environmental action but also provides insights into addressing deficiencies and meeting requirements in waste management, advocating for a holistic approach that harmonizes coastal conservation efforts with comprehensive waste management strategies.

4.2. Local Action, Global Impact: Teneke Cocuk's Segregation Event in the Context of EU Waste Management Law

The Instagram post dated September 17, 2017, captures a significant moment in Teneke Cocuk's environmental initiatives, showcasing their 8th segregation event in the Nicosia region. The post not only highlights the tangible outcome of waste segregation but also emphasizes the involvement of public figures, including the Mayor of Nicosia, in promoting responsible waste management practices. This event holds particular significance in the context of the Turkish TRNC not being an EU member state, underlining the importance of tailoring waste management systems to the local situation.

In the lens of the EU Waste Management Law, this event serves as a case study in effective waste segregation practices and community involvement. The EU Waste Management Law emphasizes the importance of waste prevention, recycling, and sustainable waste management practices, aligning with the objectives demonstrated by Teneke Cocuk's segregation event.

The post's visual depiction of the Mayor of Nicosia actively participating in waste segregation aligns with the EU Waste Management Law's emphasis on involving local authorities in waste management processes. The law advocates for collaboration between public authorities and communities to achieve effective waste management, echoing the collaborative spirit exhibited in the Instagram post.

The series of images accompanying the Instagram post, portraying the Segregation event, encapsulates a visually compelling narrative marked by the active participation of individuals engaging in the segregation process. Notably, the Mayor of Lefkosa is prominently featured in each photograph, lending an authoritative and influential dimension to the event. This visual composition aligns harmoniously with the principles of social media studies, wherein the

aesthetic appeal and positivity of content are paramount for capturing and sustaining audience interest.

The deliberate emphasis on smiling individuals actively partaking in the segregation process serves to evoke positive emotions, fostering a sense of community engagement and enthusiasm. In the realm of social media studies, the strategic utilization of positive imagery is recognized as a catalyst for increased attention and interactive engagement, contributing to the overall success of content dissemination.

The consistent presence of the Mayor of Lefkosa throughout the imagery not only imparts a sense of official endorsement to the event but also augments the overall credibility of the content. This aligns strategically with the social media studies paradigm, emphasizing the significance of involving influential figures, particularly public officials, to enhance the reach and efficacy of environmental initiatives (Seah and Addo-Fordwuor, 2021). Such involvement underscores the collaborative nature of the event, signifying active support from local authorities for community-driven waste management initiatives.

The posed shots during the segregation process can be construed as a form of visual storytelling, conveying a narrative of active community involvement, collaboration, and shared responsibility. This storytelling approach resonates with contemporary trends in social media, where visual narratives often supersede extensive textual content, contributing to enhanced viewer comprehension and engagement.

This thematic alignment emphasizes the collective responsibility inherent in waste management, advocating that such challenges can be effectively addressed through concerted community-led efforts. Furthermore, the images hold potential for encouraging participants to tag themselves or others and share the content, thus amplifying the event's visibility on social media platforms. In accordance with social media studies, the facilitation of user-generated

content and sharing mechanisms significantly contributes to the overall success and impact of environmental initiatives.

Segregation event not only attains visual appeal and community engagement but also strategically leverages the presence of influential figures, aligning cohesively with the principles delineated in social media studies. The positive and collaborative ambiance conveyed by the photographs resonates seamlessly with the overarching theme of the dissertation, affirming the centrality of community-led initiatives in effective waste management strategies (Barger and others, 2016).

Additionally, the post's acknowledgment of the TRNC's non-membership in the EU highlights the need for locally tailored waste management solutions. The EU Waste Management Law encourages member states to adapt waste management strategies to their specific circumstances, recognizing the diversity of waste challenges across regions. Teneke Cocuk's event, despite TRNC's non-membership, demonstrates the practical implementation of effective waste segregation and management practices.

The positive engagement with 24 likes underscores the community's support for such initiatives, reinforcing the idea that community involvement is essential for the success of waste management programs, a principle reinforced by the EU Waste Management Law.

Eventually, Teneke Cocuk's segregation event provides a compelling illustration of effective waste management practices within the local context of TRNC, demonstrating the practical implementation of key principles outlined in the EU Waste Management Law. The event highlights the importance of community engagement, collaboration with local authorities, and the adaptation of waste management strategies to the unique challenges of the region, offering valuable insights for both local and global waste management efforts.

4.3. Spot Turtle Project's Alagadi Fest: Blending Conservation, Community, and Recycling in Northern Cyprus

Spot Turtle Project's Instagram posts on August 22, 2023, under the titles "Alagadi Fest" provide a comprehensive view of the event's multifaceted nature, weaving together themes of conservation, community engagement, and recycling in Northern Cyprus.

Spot Turtle Project's Alagadi Fest, located at Alagadi-2 Beach, approximately 19km east of Girne, represents a celebration of community engagement and conservation. The intentional choice of Alagadi's sandy and undeveloped beaches aligns with the commitment to preserving natural habitats, mirroring sentiments raised by Yesil Baris Hareketi in previous tables.

Emphasizing the participation in environmental management, the event encourages community members to actively participate in a beach clean-up, showcasing a commendable effort by Spot Turtle Project. This approach parallels the grassroots efforts championed by Yesil Baris Hareketi, highlighting the effectiveness of local, community-led initiatives.

Spot Turtle Project's Alagadi Fest emerges as a beacon for the integration of recycling initiatives in Northern Cyprus. Addressing the challenges outlined in the thesis regarding limited recycling practices, the festival actively contributes to sustainable waste management. The incorporation of a beach clean-up event aligns with the principles highlighted in the Packaging Waste Management Regulation.

The Alagadi Fest's success, as indicated by its substantial engagement on social media, demonstrates the potential of community-led events to overcome challenges associated with limited resources and public engagement in recycling efforts. The festival's integration of conservation, community engagement, and potential recycling initiatives reflects the region's commitment to fostering a culture of recycling and contributing to a sustainable future for Northern Cyprus.

Lastly, the graphic design elements and content organization in both images appear aligned with effective social media practices. The vibrant colour palette, meaningful iconography, informative content, and a well-structured timetable contribute to visual appeal and engagement, fostering a positive response from the audience. This aligns seamlessly with the overarching theme of community involvement in environmental initiatives, as emphasized in previous discussions.

Accordingly, Spot Turtle Project's Alagadi Fest stands as a promising example of how community-driven events can play a pivotal role in addressing recycling challenges outlined in the thesis. By combining conservation, community engagement, and potential recycling initiatives, the festival aligns with Northern Cyprus's commitment to sustainable waste management and environmental preservation.

4.4. Transformative Actions: Alagadi 2 Clean-Up Session Unveils Northern Cyprus' Commitment to Waste Management Objectives.

The Instagram postdated August 30, 2023, encapsulates the essence of community-driven environmental action during the Alagadi Festival's clean-up session. With a substantial 436 likes and 4 comments, the post highlights the dedication of Alagadi's coastal volunteers, children, and organizers. The Catalkoy-Esentepe Municipality's active involvement adds a crucial municipal dimension to the event, underlining the synergy between local communities and government entities in addressing waste management challenges.

The Alagadi 2 clean-up session serves as a tangible manifestation of the legal and policy frameworks discussed in the thesis, particularly in the context of waste management objectives in Northern Cyprus. Aligning with the Waste Management Plan's European Union waste

management acquis targets, the event contributes to the gradual adaptation process outlined in the plan.

The plan's recycling and recovery targets for packaging, bio waste, and construction waste are crucial parameters for evaluating the region's progress. The Alagadi 2 clean-up session, with its emphasis on plastics, glass, metal, fishing gear, and bulky waste, directly addresses these recycling targets and reflects the commitment to sustainable waste practices outlined in the objectives.

The general purpose of waste management in Northern Cyprus, as highlighted in the dissertation, emphasizes the quality and efficiency of waste management services for environmental protection and public well-being. The Alagadi 2 clean-up aligns with this purpose, showcasing how community-led initiatives actively contribute to the region's waste management goals.

The images shared on social media during the Alagadi 2 clean-up session play a pivotal role in conveying the event's impact and emphasizing the urgency of addressing plastic pollution. The photographs depict children actively participating in beach activities, creating a visually engaging narrative. The blue beach background provides a stark contrast to the plastic waste, evoking a powerful emotional response.

The inclusion of face painting activities and children playing ball adds a festive and positive dimension to the event, attracting a wider audience on social media platforms. The photos of children with their eyes tied, navigating the sand to discover plastic objects, symbolize the need for heightened awareness and engagement in waste management.

These images effectively utilize social media by not only documenting the clean-up session but also creating a compelling visual story that resonates with the audience. The juxtaposition of joyful children against the backdrop of plastic waste serves as a poignant reminder of the importance of community-driven efforts in addressing plastic pollution.

In conclusion, the Alagadi 2 clean-up session becomes a beacon of transformative action, translating legal and policy frameworks into tangible community-led initiatives. The effective use of social media and images amplifies the event's impact, fostering awareness and mobilizing collective action towards sustainable waste management in Northern Cyprus. Building upon the local success of the Alagadi 2 clean-up session, it is crucial to acknowledge the broader global context of environmental regulation, particularly through the lens of International Environmental Market Instruments (IEMEIs). The legal phenomenon of IEMEIs within the context of EU external environmental action extends the impact of environmental legislation beyond borders, showcasing the EU's global regulatory power.

This legal framework, as mapped out in recent articles, positions IEMEIs as mechanisms that bridge EU, national, and international law, including WTO law. The interplay of these legal regimes is identified as crucial for understanding the operation of IEMEIs. The discussion highlights the EU's efforts to influence World Trade Organization (WTO) law and its use of environmental measures in international trade disputes. The IUU Regulation, for example, imposes authorizations for fishing vessels, requiring a validated catch certificate and enforcing measures against illegal fishing. The Ship Recycling Regulation imposes requirements on ship recycling facilities, illustrating the multifaceted nature of IEMEIs. The inclusion of economic instruments, such as the EU Emissions Trading Scheme (EU ETS) for international flights, also showcases the EU's use of market-based mechanisms to influence international developments. Despite facing resistance globally, this unilateral measure impacted international aviation policies, demonstrating the potential of IEMEIs to trigger regulatory changes abroad.

Moreover, the consideration of economic instruments, like a ship recycling fund, highlights the EU's exploration of mechanisms linking market access requirements to legal developments outside the EU. The multifaceted legal nature of IEMEIs and their growing

significance in the global regulatory landscape is a testament to the EU's innovative approach to environmental governance.

4.5. Yesil Baris Hareketi's Warning: Unraveling the Menace of Coastal Violations and Neglected Marine Analysis

Yesil Baris Hareketi's Instagram post on May 17, 2022, serves as a stark warning about the alarming state of the marine environment in Northern Cyprus, shedding light on the violation of coastline declarations and the negligence in sea water analyses. This post not only draws attention to the immediate concerns raised by Yesil Baris Hareketi but also delves into specific issues that contribute to negative impacts on the marine environment.

In the post titled "Coastline declaration is violated, and sea water analyses are not carried out," Yesil Baris Hareketi expresses horror at the marine pollution attributed to municipalities prioritizing the development of "beach clubs" and "new hotels" without adhering to coastal declarations and reports. This assertion is a poignant call to address the negative impacts on the marine environment, emphasizing the urgent need for responsible coastal management practices.

The post further raises concerns about the irregular and non-transparent sea water analyses conducted by the Ministry of Health. In the context of negative impacts on the marine environment, this neglect in monitoring and analyzing sea water quality poses a significant threat. Transparent and up-to-date information on sea water quality is vital for understanding the health of marine ecosystems and ensuring public awareness of potential hazards.

To contextualize these issues within the broader theme of negative impacts on the marine environment, it's essential to delve into specific topics such as the beach litter problem in North Cyprus. Yesil Baris Hareketi's focus on violations related to "beach clubs" and "new hotels"

underscores the urgent need for stricter regulations and enforcement to mitigate beach litter problems. Effective waste management and preventive measures are imperative to safeguard the pristine nature of Northern Cyprus's coastal areas.

Additionally, the post draws attention to port wastes problems in North Cyprus. While the specifics are not explicitly outlined, addressing this issue is crucial for comprehensive marine environmental management. Exploring necessary measures for port wastes becomes integral, involving the implementation of stringent waste disposal regulations for ports and the establishment of effective waste management infrastructure.

Yesil Baris Hareketi's strategic use of a newspaper article image amplifies the impact of their social media campaign. The visually striking post not only captures attention but also conveys a dire warning about coastal violations and inadequate water analysis. This aligns with our earlier discussions on the negative impacts on the marine environment, emphasizing the importance of stringent monitoring and adherence to environmental regulations. Yesil Baris Hareketi's warning serves as a wake-up call, unraveling the complex web of coastal violations, neglected sea water analyses, and the resulting negative impacts on the marine environment in Northern Cyprus. By exploring specific issues like beach litter problems and port wastes, the essay sheds light on the urgent need for regulatory measures, public awareness, and effective waste management strategies to preserve the marine ecosystems of North Cyprus.

4.6. Urgent Environmental Action: Yesil Baris Hareketi's Call Amidst Global Legal Frameworks

Yesil Baris Hareketi's poignant Instagram post on May 20, 2022, revealing disturbing marine results, resonates with the urgent need for environmental action within the broader context of international legal and political frameworks. This analysis will harmonize the concerns raised by Yesil Baris Hareketi with the pertinent aspects of the early chapters of the thesis, specifically focusing on the 1972 London Convention, the 2006 London Protocol, and the MARPOL Convention.

Yesil Baris Hareketi's post, titled "Frightening marine results," brings to light the alarming contamination observed in sea water analyses across the Lefke, Mağusa, and Girne regions. This revelation echoes the global concerns addressed in the early chapters of the thesis, which emphasize the problem of marine and coastal litter. The specific detection of *Enterococ* and *E. coli* bacteria points to the severity of sewage-related contamination, posing risks not only to the marine ecosystem but also to public health.

The lack of timely announcements and precautions, as criticized by Yesil Baris Hareketi, underscores the need for immediate and comprehensive action, aligning with international legal frameworks. The 1972 London Convention and its 2006 Protocol address the prevention of marine pollution by dumping, emphasizing the importance of stringent measures to protect marine environments. Yesil Baris Hareketi's documentation of pollution hotspots, particularly in the Girne Port area, parallels the Convention's objectives to regulate the dumping of wastes at sea and prevent adverse impacts.

The use of a newspaper article image by Yesil Baris Hareketi effectively communicates the urgency of addressing marine pollution. The statistics presented align with our earlier discussions on the negative impacts of marine litter. This aligns with the broader theme of our research, emphasizing the importance of robust environmental policies and effective

monitoring to ensure the health of coastal waters in Northern Cyprus. Furthermore, the post's reference to marine biologists' concerns about sewage-related contamination ties into the MARPOL Convention, which addresses the prevention of pollution from ships. The detection of *E. coli* and *Enterococ* bacteria in sea water analyses aligns with MARPOL's efforts to control and reduce pollution from ships, highlighting the interconnectedness of regional environmental issues and global maritime regulations.

The urgent call for action within the post aligns with the principles of these international legal frameworks, emphasizing the need for immediate measures to address marine pollution. Yesil Baris Hareketi's assertion that the situation is not development, but "suicide" resonates with the global imperative outlined in these conventions to preserve marine ecosystems for future generations.

Yesil Baris Hareketi's Instagram post serves not only as a local call for action but also as a poignant reflection of the broader global challenges addressed in international legal and political frameworks. The contamination revealed in the sea water analyses underscores the pressing need for coordinated efforts, in line with the objectives of the 1972 London Convention, the 2006 London Protocol, and the MARPOL Convention. The post reinforces the interconnectedness of regional and global environmental concerns, highlighting the imperative for immediate and sustained actions to protect the marine environment and coastal ecosystems.

5. DISCUSSION

This chapter sheds light on the challenges hindering effective waste management and comprehensive environmental conservation. Drawing from legal frameworks, community-driven initiatives, and societal attitudes explored in preceding chapters, the focus shifts to the obstacles that demand attention. By recognizing these challenges, strategic recommendations can be formulated for a cleaner, healthier, and more sustainable future.

The Alagadi 2 clean-up session, representing community dedication, aligns with the Waste Management Plan's targets. However, achieving these targets requires navigating the complexity of legislative reforms. Legislative gaps and enforcement mechanisms pose challenges, even amid the success of community-driven initiatives. The legal and policy frameworks highlighted reveal gaps that need immediate attention. Recommendations for strengthening enforcement mechanisms include aligning legal frameworks with EU directives, enhancing transparency in environmental monitoring, and fostering collaboration between community action groups and local governments.

Societal attitudes play a pivotal role in environmental conservation efforts. While social media platforms actively disseminate information, a persistent gap exists in comprehending the broader environmental implications. Social media, exemplified by the Alagadi 2 clean-up session's Instagram posts, serves as a powerful tool for environmental awareness. However, challenges persist in achieving comprehensive behavioral change. Addressing these challenges requires a multifaceted approach that goes beyond the scope of individual community action groups.

Community action groups in Northern Cyprus, such as Yesil Baris Hareketi, have commendably engaged in beach clean-up initiatives. However, the battle against beach litter extends beyond visible pollution to hidden threats posed by marine litter as a potential vector for alien species. Recent studies reveal that marine litter, particularly plastics, serves as a

significant vector for the transport and dispersal of alien species. Yesil Baris Hareketi's concerns about coastline declarations and sea water analysis underscore the need for a comprehensive regulatory framework.

Northern Cyprus grapples with interconnected challenges in legal, societal, and environmental dimensions. Transformative actions, such as the Alagadi 2 clean-up session, showcase the potential of community-led initiatives. However, the complexity of these challenges necessitates strategic and multifaceted solutions. In the subsequent sections of this chapter, we will delve deeper into each challenge, offering detailed analyses and nuanced recommendations. These recommendations, interconnected strands of a robust strategy, aim to fortify the region's environmental resilience and pave the way for a cleaner, healthier, and more sustainable tomorrow.

5.1. Resource Limitations

In the realm of community-led environmental endeavors, the pressing challenge of inadequate resources, both financial and human, poses a formidable barrier to sustained progress. As illuminated by Vince and Hardesty's (2018) discerning insights, the evolution of effective waste management strategies, especially those targeting plastics, is a protracted and intricate process. The deliberative nature of international conventions, where participating states grapple with issues ranging from financial capacities to waste management infrastructure, underscores the complexities faced by community action groups in securing robust resource frameworks.

5.2. Financial Austerity

At the core of the challenge lies the financial constraints constraining community action groups. Despite the resounding success exemplified by events such as the Alagadi Fest, the financial landscape remains a critical bottleneck (Vince and Hardesty, 2018). These community-led initiatives, while impactful, often operate within tight budgetary confines, relying heavily on voluntary contributions and sporadic sponsorships. The inherent financial limitations impede the scalability and sustained impact of these initiatives, demanding a nuanced approach to circumvent fiscal challenges (Vince and Hardesty, 2018).

The Alagadi Fest, with its integration of conservation and recycling initiatives, embodies the region's commitment to fostering recycling culture, even amid financial limitations. However, the longevity and expansion of these practices are constrained by the inadequacy of financial resources necessary for institutionalization.

5.3. Expertise Challenges

Going beyond the financial considerations, a critical hurdle surfaces — the scarcity of human capital. The active engagement expected from volunteers in environmental initiatives demands a substantial investment of time and effort. Despite their fervent passion, volunteers are susceptible to burnout due to the sustained nature of these commitments. Furthermore, the multifaceted demands of environmental management necessitate a diverse spectrum of expertise, which is not always readily available within these groups.

The Warning post by Yesil Baris Hareketi serves as a vivid illustration, laying bare the urgency of addressing coastal violations and the overlooked aspect of marine analyses. It not only underscores the pressing need for immediate action but also reveals the tangible strain on human resources within community action groups. The expansive scale of environmental

challenges, coupled with the intricate nature of legal and policy frameworks, accentuates the imperative for fortified capacity building and skill diversification within these groups.

As elucidated in the preceding chapters, these community action groups, including Yesil Baris Hareketi, have been at the forefront of environmental advocacy. Their commitment is unquestionable, yet the sustained impact they can achieve is contingent upon overcoming the challenges posed by a dearth of expertise. Recognizing the multifaceted nature of environmental issues, it becomes clear that a strategic investment in capacity building is not just desirable but essential.

The enhanced capacity building and skill diversification advocated here are not merely abstract notions; they are the building blocks of resilience for community action groups. In the face of evolving environmental challenges, these groups need to evolve too. The urgency is not just about immediate actions but about equipping these groups with the tools and expertise needed to navigate a complex and dynamic environmental landscape. This strategic imperative ensures that their efforts are not only sustained but also increasingly impactful.

5.4. An Approach to Overcome Challenges

Addressing the challenge of inadequate human and financial resources necessitates a strategic and holistic approach, combining foresighted planning, community involvement, and external support mechanisms.

5.5. Strategic Alliances and Collaborations:

Encourage community action groups to forge strategic alliances with governmental bodies, private organizations, and academic institutions. Collaborations of this nature can infuse financial support, technical expertise, and a broader volunteer base, fortifying the overall capacity of these groups.

5.6. Grant Procurement and Fundraising Prowess:

Explore avenues for securing grants and engage in targeted fundraising initiatives. Heightening visibility through social media and community outreach efforts can attract sponsorships and donations, mitigating financial constraints and ensuring sustainable funding channels.

5.7. Skill Augmentation Programs:

Implement skill augmentation programs within community action groups to diversify the expertise available. Structured training sessions, workshops, and partnerships with educational entities can elevate the knowledge base and capabilities of volunteers, addressing human resource challenges.

5.8. Advocacy for Governmental Endorsement:

Champion the cause for increased governmental support for community-led environmental initiatives. This involves not only financial allocation but also logistical backing and the establishment of incentive structures to recognize and incentivize commendable community-driven efforts.

5.9. Need for Recycling Systems: A Crucial Nexus for Sustainable Waste Management

Amidst the commendable efforts of community action groups in Northern Cyprus, the imperative for robust recycling systems emerges as a critical facet in the overarching goal of

sustainable waste management. Recycling policies, as underscored by Directive 94/62/EC within the EU framework, play a pivotal role in waste reduction, encouraging reuse, and fostering the recycling and recovery of packaging materials (Pouikli, 2020).

While the southern part of the island, the Republic of Cyprus, grapples with challenges in implementing EU waste policies, the situation in Northern Cyprus is distinct. The region, isolated from the EU legislation, faces unique hurdles stemming from limited market access for recyclable products. The absence of a comprehensive recycling infrastructure further compounds the challenges faced by community action groups in Northern Cyprus (Sulun and Azizbeyli, 2021).

The lack of clear responsibilities and sanctions for local authorities in Northern Cyprus exacerbates the implementation issues. Unlike EU member states, the absence of stringent measures and explicit consequences for failing to meet recycling targets hinders the establishment of effective recycling systems.

Although efforts have been made to promote recycling through the Packaging Waste Management Regulation initiated in December 2018, challenges persist. The absence of a fee for green waste and the failure to establish a viable business model for green waste composting projects contribute to their limited success. Recycling initiatives for construction wastes are similarly hindered by the absence of a dedicated system, despite the availability of EU construction waste crusher equipment.

5.10. Spotlight on Community Initiatives

The Alagadi Fest organized by Spot Turtle Project stands as a beacon for recycling integration in Northern Cyprus. This community-led event not only addresses challenges outlined in the thesis but actively contributes to sustainable waste management. The festival's incorporation of a beach clean-up event aligns seamlessly with the principles delineated in the Packaging Waste Management Regulation.

Notably, the social media posts promoting the event played a significant role in increasing public engagement, as a visible rise in physical participation was observed in response to these online campaigns. The success of the Alagadi Fest, evidenced by substantial engagement on social media, illuminates the potential of community-led initiatives to surmount challenges associated with limited resources and public engagement in recycling efforts (Coskun and others, 2022). The festival's multifaceted approach, integrating conservation, community engagement, and potential recycling initiatives, reflects the region's commitment to fostering a culture of recycling and contributing to a sustainable future for Northern Cyprus.

5.11. Addressing the need for recycling systems in Northern Cyprus demands strategic interventions that consider the region's unique challenges and opportunities

5.11.1. Legislative Enhancements:

Advocate for legislative enhancements that establish clear responsibilities and consequences for local authorities. The development of a comprehensive legal framework aligned with recycling targets is crucial for the effective implementation of recycling systems.

5.11.2. Market Expansion Strategies:

Explore avenues to expand the market for recyclable products in Northern Cyprus. This may involve collaboration with regional partners, exploring export opportunities, and fostering local industries that utilize recycled materials.

5.11.3. Public Awareness Campaigns:

Launch extensive public awareness campaigns to educate the community on the importance of recycling. Increasing public engagement is fundamental for the success of recycling initiatives, and informed citizens can play a pivotal role in driving change.

5.11.4. Technology Adoption:

Invest in and adopt recycling technologies suitable for the local context. This includes the establishment of green waste composting facilities, recycling centers, and the utilization of available EU-standard equipment for construction waste recycling. Another valuable addition to future research would be the use of sentiment analysis to assess the emotional responses embedded in social media content. Such analysis could identify common emotional tones—such as hope, concern, or frustration—associated with marine litter discourse. Incorporating sentiment-based interpretation would enrich the qualitative dimension of social media analytics and provide deeper insights into user motivation and environmental awareness.

5.11.5. Collaborative Initiatives:

Foster collaborations between community action groups, governmental bodies, and private organizations. A united front can pool resources, share expertise, and create a synergistic approach to overcome the challenges posed by limited resources.

As Northern Cyprus charts its course towards sustainable waste management, the integration of effective recycling systems stands as a linchpin for environmental preservation and a cleaner future. The journey requires not only the commitment of community action groups but also strategic partnerships, legislative support, and a collective societal effort to pave the way for a recycling-centric paradigm in the region.

5.12. Creating Awareness is Not Effective Enough

In the realm of environmental activism, creating awareness has been a pivotal strategy employed by organizations and communities worldwide (Wapner, 1995). The power of social media, as demonstrated by various environmental campaigns, allows for the rapid dissemination of information, garnering public attention and concern (Appel and others, 2020). However, despite its undeniable impact in drawing attention to critical issues, the effectiveness of awareness campaigns, as illustrated by Yesil Baris Hareketi's initiatives in Northern Cyprus, is proving insufficient in fostering substantive change.

Yesil Baris Hareketi's Instagram posts serve as stark reminders of the limitations inherent in awareness campaigns (Weiss and Tschirhart, 1994). The post titled "Coastline declaration is violated, and sea water analyzes are not carried out" highlights the environmental violations in Northern Cyprus, specifically the negligence in adhering to coastline declarations and conducting regular sea water analyses. Despite the poignant visuals and compelling narratives, the impact of these awareness posts is constrained by a lack of regulatory measures

and enforcement. In this post, Yesil Baris Hareketi stated that they are horrified by the marine pollution created by municipalities that pursue "beach clubs" and "new hotels" without paying attention to coastal declarations and reports. Additionally, they claimed that sea water analyzes are not carried out regularly and up to date by the Ministry of Health and are not shared transparently with the public.

The staggering revelation of contamination in sea water analyses, detecting bacteria indicative of sewage pollution, necessitates urgent action. However, the mere creation of awareness, even when it triggers public concern, does not address the root causes of the problem. Yesil Baris Hareketi's assertion that the situation is not development, but "suicide" emphasizes the urgency of the issue but also underscores the inadequacy of awareness alone to rectify complex environmental challenges (Omoogun and others, 2016).

5.13. The Need for Regulatory Measures

The interconnectedness of regional and global environmental concerns, as highlighted by Yesil Baris Hareketi's Instagram post, emphasizes the need for immediate and sustained actions guided by robust regulatory measures. The post titled "Frightening marine results," which sheds light on the alarming contamination observed in sea water analyses.

Yesil Baris Hareketi shares a photography of a newspaper article and warns that marine results are frightening. Yesil Baris Hareketi stated that: "We feel sorry for this country... Our seas... Those who have not announced the analyzes and taken precautions for four months... They are announcing marine pollution at a time when the sea season is getting ready to open... Everyone is worried! Reports of images of sewage flowing into our seas from every region continue to come to us... We warn many times that this country and this environment cannot handle this unplanned development! This is not development but suicide!" In the newspaper

article they used in this post, it was said that in 17 of the "sea water analyses" where water samples taken from 38 different points in the Lefke, Mağusa, and Girne regions were examined, contamination was observed. Enterococ and Ecoli bacilli were detected at 17 points. Marine biologists stated that this means 'there is domestic waste in the sea directly contaminated with sewage.' It was noted that Ecoli bacillus pollution is caused by sewage, while Enterococ is a different type of bacteria and both pollutions can cause intestinal infections, as announced by the Ministry of Health. Accordingly, Biologist Burak Ali Çiçek said, "If the amounts of E.coli and Enterococ are high, swimming should not be done in these areas. However, there is always risk, even if it is a small value. Even if these are low, it means that the problem has started. It may cause people who swim in the sea, especially in the summer months, to get an intestinal infection". In the April analyzes announced by the Ministry of Health, while examining the European Union Bathing Water Quality Management and microbiological criteria for Coastal Waters and Transitional Waters, 17 spots of Enterococ and Ecoli bacilli were found. It has been recorded that there is pollution, especially in the Girne Port area and at different points where environmentalists say, 'sewage is being discharged into the sea'.

This post not only unveils the severity of pollution but also criticizes the delayed response from authorities. The need for immediate precautions and announcements aligns with the urgency emphasized by international legal frameworks, such as the 1972 London Convention, the 2006 London Protocol, and the MARPOL Convention.

5.14. The Role of International Legal Frameworks

The ineffectiveness of awareness campaigns alone is evident in the context of Northern Cyprus's complex geopolitical situation (Steinebach, 2022). EU laws, which cannot be applied

in the TRNC due to its non-membership status, further complicate environmental efforts. The limited interactions with the EU hinder the implementation of comprehensive environmental policies in Northern Cyprus (Kyriz, 2018). Despite Yesil Baris Hareketi's persistent warnings and calls for action, the political dynamics on the island obstruct the Union's endeavors to address environmental issues effectively.

The urgency of implementing international legal frameworks is underscored by the interconnectedness of regional and global environmental challenges. The contamination revealed in sea water analyses in Northern Cyprus aligns with the global imperative outlined in these conventions to preserve marine ecosystems for future generations. Yesil Baris Hareketi's Instagram posts serve not only as local calls for action, but also as poignant reflections of broader global challenges addressed in international legal and political frameworks.

While creating awareness is undoubtedly a crucial step in environmental advocacy, Yesil Baris Hareketi's experiences in Northern Cyprus highlight its inherent limitations. The call for action and the urgency of addressing marine pollution necessitate more than awareness campaigns. Robust regulatory measures, informed by international legal frameworks, are indispensable in fostering tangible change. Northern Cyprus stands at a crossroads, and concerted efforts are required to navigate the complex geopolitical landscape, establish effective environmental policies, and ensure the sustainability of its natural resources. The inadequacy of awareness alone should serve as a catalyst for policymakers, environmentalists, and the public to collaborate on comprehensive and enforceable solutions for a cleaner, healthier future.

5.15. The Imperative of Sponsorship for Sustainable Environmental Initiatives in Northern Cyprus

The environmental landscape of Northern Cyprus stands at a crossroads, grappling with challenges posed by marine pollution, inadequate waste management, and the need for comprehensive environmental awareness. Community action groups, exemplified by initiatives like the Alagadi Fest, Yesil Baris Hareketi, Teneke Cocuk, and the Spot Turtle Project, play a pivotal role in addressing these challenges. However, financial constraints have emerged as a critical bottleneck, hindering the scalability and sustained impact of these community-led environmental efforts. This section explores the imperative of sponsorship in overcoming financial challenges and fostering the long-term success of environmental initiatives in Northern Cyprus.

5.16. Financial Constraints and Community Action

At the core of the challenges faced by community action groups in Northern Cyprus lies the financial constraints constraining their impactful initiatives. The Alagadi Fest, for instance, with its integration of conservation and recycling initiatives, embodies the region's commitment to fostering a recycling culture. However, the financial limitations inherent in community-led initiatives hinder the longevity and expansion of these practices, demanding a nuanced approach to circumvent fiscal challenges (Vince and Hardesty, 2018). Despite the success of events like the Alagadi Fest, the financial landscape remains a limiting factor, relying heavily on voluntary contributions and sporadic sponsorships.

To address these financial challenges, community action groups must explore avenues beyond sporadic donations and voluntary contributions. A strategic approach involves seeking sponsorships from various sources, including local businesses, environmental organizations, and government agencies.

5.17. The Role of Sponsorship in Environmental Initiatives

Sponsorship plays a pivotal role in addressing financial constraints and ensuring the sustainability of community-led environmental initiatives. Research by Vince and Hardesty (2018) emphasizes the positive correlation between financial support and the effectiveness of such initiatives. Diversifying funding sources and securing long-term sponsors can enhance financial stability, providing flexibility in program design and outreach efforts.

Sponsors contribute not only financial assistance but also bring broader visibility and legitimacy to community-led events. The Alagadi Fest, for instance, could benefit from establishing long-term sponsor relationships to ensure its continued success. The integration of sponsors provides financial assistance and brings broader visibility and legitimacy to community-led events.

Strategic partnerships with sponsors, whether local businesses or larger corporations, can provide the necessary financial infusion for sustained impact. These collaborations align with the principles of Extended Producer Responsibility (EPR), wherein businesses actively contribute to environmental initiatives related to their products. By associating their brand with environmentally conscious initiatives, sponsors can not only fulfil their corporate social responsibility but also gain valuable visibility and positive brand perception.

Sustainable environmental initiatives require a multifaceted approach that goes beyond sporadic contributions. The establishment of strategic partnerships with sponsors ensures consistent financial support, enabling community action groups to plan and execute initiatives with a long-term impact.

Examining case studies of successful environmental initiatives can provide insights into the transformative power of sponsorship. The Alagadi Fest, Yesil Baris Hareketi, Teneke Cocuk, and the Spot Turtle Project serve as exemplary models where sponsorships have played a crucial role in amplifying the impact of community-led initiatives.

These case studies underscore the transformative potential of sponsorship in addressing specific environmental challenges in Northern Cyprus. The Alagadi Fest, for instance, with consistent sponsorship, can ensure the longevity and expansion of its successful integration of conservation and recycling initiatives. Yesil Baris Hareketi's sponsorship can amplify its environmental warnings, and Teneke Cocuk can collaborate with local governments for more effective waste segregation.

As community action groups in Northern Cyprus navigate the path to sponsorship, several recommendations can guide their efforts. Firstly, understanding the value proposition for sponsors is crucial. Community-led initiatives offer sponsors opportunities for positive brand association, corporate social responsibility fulfilment, and public recognition.

Understanding the needs and goals of potential sponsors is essential for crafting compelling proposals that align with their values. Building relationships with local businesses is a strategic approach, considering their vested interest in community development. Leveraging environmental legislation, such as Extended Producer Responsibility (EPR), can enhance the credibility of community-led initiatives, making them more attractive to sponsors.

In conclusion, the imperative of sponsorship for sustainable environmental initiatives in Northern Cyprus cannot be overstated. Financial constraints pose significant challenges to the scalability and longevity of impactful community-led initiatives. Strategic partnerships with sponsors offer a transformative solution, providing financial stability, flexibility in program design, and enhanced outreach efforts. Case studies of successful initiatives underscore the potential of sponsorship in addressing specific environmental challenges. As community action groups navigate the path to sponsorship, understanding the value proposition for sponsors and building relationships with local businesses are key recommendations. Embracing sponsorships not only ensures the continuity of impactful initiatives but also fosters

collaborations that contribute to the broader goals of environmental preservation and sustainable waste management in Northern Cyprus.

5.18. Overcoming Environmental Challenges: The Imperative of Enforcement Systems

Northern Cyprus faces formidable challenges in waste management and environmental conservation. Despite commendable community-led initiatives, the lack of enforcement systems remains a critical bottleneck. This sub-chapter delves into the multifaceted issue of enforcement, exploring the socio-political context, legislative gaps, and the imperative for effective enforcement mechanisms. The intricate interplay between political realities and environmental aspirations sets the stage for a nuanced discussion on how Northern Cyprus can navigate these challenges.

Due to the suspension of the *acquis Communautaire* in the northern part of Cyprus, community rules cannot be enforced. The EU's non-recognition of the northern region as a state poses a significant hurdle, hindering the enforcement of comprehensive environmental policies (Kyris, 2018). This political situation on the island impedes the Union's efforts to address environmental concerns effectively.

The lack of alignment with EU waste management directives further complicates the situation. Legislative reforms, capacity building, and enhanced enforcement mechanisms become imperative for achieving effective waste management practices (Zachariadis, 2019).

Targets set for the legal framework in 2020, including the adoption and enforcement of waste management regulations, underscore the urgency of addressing legislative gaps. However, the socio-political context adds layers of complexity to the legislative process. Yesil

Baris Hareketi's focus on violations related to "beach clubs" and "new hotels" highlights the critical need for stricter regulations and enforcement to mitigate beach litter problems.

Achieving these targets requires a concerted effort to bridge legislative gaps. The incorporation of environmental considerations into legal frameworks and the establishment of robust enforcement mechanisms are central to navigating the complexity of legislative reforms. Additionally, Yesil Baris Hareketi's claims about irregular and non-transparent sea water analyses conducted by the Ministry of Health unveil a broader issue of accountability and transparency in environmental monitoring. Regular and transparent reporting on sea water quality is vital for understanding the health of marine ecosystems and ensuring public awareness of potential hazards. The lack of transparency not only hampers public awareness but also undermines the effectiveness of environmental initiatives. Establishing clear guidelines for environmental monitoring and ensuring regular, transparent reporting are essential steps in addressing this challenge.

Examining the experiences of community action groups in dealing with enforcement challenges provides valuable insights. Yesil Baris Hareketi's emphasis on violations related to "beach clubs" and "new hotels" underscores the need for stringent regulations and effective enforcement mechanisms.

These case studies highlight the critical role of enforcement in the success of environmental initiatives. Stricter regulations are crucial for addressing specific issues, such as those raised by Yesil Baris Hareketi, and collaboration with local governments enhances the effectiveness of waste segregation.

Addressing the lack of enforcement systems requires a strategic approach. Recommendations for strengthening enforcement mechanisms include the alignment of legal frameworks with EU directives, enhancing transparency in environmental monitoring, and fostering collaboration between community action groups and local governments.

These recommendations offer a roadmap for overcoming the lack of enforcement systems, providing a foundation for effective waste management practices and environmental conservation in Northern Cyprus. The lack of enforcement systems in Northern Cyprus poses a formidable challenge to environmental initiatives. The socio-political context, legislative gaps, and transparency issues underscore the need for a comprehensive approach. Stricter regulations, aligned with EU directives, are essential, necessitating legislative reforms and enhanced enforcement mechanisms. Transparency in environmental monitoring and collaboration between community action groups and local governments are crucial for addressing challenges highlighted by initiatives like Yesil Baris Hareketi. Navigating these complexities requires a concerted effort, but the ultimate goal of achieving effective waste management practices and environmental conservation in Northern Cyprus is well within reach with strategic reforms and collaborative endeavors.

5.19. Societal Attitudes and Environmental Responsibility: Bridging the Awareness Gap

In the wake of rapid industrialization, technological advancements, and the influence of globalization, societal attitudes towards the environment play a pivotal role in shaping the trajectory of environmental conservation efforts. This section delves into the societal attitudes of Northern Cyprus, particularly the challenges stemming from a lack of understanding of the importance of the environment. Despite the active engagement of community action groups and government entities, a gap persists in comprehending the broader environmental implications. This chapter explores the role of social media in disseminating environmental awareness, the operational effectiveness of community action groups, and the challenges encountered in achieving behavioral change.

The ubiquity of social media platforms has become a prevalent phenomenon in contemporary society, serving as a powerful tool for environmental awareness and education. Community action groups in Northern Cyprus, as discussed in the preceding chapters, actively utilize platforms like Instagram to disseminate information regarding the adverse consequences of marine and coastal litter. The cumulative membership across these groups reflects a significant portion of the population actively engaging in the cause.

The operational effectiveness of these groups, evidenced by substantial Instagram posts and positive interactions in the comment sections, highlights the potential of social media to facilitate interactive engagements among various stakeholders.

5.20. Societal Attitudes, Interactive Engagements and Challenges

Contemporary community action groups employ social media platforms strategically to promote environmental awareness and education. The rapid dissemination of information through these platforms underscores the importance of environmental education in fostering a sense of responsibility. The study also aims to understand the effectiveness of these groups, scrutinize objectives, regulatory frameworks, and address challenges encountered. Our findings indicate that social media posts have contributed to an increase in active participation in clean-up activities. Social media's role in providing insights into and monitoring the quality of the climate, sea, and ocean further empowers users to influence societal attitudes and behaviors concerning marine and coastal litter. However, despite the active engagement facilitated by social media, challenges persist in achieving behavioral change. The research questions aim to assess the efficacy of social media groups, scrutinize regulatory frameworks, and propose recommendations for overcoming challenges. The information presented in previous chapters provides a foundation for addressing these challenges.

5.21. Behavioral Change Initiatives in Northern Cyprus

The Turkish Republic of Northern Cyprus acknowledges the importance of behavioral change in promoting environmental protection and sustainability. Despite cultural diversity, the Environmental Protection Department, the European Union Information Centre, and universities actively contribute to environmental activities and awareness campaigns.

These initiatives reflect Northern Cyprus' commitment to inducing a shift in citizen behaviour towards more environmentally responsible practices. Societal attitudes towards the environment in Northern Cyprus, while positively influenced by community action groups and social media platforms, face challenges in achieving comprehensive behavioural change. The role of social media in disseminating information and fostering interactive engagements is evident, but addressing challenges related to education, resources, and cultural factors requires a multifaceted approach. The initiatives undertaken by the Environmental Protection Department, the European Union Information Centre, and universities demonstrate a commitment to behavioral change and environmental responsibility. By continuing to invest in education, awareness campaigns, policy support, and community engagement, Northern Cyprus aims to bridge the awareness gap and cultivate a culture of environmental responsibility for a cleaner, healthier, and more sustainable future.

5.22. Addressing Beach Litter Challenges and the Role of Marine Litter

The introduction and transport of marine invasive species into new environments are a great threat to biodiversity and ecosystem services with potential economic repercussions. There are several routes and mechanisms by which alien species are transported and dispersed

in the marine environment (shipping, waterways, and aquaculture). Each year, millions of tons of plastic enter the ocean. The presence of floating marine litter in marine environments provides a substrate for marine organisms and may increase the potential for the transport of alien species. Research on the role of marine litter in the introduction of alien marine species has grown exponentially in recent years. In these studies, the transport and dispersal of alien species by marine litter are reviewed and 67 alien species associated with marine litter are discovered. The most recurrent alien phyla found on marine litter are Arthropoda (29 %), Mollusca (23 %), Bryozoa (19 %), Annelida (7 %) and Cnidaria (5 %). Plastic appears to be more efficient in transporting alien species than by natural means. Their characteristics (buoyancy and persistence) allow them to be widely dispersed throughout all ocean compartments. Thus, plastics may act as a primary vector, carrying organisms to remote areas but can also facilitate the secondary spread of alien species between points of invasion. Despite the growing number of studies on this subject, much work remains to be done to understand the roles of plastics in the introduction of alien species and to develop solutions to mitigate the issue.

Marine anthropogenic litter is among the most ubiquitous environmental pollution challenges that the oceans are now confronting, directly and indirectly influencing all marine ecosystems (De-la-Torre et al., 2021). Marine litter is defined as all items used or manufactured by humans and deliberately discharged into the sea, shorelines, or beaches or brought indirectly by sewage, stormwater, rivers, or winds, or lost accidentally. Within marine litter, plastic is the most abundant in the marine environment (Mghili et al., 2020; Haarr et al., 2022), principally due to the high level of demand for its use, which has led to an exponential increase, surpassing other artificial materials. In 2019, PlasticsEurope and EPRO (2019) estimated that global plastic production increased to 368 million metric tons and is expected to rise continuously in the coming years. Recently, Borrelle (2020) estimated that 19 to 23 million metric tons, or 11

%, of the plastic litter generated globally in 2016 penetrated aquatic ecosystems. Plastic litter are primarily introduced into aquatic ecosystems by land-based sources, such as recreational activities, rivers, urban runoff, storm drains, sewage discharges, plastic manufacturing plant effluents, landfills, or recycling points (Rech et al., 2014; Gunasekaran et al., 2022). In addition, plastic litter can be introduced through marine sources, such as fishing and aquaculture (Campbell et al., 2017), ultimately, accumulating in aquatic ecosystems around the world, from coastal areas to deep waters (Hammer et al., 2012).

Once in the environment, plastics can affect the marine ecosystem and socio-economic activities. The impact of plastic pollution on wildlife and marine ecosystems has been documented in numerous studies (Villarrubia-Gomez et al., 2017; Galgani et al., 2019). Plastic litter induces injury and mortality to marine species via ingestion and entanglement (Claro et al., 2019) fragments down into microplastics (<5 mm) and nanoplastics, which can enter the food chain directly carrying chemical pollutants to the ingested organism (Debroas et al., 2017), altering the growth, reproduction, development, behavior, and mortality of diverse marine organisms at any trophic level (Gonçalves and Bebianno, 2021) damages ships and fishing gear, compromise the quality of coastal areas and ocean ecosystems resulting in economic losses due to reduced tourist numbers and increased clean-up costs (Krelling et al., 2017), affects fishing activity (Selvam et al., 2021) and acts as a vector for the spread of alien species and diseases (Rech et al., 2018). One of the questions that have received the least attention is the potential role of marine litter as a vector for the transport and dispersal of alien species (Rech et al., 2016).

The growing number of floating marine litter in the marine ecosystem has offered a large amount of substrate for colonization by diverse organisms (Rech et al., 2018; Mghili et al., 2022). Many studies have documented the transport of fouling organisms (Rech et al., 2018; Lacerda et al., 2022). This litter is distributed over short or long distances by ocean currents

and winds that dispersed them across the ocean and facilitate the dispersal of alien species (Battaglia et al., 2019). Plastic litter can double or even triple the spread of marine species due to its high persistence and buoyancy (Barnes, 2005). In particular, marine litter with a large surface area has a higher capacity to transport alien species due to its ability to harbor a more diverse fouling community and travel longer distances (Mghili et al., 2022). Plastic production and consumption continue to increase worldwide. The large influx of plastics into the marine environment from a variety of sources enhances the rafting opportunities for marine species (Barnes, 2005). However, the role of marine litter as a primary or secondary vector for novel introductions and the spread of alien species has been largely ignored (Katsanevakis and Crocetta, 2014). Studies investigating marine litter biofouling have reported a diversity of coastal marine invertebrates, including barnacles, hydroids, bryozoans, amphipods, echinoderms, and bivalves worldwide (De-la-Torre et al., 2021; Mghili et al., 2022). These taxonomic groups contain invasive species that can establish new populations upon arrival in new areas (Rech et al., 2018). Plastic litter is also an important vector for invasive algae but also for invasive and pathogenic microorganisms (Reisser et al., 2014). These invasive species can negatively affect the invaded environment by altering community structure and ecosystem functions through competition with native species, indirect changes in habitat conditions, and the introduction of pathogens. Although the issue of plastic transport of alien species has received very little attention from scientists and the public, this type of vector may be particularly important in marine environments, including remote islands, where other vectors, such as ballast water and aquaculture, are absent or scarce (Rech et al., 2018). The only method to stop new introductions of marine alien species is to successfully manage the associated pathways of introduction (Katsanevakis and Crocetta, 2014).

In Northern Cyprus, community action groups such as Yesil Baris Hareketi, Teneke Cocuk, and Spot Turtle Project are actively involved in beach clean-up initiatives. These

efforts, visually represented in selected Instagram and Facebook posts, highlight a collective dedication to combating marine pollution, and demonstrate that social media engagement has helped increase physical participation in these clean-up events. However, the growing concern is not only the visible pollution but also the hidden threat posed by marine litter as a potential vector for alien species. Despite commendable efforts, challenges persist, as illustrated by Yesil Baris Hareketi's concerns about coastline declarations and sea water analysis (Table 5: Challenges in Beach Litter Management). This aligns with the broader challenge of understanding the intricate role of marine litter in introducing and dispersing alien species (Rech et al., 2018). The introduction of 67 alien species associated with marine litter, as revealed in recent studies, underscores the complexity of the issue.

5.23. Recommendations for Effective Beach Litter Management

To combat beach litter, recommendations include a shift from plastic to environmentally friendly alternatives like paper (Table 7: Recommendations for Beach Litter Management). Simultaneously, addressing the role of marine litter in introducing alien species requires a multidimensional approach. Emphasizing the need for a comprehensive regulatory framework (Table 5) and acknowledging the potential of plastics as a vector for alien species spread are crucial steps. Integrating these recommendations ensures a holistic strategy addressing both visible pollution and hidden threats.

The influx of plastics into marine environments significantly contributes to the introduction and spread of alien species. Plastic litter serves as a substrate for colonization by diverse organisms (De-la-Torre et al., 2021). Research indicates the transport of fouling organisms across ocean currents and winds facilitated by plastics, doubling or even tripling the spread of marine species (Katsanevakis and Crocetta, 2014). Moreover, the qualitative

composition of alien communities on marine litter reveals the prevalence of various taxonomic groups, including invasive species that can establish new populations upon arrival in new areas.

The battle against beach litter in Northern Cyprus not only requires immediate attention to visible pollution but also demands a proactive stance on the hidden threat posed by marine litter in introducing and dispersing alien species. Community action groups play a pivotal role, but a comprehensive approach involving regulatory bodies and the public is indispensable. Embracing recommendations for effective waste management practices addresses visible pollution, while acknowledging the role of plastics as a vector ensures a more holistic strategy against hidden threats. In the global context, understanding and mitigating the role of marine litter in introducing alien species is an emerging challenge, necessitating ongoing research, regulatory frameworks, and public awareness. Future studies should consider combining digital engagement analysis with metrics of offline action, such as event attendance. In addition, applying artificial intelligence tools like sentiment analysis may reveal the emotional depth of environmental communication, potentially highlighting which narratives foster greater participation. In addition to online engagement metrics such as likes, shares, and comments, future research could benefit from measuring the extent of physical participation in clean-up events. While this study focused primarily on digital interactions, there is potential value in exploring whether increased social media activity translates into tangible action, such as event attendance or volunteer involvement. Including this dimension would enhance the understanding of how digital campaigns influence real-world environmental behavior.

6. CONCLUSION

The journey through the chapters of this thesis has been a comprehensive exploration of the environmental challenges and initiatives in Northern Cyprus, emphasizing the critical need for sustainable practices and collaborative efforts. As we reflect on the multifaceted dimensions of environmental conservation, waste management and societal attitudes, the conclusion serves as a synthesis of key insights, a call to action, and a vision for a sustainable future. Notably, event invitations and motivational posts shared on social media have been observed to positively influence physical participation in clean-up activities. This effect is evidenced by the collective photos shared after the events and the reported data on the amount of waste collected.

The environmental landscape of Northern Cyprus is marked by commendable community-led initiatives, exemplified by the Alagadi Fest, Yesil Baris Hareketi, Teneke Cocuk, and the Spot Turtle Project. These initiatives showcase the transformative power of sponsorship, emphasizing the crucial role it plays in amplifying the impact of grassroots environmental efforts. Sponsorship not only provides financial stability but also unlocks opportunities for collaboration, innovation, and increased outreach. The Alagadi Fest, with consistent sponsorship, stands as a model for the integration of conservation and recycling initiatives, ensuring the longevity and expansion of its success.

The legislative and enforcement landscape in Northern Cyprus presents formidable challenges, primarily due to the political situation on the island and the lack of alignment with EU waste management directives. The suspension of the *acquis Communautaire* in the northern part of Cyprus impedes the effective enforcement of comprehensive environmental policies. Legislative reforms, capacity building, and enhanced enforcement mechanisms are imperative to bridge these gaps. Stricter regulations, aligned with EU directives, are essential to address specific issues highlighted by initiatives like Yesil Baris Hareketi. The case studies underscore

the critical role of enforcement in the success of environmental initiatives, emphasizing the need for a strategic approach and collaboration with local governments.

The societal attitudes of Northern Cyprus towards the environment are influenced by rapid industrialization, technological advancements, and globalization. While community action groups actively utilize social media platforms for environmental awareness, challenges persist in achieving comprehensive behavioral change. The ubiquity of social media serves as a powerful tool for disseminating information and fostering interactive engagements, yet addressing challenges related to education, resources, and cultural factors requires a multifaceted approach. The initiatives undertaken by the Environmental Protection Department, the European Union Information Centre, and universities demonstrate a commitment to behavioral change and environmental responsibility.

The recommendations woven throughout the thesis provide a roadmap for sustainable environmental practices and the preservation of Northern Cyprus's unique ecosystems. Understanding the value proposition for sponsors, building relationships with local businesses, and leveraging environmental legislation are key steps in navigating the path to sponsorship. Strengthening enforcement mechanisms, aligning legal frameworks with EU directives, and fostering collaboration between community action groups and local governments are crucial for overcoming legislative challenges. The call for behavioural change emphasizes the need for continued education, awareness campaigns, policy support, and community engagement.

The imperative of collaborative stewardship is underscored as the cornerstone of sustainable environmental initiatives. It requires the active participation of governments, community action groups, businesses, and individuals. Embracing a shared responsibility for environmental conservation fosters a culture of accountability and proactive engagement. As we envision a sustainable future for Northern Cyprus, it is essential to view environmental

preservation not merely as a set of challenges but as an opportunity for collaboration, innovation, and collective growth.

In conclusion, the narrative woven through these chapters converges on the pivotal role of collaboration, innovation, and collective responsibility in addressing the environmental challenges faced by Northern Cyprus. The success of environmental initiatives hinges on strategic partnerships, legislative reforms, societal awareness, and sustainable practices. The thesis is not just a documentation of challenges but a call to action for all stakeholders to actively contribute to the well-being of the environment. Northern Cyprus stands at a crossroads where decisions today shape the environmental legacy for generations to come. By embracing the recommendations presented and fostering a culture of environmental stewardship, Northern Cyprus can pave the way for a sustainable, resilient, and vibrant future. The journey toward sustainability is ongoing, and this thesis serves as a compass guiding the way toward a harmonious coexistence of nature and society.

7. REFERENCES

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