

**Oil Spills, Climate Change, Pollution and Land  
Decay: Media Framing of Environmental Issues in  
the Iraqi Media**

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## ABSTRACT

Iraq is a significant country in the Middle East and significant natural resources in Iraq include natural gas and petroleum. Refining Iraqi oil causes serious environmental issues such as oil spillage, air, water, and land pollution and all of these problems contribute to climate change. Several studies have associated air, water, and land pollution with wars and oil spillage which is a form of pollution that can be viewed from the perspective of intentional and unintentional acts. In many cases, the way the media presents their understanding of the issue instead of how the audiences understand it and should understand it. As a result of the limited comprehensive study dissecting the diverse media frame of oil spills, pollution, and land decay in Iraq, this study is necessary to fill this research vacuum by evaluating the media framing of oil spills, pollution, and land decay in Iraq. Quantitative content analysis in combination with frame theory and agenda-setting theory was applied to examine the reflection of newspapers in media framing of oil spills, climate change, pollution, and land destruction in Iraq. The study concludes that news on environmental issues has been well discussed in the Iraqi media. The reflexivity shown in newspaper coverage suggests that Iraqi investigative journalism may play an advocacy role in portraying environmental problems in a reactive manner that confronts and criticizes Iraq's official goals. The study recommends that since newspapers are a widely used news medium in Iraq, news can now be sent to individual residents via social media 24 hours a day.

**Keywords:** media framing, oil spillage, Iraq, pollution, land decay

## ÖZ

Irak, Orta Doğu'da önemli bir ülkedir ve Irak'taki önemli doğal kaynaklar arasında doğal gaz ve petrol bulunmaktadır. Irak petrolünün rafine edilmesi, petrol sızıntısı, hava, su ve toprak kirliliği gibi ciddi çevre sorunlarına yol açmakta ve tüm bu sorunlar iklim değişikliğine katkıda bulunmaktadır. Çeşitli araştırmalar hava, su ve toprak kirliliğini savaşlar ve kasıtlı ve kasıtsız eylemler açısından bakılabilecek bir kirlilik türü olan petrol döküntüsü ile ilişkilendirmiştir. Çoğu durumda, izleyicilerin konuyu nasıl anladıkları ve anlamaları gerektiği yerine, medyanın konuyu nasıl anladıklarını sunma şekli. Irak'taki petrol sızıntıları, kirlilik ve arazi bozulmasına ilişkin çeşitli medya çerçevesini inceleyen sınırlı kapsamlı çalışmanın bir sonucu olarak, bu çalışma, Irak'taki petrol sızıntıları, kirlilik ve arazi bozulmasına ilişkin medya çerçevesini değerlendirerek bu araştırma boşluğunu doldurmak için gereklidir. Gazetelerin Irak'taki petrol sızıntıları, iklim değişikliği, kirlilik ve arazi tahribatının medya çerçevesindeki yansımalarını incelemek için çerçeve teorisi ve gündem belirleme teorisi ile birlikte nicel içerik analizi uygulandı. Çalışma, Irak medyasında çevre konularıyla ilgili haberlerin iyi tartışıldığı sonucuna varıyor. Gazete haberlerinde gösterilen yansıma, Irak araştırmacı gazeteciliğinin, Irak'ın resmi hedefleriyle yüzleşen ve onları eleştiren tepkisel bir biçimde çevre sorunlarını tasvir etmede savunuculuk rolü oynayabileceğini öne sürüyor. Çalışma, gazetelerin Irak'ta yaygın olarak kullanılan bir haber aracı olması nedeniyle, artık sosyal medya aracılığıyla 24 saat haberlerin bireysel olarak bölge sakinlerine gönderilebileceğini önermektedir.

**Anahtar Kelimeler:** medya çerçeveleme, yağ dökülmesi, Irak, kirlilik, arazi çürüm

# DEDICATION

*To My Family, Friends, and people*

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# Chapter 1

## INTRODUCTION

### 1.1 Introduction

Iraq is a significant country in the Middle East based on its natural resources. The significant natural resources in Iraq include natural gas and petroleum (Wehrey et al., 2010). At the moment, Iraq is the sixth greatest producer of petroleum globally based on the International Trade Administration (ITA) data (ITA, 2022). Iraq is also a member of an oil-producing countries international organization called the Organization of Petroleum Exporting Countries (OPEC), claiming the 4th position in OPEC-proven crude oil reserve in the committee of member states (OPEC, 2022). Refining Iraqi oil causes serious environmental issues such as oil spillage, air, water, and land pollution and all of these problems contribute to climate change (Arangocontribut & Krauss, 2013; Bhattacharjee & Dutta, 2022).

According to Hosmer, Stanton, and Beane (1997), it is usually acknowledged that oil spills are accidental and unexpected events basically a result of human mistakes or equipment failure and public perception for the most part ascribes oil spillage to mishaps such as pipelines and tank ruptures or groundings of oil vessels. Over the most recent 5 decades, preserving the marine ecosystem has transformed into a significant piece of environmental activities and the most important in this domain is directly connected with oil spills (Pashaei, Gholizadeh, Iran, & Hanifi, 2015) and other environmental issues such as air pollution, and land decay. Sadly, as a general rule,

there are various predicted and intended activities that produce oil spills that are similar, while possibly not more, obliterating to the climate and the most noticeable among these occasions are terrorism, theft, vandalism, and war (Hosmer et al., 1997).

Pashaei et al. (2015) noted that the most perceptible and fundamental instance of the Persian Gulf contamination and pollution is connected with the 1991 Gulf War spill, which is viewed as the biggest oil spill ever and also attributed the Persian Gulf which covers an area of roughly 239,000 km<sup>2</sup> (de Mora et al., 2010) to be the most contaminated marine basin on the planet based on the fact that the water in this region is warm, the toxicity level of oil is higher in warm water, and weathering happens a lot quicker. Extant studies such as Ahmed, El-Raey, Nasr, and Frihy (1998) and Golob and Bruss (1984) have assessed that the oil contamination in the Persian Gulf region was 47 times the regular rate for a marine area of a comparable surface, making Saedi (2012) and de Mora et al. (2010) predict that the war in the past twenty years might have intensified the contamination loads in the region.

The media have significant responsibility in impacting private, nationalistic, and global environmental policies (Rousseau & Deschacht, 2020; Camay, Brown, & Makoid, 2012; Patten, 2002). In many cases, the way the media presents their understanding of the issue instead of how the audiences understand it and should understand it. Weathers and Kendall (2016) claimed that the lack of participation in environmental issues is a result of how the media frame these issues, based on messages to promote public understanding to aid proper responses from the communities and individuals. For many years, the press in Iraq has portrayed these environmental issues based on different agendas because the media is essential in shaping the opinion of the people about such topical issues.

## **1.2 Problem Statement**

Several studies have associated air, water, and land pollution with wars and oil spillage which is a form of pollution that can be viewed from the perspective of intentional and unintentional acts based on Hosmer et al. (1997) definition of oil spills. Brown (2004) associated the total damage to Iraqi water, land, health, and water infrastructure with the more than a decade embargo, three significant wars, and as well as the internal crisis that lasted for some years with the new clampdown on terrorism. Iraq has experienced significant battles which tremendously affect the climate condition of the country (Nameq, 2014). A few explorations have established a connection between the Iraqi conflicts and the expansion in the frequency of cancer and have anticipated a potential increase of such sicknesses because of the toxins related to war (Nameq, 2014; Ridha & Al-Safi, 2010). Also, there were upsurges in birth defects that were connected to barraged Iraqi urban areas (Alaani et al., 2011). Serious pollution of soil, air and water can happen after attacks (Jergović et al., 2010). There were immediate and circuitous impacts of these conflicts on the environment, the immediate impact was the waste and contaminations coming about because of the bombs and rockets and war-related synthetic substances. While the unintended impacts were addressed by the annihilation of the infrastructure (Mohammed, Al-Tameemi, & Naji, 2010).

It is believed that toxic compounds are contained in the sand particles of Iraq, which trace back to the pollution generated by military activities that dismantle the desert and make it into light dust. These toxic substances date back to the time when Iraq was under occupation by the United States (Al-Shammari, 2016). Dust storms caused by this dust reach cities in Iraq and affect more than half of the country's cities (Sultan, Al-Rubaiee, & Abdulrahim, 2012). It has been shown that certain sandstorms in

Baghdad carry tiny quantities of uranium, which can have cumulative consequences (Al-Dabbas & Al-Khafaji, 2012). During the USA-Iraq War in 2003, the governments of the United Kingdom and the United States announced that depleted uranium munitions had been used in Iraq. According to both countries, at least 150 tons of depleted uranium ammunition were deployed (Dyer, 2006). Uranium is a naturally radioactive material that has been employed in the atomic energy sector, and the product of this use is depleted uranium. Depleted uranium is used by the military for the construction of powerful missiles, as stated by Keith et al. (2013). Stradling et al. (1988) and Kathren and Moore (1986) both verified that as missiles penetrate, they leave depleted uranium dust in the environment on impact and that they include uranium oxides that may be ingested or breathed by humans. It has been stated that depleted uranium can be found in a few different locations throughout Iraq (Rasheed, 2013).

After 11 years of the 2003 Iraq War, the degree to which the opening up of petroleum assets in the Persian Gulf to the economy of the rest of the world was a primary motive behind the Anglo-American intervention into the area is not precisely examined in the majority of media reflections on the conflict (Ahmed, 2014). This implies that environmental degradation in the Persian Gulf region of which Iraq is part of the region is a result of the invasion orchestrated by the Anglo-Americans based on their interest in opening up Persian Gulf energy assets (i.e., crude oil) to the global economy and the media are not engaged in comprehensive reflections on these issues leading to diverse media frames.

Oil spillage is one of the significant sources of environmental pollution, and it alludes to the unintentional spillage of refined products or crude oil onto land, because of the

course of the production and circulation of unrefined petroleum (Khwedim, 2016). The dependency on crude oil as the wellspring of energy has triggered a sensational expansion in the production, distribution, and processing of this natural resource, causing environmental pollution. Oil spillages happen in various areas of the planet, resulting in serious dangers to the climate (Adesina & Adelasoye, 2014). Oil extraction, processing, and distribution activities present a risk of unplanned oil leakages with likely effects on the environment (Frantzen et al., 2012). Tsai and Kao (2009) added petrol hydrocarbon pollution is one of the major ecological issues, due to the critical sums delivered as well as because of their poisonousness.

As earlier noted by Weathers et al. (2016), the lack of participation in environmental discussions is dependent on how the media frame environmental problems because they are in a pole position to disseminate information that will enhance public understanding of these issues to aid proper responses from the communities and individuals. Considering the effects of oil spillage from both intentional as a result of war or unintentional perspectives due to the extraction, production, and transport activities, it is essential to call for public participation in the debate for a safe and secured Iraq and global community and to achieve that, media frame of environmental issues in Iraq must be addressed from empirical evaluation.

Over the years, so many academic and conference papers, book chapters, and books have studied media framing of environmental issues such as climate change, oil spills, air pollution, water pollution, and land poisoning in other oil-producing countries such as America (Stecula, & Merkley, 2019; Weathers, & Kendall, 2016; Boykoff & Boykoff 2007), Russia (Polina et al., 2020; Poberezhskaya, 2015; Tynkkynen, 2010) and Canada (Mahon, 2020, Dussyk, Axsen & Dullemond, 2018; Callison & Tindall,



2017), but little or none exists in the context of Iraqi environmental issues. As a result of the limited comprehensive study dissecting the diverse media frame of oil spills, pollution, and land decay in Iraq, this study is necessary to fill this research vacuum by evaluating the media framing of oil spills, pollution, and land decay in Iraq. According to Weathers et al. (2016), when the core issues of environmental problems such as climate change are well-positioned or dissected by the media, it encourages public discourse on the matter. Comprehensively, this study examines how the media have covered topics on oil spills, climate change, pollution, and land decay in Iraq.

### **1.3 Aim and objectives of the Study**

The general aim of the study is to examine media framing of oil spills, climate change, pollution, and land decay in Iraq. These objectives will be achievable under the following specific purposes.

- i. To understand how the Iraqi news media cover and frame the issues of oil spilling affecting the country's oil-producing regions.
- ii. To know how the Iraqi online news media cover and frame climate change issues in the entire country.
- iii. To know how the Iraqi online news media cover and frame air pollution in the entire country.
- iv. To know how the Iraqi online news media cover and frame the issues using water pollution issues dire country.
- v. To know how the Iraqi online news media cover and frame the issues of land decay in the entire country.

- vi. To understand how the pro-government and anti-government frame the environmental issues (climate change, oil spillage, land poisoning, air, water, and land pollution) in Iraq?

#### **1.4 Research Questions**

This study focuses on oil spills, climate change, pollution, and land decay through the lens of media framing of environmental issues in Iraqi media. For this reason, the following research questions were raised.

- i. How did the media frame the Oil Spills in the chosen Iraqi Newspapers?
- ii. How did the media frame Climate Change in the chosen Iraqi Newspapers?
- iii. How did the media frame the Pollution in the selected Iraqi Newspapers?
- iv. How did the media frame the Land Decay in the chosen Iraqi Newspapers?
- v. What is the difference in how the pro-government and anti-government frame the environmental issues in Iraq?

#### **1.5 Significance of the Study**

The discussion about environmental issues in recent times has become very important because scientists have said it could lead to the end of our planet, so this topic is more important now than ever for the following reasons;

Climate change is a current issue in media studies. It is one of the most talked-about issues today because the media have played an important role in covering and reporting the issues and policies in and around it. According to Nielsen & Kjærgaard (2011), anything that has to do with the topic of Climate change is seen as necessary by many media outlets such as news, politics, economics, and even gossip. Various media platforms have framed the issues in different ways. As a result, it is not strictly an issue

for the experts, activists, and scientific community anymore. It is also important to say that the problems have become highly political and economically related. This study is critical because it shows how media reports portray environmental issues. Everybody plays a part in environmental issues: The government and the individual people. The media aims to report the news to a large and mass audience, and since that is the case, the question is about what individuals can do to reduce these environmental issues.

More specifically, it is essential to study the press framing of environmental issues in Iraq because Iraq, as stated earlier, for many years, it is known to be the 11th largest producer of petroleum. It is an oil-producing country labelled as the Organization of the Petroleum Exporting Countries. Hence, there are so many environmental issues ongoing. But unfortunately, no significant comprehensive study has researched the media coverage of Oil Spills, Climate Change, Pollution and Land Decay in Iraq. This study is significant because countries such as Iraq are developing countries, and they are believed to be the most vulnerable to troubles of environmental concerns.

## **1.6 Motivation for the Study**

I am highly motivated to choose this topic because I saw all these environmental issues (Oil Spills, Climate Change, and Pollution) first-hand. For example, as a child, our family (me, my parents, and my siblings) traveled to other cities in Iraq. In cities such as Baghdad, Maysan, Kirkuk, and Basra with Oil wells, one could see the land pollution. The burning of gases is seen across the oil companies, and one could even perceive the smell of these gases. Even after I moved to Jordan in 2006, I heard about these issues in the press; people were infected with strange diseases and getting their medication. In 2009, I moved to Cyprus for my Bachelor's and my friends who were

still in my country talked about the increase in water and air pollution problems and the neglect of these problems by the government and local and international organizations that benefit from these natural resources. These are my motivation for writing this dissertation. It is personal but almost one of the most talked-about topics globally.

### **1.7 Limitations of the Study**

Despite the above listed significance of this study, the limitations can be seen from the scope of the study which focuses on Iraqi news media coverage and frames the issues of oil spilling affecting the country's oil-producing regions. As a result, it's a limitation of the study. This research uses content analysis, Framing Theory and Agenda-setting Theory to evaluate the Iraqi online news media coverage and framing of climate change issues in the entire country by dissecting only the pro-government and anti-government newspapers editorials on the environmental issues (climate change, oil spillage, land poisoning, air, water, and land pollution) in Iraq.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The previous research that pertains to this topic is discussed in this chapter. This chapter covered Iraqi media, the Ba'ath era and the media from 1968 to 2003, media coverage of environmental issues, oil spills, land decay, climate change, pollution, framing theory, framing in the relationship between issuer-receiver, visibility, and thematization of the information.

#### **2.2 An Overview of Iraqi Media**

The general attitude of the Iraqi people is one of pessimism, and this outlook is pervasive across the country. This is a direct result of years of living through warfare, war, and poverty, in addition to persistent unemployment and deteriorating public services (Stoker, 2016; Hammack, 2011; Dannreuther, 2014). This sense of helplessness permeates many of the arguments and conversations that take place concerning Iraq and the chances of progress toward gender equality and other goals. Stakeholders are in strong agreement that the media space is highly politicized, and that this is a barrier to the provision of content that might support equality and human rights. Furthermore, this politicization is seen as a barrier to providing content that might support equality and human rights. The media have deep links to the political parties and donors that provide their funding; these groups are widely seen as being very immoral and corrupt (Galluccio, 2021; Hoppe, 2011). As a consequence of this, the content and storylines of the media are seen as not being indicative of the

requirements of the people. Participants in the media felt constricted and restricted when operating in this atmosphere. For their news consumption needs, audiences are increasingly looking to social media rather than traditional media outlets. The primary reasons people use traditional media channels are to get their amusement and to watch programming. The pessimism that people are feeling as a result of the absence of uplifting news coming out of Iraq has led to an increase in audience consumption of entertainment programming. Tradition and religious belief play a significant part in how the general public understands and responds to depictions of women in the media. Working late hours, traveling, and having regular interaction with male coworkers are cited as the primary reasons why women should not pursue careers in the media. Reactions of the audience to the portrayal of women in roles more traditionally associated with women on television were also influenced by more traditional attitudes (Al-Mohammad, 2007; McKay, Thomas, & Warwick, 2011; Hussain, 2021).

Hassan (2013) gave an in-depth view of Iraqi media where he stated that men of older age groups tend to have more unfavorable judgments regarding the contributions of women in the workplace. In the Iraqi media, there exists a severe deficiency in both ethics and professionalism. The public and the media stakeholders' responses to the volatile situation in Iraq are highly gendered. The environment in Iraq is turbulent. The media often portrays women in a more masculine light, a perception that is shared by both women and men. Some female journalists have stated that playing the part of a man is vital for them to keep their positions and advance in their professions. It is clear that female journalists are subjected to harassment both in the workplace and online. There is no real legal recourse available for female journalists who experience sexual harassment at the hands of their supervisors, making them vulnerable to such treatment

(Davies, 2017; Ferrier & Garud-Patkar, 2018). It has been suggested that feelings of shame and honor contribute to the pervasive lack of discussion on harassment in the workplace. It would appear that women working in the media receive insufficient assistance on the organizational level from within media organizations (Adamo et al., 2018; Bourassa Rabichuk, 2021).

Following the invasion of Iraq by the United States and its allies in March 2003, Iraqi state television immediately stopped broadcasting, which resulted in a dramatic shift in the composition of Iraq's media landscape (Abdulmajid, 2021; Joubin, 2020; Hastings, 2020). According to Campbell (2017), Iraqis were very literally deprived of information due to the fact that the Baathist dictatorship forbade the possession of satellite dishes and did not broadcast state television. Because of this, sales of satellite dishes went through the roof in the months that immediately followed the invasion, it resulted in one of the highest levels of market penetration anywhere in the globe in only a space of two years.

Ipsos-Stat reports that just 15% of Iraqi homes were contacted by Alhurra in June 2005. Despite this, the organization has had some success in other parts of the area. The invasion of Iraq and the following occupation of that country have produced the bloodiest battle in the history of the news industry. They have led to the deadliest battle and war that has ever been reported in the mainstream media. Iraq's news media climate changed practically for the time being from the firmly controlled publicity arm of Saddam Hussein's administration into one of the most different and open news climates after the collapse of Baghdad in 2003 (Twigt, 2018). As a result of the conflict and chaos, the ethno-sectarian partition of the country currently echoes in Iraqi media. These extremely biased media sources have the tendency to expand the gap between

deteriorating public identity and communities (Sivakumar, 2017; Sissakian, Al-Ansari, & Knutsson, 2014).

According to Harrison (2020) and Keane (2020), Iraqis were fascinated by observing practically continuous coverage of the legislative electioneering race on their TV screens during the early part of 2010. The result was far from certain based on the close race which is not similar to the majority of electioneering processes in the Middle East. The political class made use of the small screen to package and disseminate their messages since enormous social meetings were dangerous, despite the upgraded security architecture all over the country. It was observed by the Al-Mir'at media supervising group that some media houses owned by private individuals were dedicated to over 90% of electoral campaigns, including paid political commercials, news reports, political discussion programs, and the public mission, including news reports, paid political notices, conversation programs, and the “get out the vote” campaign funded by the U.S. (Mazzeo, 2015). TV had become fundamental in reaching Iraqi voters by the year 2010. Almost 16 million Iraqis are reached through the TV on a normal day, and this reachability through TV is higher compared to other sources of information such as radio, the internet, and newspaper (Saghatelyan, Sahakyan, Belyaeva, Tepanosyan, Maghakyan and Kafyan, 2013). In Baghdad teashops and at home, Iraqis sit in front of the TV to watch and smoke effervescent. Iraqis were able to look up from plates of darkened tomatoes and lamb over lunch at outside cafés and watch as Iraqis exhibit their democratic activities on TV screens behind the cashiers of grocery stores with questions like ‘which TV channel are they watching?’. Viewers’ choice was much of the time a sign of partisan personality. Iraq's media scene had turned into a reflection of Iraq's political-sectarian partitions. This



separation drove Iraq into shocking brutality from 2005 to 2007 and presently has developed into a political epic showdown with satellite TV proprietorship standing as the key players (Michalopoulos and Papaioannou, 2020) with no unbiased satellite TV outlets. Ibrahim Al-Marashi pronounced in a milestone 2007 study that Iraqi media is a strong partisan domain that is mixed around ethnopolitical groups in Iraq that have the radio, television, TV, and print available to them (Rakib et al., 2014). Ethnic ideological groups, Arab economic interests, political Islamists that represent partisan groups as well as the Iraqi government fund broadcasts. This different framework assumed a part in the electioneering campaign of 2010. A Kurdish columnist and media professional known as Hiwa Osman claimed that most Iraqi media currently follows one ideological group based on who funds their activities (Alghamdi, 2016).

The state controlled the media under Saddam Hussein, they operated and produced five national dailies, four radio stations, and two TV stations. There was an absence of opposing views because the government did not give room for opposing views. The government declared the use of satellite dishes as unlawful and keeping in mind that elites in Baghdad frequently boycotted this ban with underground market satellite dishes concealed on roofs, seeing external media was restricted because of neighborhood watch groups that report satellite dish users as criminals. The Saddam-era media sources unexpectedly imploded in March 2003, when alliance powers brought down the system and assumed command over Baghdad. Private radio and TV stations and newspapers sprouted all over the country during the power vacuum that ensued.

Iran as Iraq's neighbor was able to open a local news channel designated for viewers in Iraq first. Al-Alam funded by Iran utilized Arabic-speaking newscasters and started

broadcasting prior to the intervention of U.S. troops in Baghdad. Al-Alam became the most famous TV station by the mid of 2003 in the capital and the Shi'a- concentrated south since it was a terrestrial TV station, and without a satellite dish, Iraqis were able to watch, because of the organization's transmitters dabbling the Iran- Iraq border (Dey, Gupta & Mahanty, 2014). With the appearance of the Americans, the illegality of owning satellite dishes vanished and the sales of satellite dishes soar, prompting one of the greatest entrance rates for satellite broadcasting on the planet (Pepper, Gerba &, 2016).

Soon after, Iraqi radio and TV stations started broadcasting. Within a year, some broadcasting stations went out of the air while some were adequately funded for operations under the control of exile political groups that came back to Iraq when Saddam's era ended. William Rugh wrote on this issue with claims that sponsorship and ownership of Arab mass media were diverse in a book about the initial appearance of the post-Saddam media. Almost half distinguished themselves as true affiliates of religious or political groups (Zheng, et al., 2015). Since the American invasion, Iraq's diverse media environment has changed. The following media houses have the biggest Iraqi audiences and are instances of proprietorship and political-sectarian direction (Al-Kasser, 2018).

In 2003, the Coalition Provisional Authority established the Iraqi Media Network (Al-Iraqiya), and later in 2004 went under the control of the Iraqi government. Iraqiya works as a public broadcasting company with satellite and terrestrial broadcasting having three stations: Iraqiya Sports, Iraqiya TV2, and Iraqiya TV. Even after the channel was returned to the Iraqi government, it was perceived as a US propaganda channel since 2005 Western news reports uncovered a secret Pentagon media activity

to place positive stories about the US on Iraqi newspapers and TV. State-owned channel workers were attacked more regularly and suffered from a larger number of killings compared to other TV stations in Iraq (Al-Kasser, 2018). Studies in the middle of 2004 indicated that the TV station is the most viewed in Iraq because of its openness as a terrestrial channel. In any case, media investigations in 2010 indicated that Iraqiya had lost a significant market share of viewers to private and externally owned Iraqi contenders. Iraqiya recorded considerably lower compared to rival channels in 2010 when a study was conducted on the stations that people trust in Iraq (Sardar et al., 2013).

A Shiite political group called the Supreme Islamic Iraqi Council led by Ammar al-Hakim controlled Al-Furat (The Euphrates) as their media outlet. Based in Baghdad and started broadcasting around 2004, their refusal to give paid adverts and free broadcasting time to political parties except those under the umbrella of the Shiite Islamist Coalition defined the channel's partisan predisposition in the 2005 political campaign (Suryati, Khair, & Gusrianti, 2019). Iraqi National Alliance through Mir'at an Iraqi NGO with the overwhelming majority claimed that this station is exclusive for Shiite political candidates supported by the Supreme Islamic Iraqi Council in the election coverage of the year 2010. The Shiite Islamist Coalition was represented by the Iraqi National Alliance, with the inclusion of the Supreme Islamic Iraqi Council. Osman added that each political party includes their representatives in the list and nobody could stand to give broadcast space or time for candidates whose names do not appear on the list. Centered around the Sunni political alliance led by Iyad Allawi the Furat's adverse media coverage featured unfavorable reports about Nouri al Maliki's party, an opposing Shiite (Chaichan, Kazem & Abed, 2016).

There are several ethnic media outlets that include Christian Assyrian, Turkmen, and Kurd media in Iraq. Notwithstanding, the Kurdish political parties owned the media houses with the most impact and viewers in northern Iraq. Since the end of the Gulf War in 1999, these broadcasting outlets got an early advantage as they have experienced relative independence in the north of Iraq (Chaichan et al., 2016). Kurdistan Satellite Station which started operating as far back as 1999 was financed and operated by the Kurdish Leftist faction (KDP), while KurdSat was operated and funded by the Patriotic Union of Kurdistan (PUK). Over 90% of survey respondents claimed that they watched it in a 2010 media study, making the programs of these two channels the most viewed in northern Iraq (Al-Hassen, King, Mahdi, & Alhello, 2015). Despite claims by the editorial staff of media independence, these channels mirror the political needs of the PUK and the KDP. The content released by these channels mirrors the predispositions of the political parties and proposes that the two channels act as mouthpieces for these political parties. During the 2010 political campaigns in Iraqi Kurdistan, the two significant media platforms just gave broadcast time to those aspirants whom they were backing and looked over the names of Kurdistan aspirants in their entertainment shows and news all through the transmission plan (Issa, Hussain, & Shaker, 2019). Political parties from the south of Iraqi Kurdistan were practically neglected.

Outside of Iraq, there are some satellite stations and they are not financed by religious groups or political parties. These media platforms are commercial stations with extra support from Sunni Arab and Iraqi financiers and some are funded by the Iraqi government. Despite the fact that they have claimed to be independent, there are criticisms that because of partisan ownership, these media outlets clearly support the

Sunni Arab predisposition (Ali, 2019). Al Baghdadi is one of the main 10 channels viewed in Iraq. This station started operating from Egypt, Cairo to be precise in 2004 with a focus on entertainment and news. The inclination of their transmissions was portrayed on the website of Newseum as the channel that frequently criticizes the U.S. invasion of Iraq and the Iraqi new government. An Iraqi business mogul known as Dr. Awn Hussain al Khaskhlok who once operated in the intelligence office of Saddam established the channel. In spite of his Shiite affiliation, the editorial strategy of the channel mirrors a Sunni perspective (Mahdi, Yousif & Dosky, 2020). The station became a topical issue on December 14, 2008, during a press conference in Baghdad, their reporter named Muntadhar al-Zaidi threw his shoes at President George W. Bush of the United States.

In February 2004, another media house situated in Beirut, Lebanon called Al-Diyar (The Homeland) started operations. Faysal al-Yasir who once worked in radio and TV during the Saddam era controlled this channel. The channel to a limited extent was funded by Arab Radio and Television Network owned by a Saudi business tycoon known as Salih Kamil. Al-Diyar is basically an entertainment station with some news programs. When Al-Sharqiya was established in 2004 with a blend of news and unique entertainment program customized for Iraqi viewers became the most well-known TV station in Iraq (Alasedi, 2014). Comedy and drama programs were prepared and created by Iraqis in an Iraqi accent, basically by Iraqis in exile in Amman and Damascus. The main non-Iraqi content is the kid's shows. Iraqi business tycoon Saa'd Bazzaz who once headed Iraqi government media in 1992 owned this media house, he escaped from Iraq after a fallout with Saddam and came back after the Americans invaded Iraq. The Shiite government authorities perceived Sharqiya as a Sunni media

outlet primarily because the Sharqiya newscasters wore black clothes after the execution of Saddam Hussein. The Iraqi government closed Sharqiya soon after, indicting Bazzaz for inciting partisan violence (Alasedi, 2014). Bazzaz kept on competing for the unwavering support of Iraqi viewers by moving his activity to Dubai. Sharqiya won the struggle with entertaining games, unscripted TV shows, and comedies. Sharqiya's coverage of the 2010 elections was slanted toward the Sunni alliance led by Iyad Allawi and the Mir'at observing group inferred that the station upheld Allawi even though negative coverage was aimed at the Prime Minister (Alasedi, 2014). An Iraqi expert in the Committee to Protect Journalists known as Mohamad Abdul Dayem stated the Iraqi media space has evolved as a clear Iraqi model since the end of the Saddam era. The Iraqi media space is pluralistic, but not guaranteed to be free. A media scholar known as Ibrahim al Marashi depicted a framework where the right to speak freely is ensured in the constitution. In any case, there is no assurance that journalists in Iraq can cover stories, leading to serious media limitations. He noted that specific political parties are satisfied when their media outlets displayed their political ideologies, however, will fiercely target media practitioners and writers who might cover news that irritates them (Abdul-Reda and Al-Shammari, 2020).

Human Right Watch (HRW) on the 12th of April, 2010 approached the Iraqi government to eradicate media guidelines that force strict media limitations on the nation's media outlets. HRW through a letter of objection to the Iraqi Parliament claimed that after the first minor violation, the new rules enabled the agency to confiscate licenses and call on the parliament to end the abuse and intimidation pointed toward gagging the press (Rasheed, Azeez, & Al-Salhy, 2016). New rules and

regulations by the CMC and the Ministry of Communication were given following a year of legal intimidations against independent and private Iraqi media houses. Government authorities flung lots of defamation suits, an unparalleled legal attack against private media utilizing Order 14 of L. Paul Bremer and Saddam's administration regulations prohibited complaints about government authorities.

A newspaper publishing house called Al Baynanat al Jedidia was sued in March 2009 by the leader of the Al Mansour Organization who also doubles as the Minister of Oil for publishing editorials alleging corrupt practices in the organization. Notwithstanding the defamation charges, Al Baynanat al Jedidia requested more than \$700,000 in punitive fees (Al-Duhaidahawi, 2015). Leader of the public railway company in April 2009 sued al Diyar, a private TV station based on a report on the employees' poor working conditions in the Anbar region, and \$70,000 was granted to the company in punitive fees. As a result of misquoting the spokesperson of the military, Sharqiya TV was sued and the court levied a fine of \$74,278 on the channel. The trade minister in May took legal action against a newspaper publication indicting the minister of corrupt practices including the parliamentarians. An international media watch group called Reporters Without Borders openly denounced these legal claims by public officials. There is a shipload of legal suits on the grounds in Kurdistan since the focal force of the two political parties that manage everything is Kurdistan definitely more united than the main authority in Baghdad and they have been taking legal actions against the press for quite a long time (Mahdi et al., 2020).

### **2.2.1 The Iraqi Media during the Ba'ath Rule, 1968–2003**

The Ba'ath Party was able to seize control of the country's political system in the year 1968, and the government's monopoly over the media was consolidated in the years

that followed, notably with Saddam Hussein's rise to power in 1979. Saddam Hussein, drawing inspiration from the communist model, reorganized the Iraqi media in such a way as to ensure that the state maintains complete control over the media environment, even at the expense of impartiality. According to Aumente et al. (1999), the ideal of impartiality as a non-sectarian paradigm was abandoned during the time of communist control, primarily in Eastern Europe, because it was regarded as an untruth at the time. The obligation of the media was to be at the service of the state, and journalists were considered to be nothing more than basic instruments to further this objective.

The instance of the previous Soviet Union and Eastern Europe is applicable to this exploration on the grounds that similar anti-imperialists and communist mottos some way or another molded Iraq under the reign of Saddam Hussein.

During the administration of the Ba'ath party, the majority of the structure of the media was determined by state policy. Unquestionably, social mores and standards, like the well-known Faith Campaign that took place in the 1990s, were disseminated to the general populace through various television platforms. According to Thompson (1990), philosophy plays a key role in the service of authority; as a result, the official media are an essential component of the political framework in Iraq. Prior to the year 2003, the media had evolved into a straightforward tool for propagating the ideology of the ruling political party, in particular in dictatorial nations such as Iraq. Outside journalists were only permitted to travel about and report freely inside the nation provided they were accompanied at all times by state officials, most of whom were members of the state intelligence agency. However, the status of the media in Iraq before to 2003 was not uncommon in the Arab world because several Middle Eastern states followed



equally stringent media rules. This was the case because Iraq was a member of the Arab League (Ayish, 2002).

For instance, based on Rugh's work on the Arab media, Rugh sees news broadcasting as being politically one-sided since different Arab governments mostly utilize them to fulfill their obligations to their political masters (Rugh 2004a). According to the Arab Human Development Report published by the United Nations, there are unified characteristics that characterize the Arab media due to the similarity of their communication practices. These unified characteristics include: At the expense of their ability to perform their other duties and responsibilities, the majority of Arab governments use the media to spread political propaganda and provide pleasure (UNDP, 2003).

To comprehend the media strategy, it is fundamental to examine how state officials perceive the media back then. The Minister of Information during the Iraq-Iran War, Latif Ansaif Jassim consistently underlined one of the renowned speeches of Saddam Hussein, when the Iraqi leader towards the end of 1979 addressed a gathering of pressmen operating under Dar Al-Jamahir, saying we advise you to report without fear or hesitation or constraint or wavering and regardless of whether the government is happy with your report (Jassim, 1990). This assertion demonstrates the twofold policy operated under Hussein toward the media since the truth was something else entirely.

Jassim (1990) advocated for self-censorship among Iraqi journalists as a means of avoiding conflict with the Iraqi government. It was logical to assume that the bulk of Iraqi authors and journalists were residing in a state of constant terror in such a climate because of the possibility that a top Ba'athist may view what they had written as being

counter-revolutionary. Jassim admitted this anxiety when he once made reference to a news conference that was conducted in the territory that had belonged to the Soviet Union in order to denounce the arms agreement with Iran. Despite this, it was not covered by any of the Iraqi news outlets. The Iraqi media did not attempt to hide the information. Instead, it was only distributed to high officials in a classified bulletin that was designated Al-Rashid and was shared among them (Jassim, 1990).

### **2.3 Media Coverage of Environmental Issues**

This refers to contaminating the air, land, and water in a variety of different ways. Environmental pollution encompasses all of these factors. Agriculture, industrial activity, and human habitation are only some of the urban and suburban factors that contribute to environmental pollution. As a result of the industrial revolution, which occurred in the 19th century in Europe, North America, and China, there has been a significant increase in environmental pollution.

Multiple stresses that are caused by humans are having an effect on the marine ecosystem. The deterioration may be noticed in coastal areas, and it has even extended to extremely distant portions of the deep waters and the polar regions. Around the globe, urbanization is spreading into previously rural coastal regions. A phenomenon that is observable in East Asia and particularly strong in South Asia, the Middle East, Europe, and the Americas is the movement of people from the interior portions of regions to the coastal zones of such regions. This migration of people has taken place all over the world. The direct disposal of waste contributes to the spread of pollution through the air and water as well. Changes in drainage regions that are caused by humans can modify the amount of sediment that is carried into coastal seas, which can contribute to erosion. Human activities such as building, landfilling, and dredging can

also result in altered patterns of decline and sedimentation. The removal of fish from an ecosystem may throw off its delicate balance, which in turn can be exacerbated by the employment of harmful fishing gear. Fisheries are a major contributor to the degradation of the ocean's ecology, making them one of the most important factors in this regard. The primary contributor to pollution in maritime environments is activity associated with the maritime sector, specifically ship operations. Accidents that take place during the transportation of oil and ballast water tanks that move potentially dangerous aquatic creatures from one location in the ocean to another are two examples. In addition to this, there is the trash that is dumped into the ocean, particularly plastics, which can linger there for a number of years without breaking down. Ships and other maritime platforms are also responsible for the emission of exhaust gases that contain soot, nitrogen oxides, and greenhouse gases. In addition, ships often dump their effluent into the ocean.

In addition, it is projected that shipping companies operating container ships lose more than 10,000 containers at sea each and every year. In addition to this, the discharge of cargo residues from bulk carriers carries with it the potential risk of hurting ecologically sensitive sites in addition to economically and commercially critical key places. Examples of such locations include ports, canals, and beaches. Oil spills have the potential to cause severe damage to streams as well as seas. The polycyclic aromatic hydrocarbons (PAHs) in the oil are responsible for the majority of the poisoning, although the physical characteristics of oil, namely its stickiness, presents a considerable challenge for a number of different creatures, including birds. Oil spills entail a multitude of detrimental effects, both immediately and over the course of time, which ultimately lead to economic and financial losses.

The methods of recovery and clean-up are also exceedingly expensive; examples are the clean-up from the Exxon Valdes and the clean-up from the Deepwater Horizon oil spills.

When ships go aground or clash with one another, there is a greater potential for catastrophic oil leaks. In addition, every ship carries fuel oil, which may be just as hazardous to the surrounding ecosystem. Not only do catastrophes provide possible dangers to the environment, but so does the routine operation of marine navigation. There are a variety of factors that might contribute to environmental hazards. When unclean water from the engine room that has been contaminated with even trace amounts of oil is pumped out into the ocean, for instance, this contributes to the pollution that occurs in the marine environment. In addition, oil that seeps into the sea from fuel oil bunkering in high-risk places has a significant negative influence on the marine ecosystem (National Research Council (2002)).

Marine species concentrate some of the hazardous compounds in the Shat and those toxins have the potential to bio-accumulate up the food chain, consuming fish poses a risk to human health. As a result, the pollution of the ecosystem surrounding the river will put people's lives in danger and result in financial losses. Even though the percentage of marine pollution caused by oil spills is relatively low when compared to other environmental pollutants, the international community is closely monitoring these activities and attempting to limit or reduce them by imposing rules, regulations, and standards through the establishment of international conventions, codes, and domestic legislation. This is despite the fact that the percentage of marine pollution caused by oil spills is relatively low (Jeffrey, 1997). Damage to Iraq's environment on a massive scale was inflicted by wars led by the United States beginning in 2003 and

continuing as far back as 1991. This had a significant impact on the quality of life and ability to make a living for the people of Iraq. The decade of United Nations sanctions that came in between only made the matter worse. The United Nations Security Council placed an embargo on Western nations and Iraq four days after Iraq invaded Kuwait in 1990 and maintained it until the United States attacked Iraq in 2003. The embargo prohibited all commercial and financial activities between Western nations and Iraq. The imposition of these sanctions was intended to coerce Saddam Hussein into leaving Kuwait and giving up his stockpile of weapons of mass destruction. However, rather of accomplishing these objectives, the sanctions mostly resulted in the suffering of Iraqi civilians. The parallel United Nations initiative known as "Oil for Food," which was intended to send humanitarian help despite sanctions, was riddled with corruption and abused by Saddam Hussein, who stole millions of dollars from the scheme (Tasic, Rajsic, Novakovic and Mijic, 2006). As a direct consequence of the sanctions, child death rates and other health indicators skyrocketed to worrisome proportions prior to the invasion of Iraq by the United States in 2003. The United Nations Environment Program (UNEP) now deems the environment of Iraq to be in a very poor state. Both the Tigris and the Euphrates rivers are extremely contaminated with garbage from industry and the military, putting the health of residents in the area at danger (United Nations Environmental Programme, 2013). The sewage treatment infrastructure in southern Iraq failed during the 1990s and the early 2000s as a direct result of United Nations sanctions and Saddam Hussein's policy of vengeance for the protests that occurred in 1991.

Because of deteriorating hydraulic infrastructure, surface water became contaminated with the garbage and sewage that was spilling. The construction of upstream dams in

Turkey along the Tigris and Euphrates further complicates the issue of clean water supply by limiting the amount of water that can flow downstream to as little as fifty percent of what it was before the dams were built (USAID, 2017). Pollution from military detritus, such as unexploded ordnance, empty cartridges, military vehicles, and radioactive substances like depleted uranium from US bombs, has polluted the soil in Iraq, which has not fared any better as a result of the ongoing state of conflict. The United States fired over 1200 tons of munitions in Iraq during the Gulf Wars in 1991 and 2003, which compounded the pollution situation in the country (US-EPA, 2011).

As a direct consequence of this, the prevalence of cancer rose at an exponential pace, with an overall increase in the incidence of breast and lung cancer, as well as leukemia and lymphoma. In 2013, researchers reported 140,000 instances of cancer in Iraq. Since then, each year has seen between 7,000 and 8,000 additional cases of the disease being diagnosed. The incidence of breast cancer in Iraqi women rose from 26.6 per 100,000 in the pre-war period to 31.5 per 100,000 in 2009, with 33.8% of breast cancers being detected in girls younger than 15 years old. This is an increase from the pre-war period (Suryati, Khair, and Gusrianti, 2019). In addition, the number of children born with congenital impairments has skyrocketed. Between the years 1994-1995 and 2003, the number of babies born with congenital impairments at Basra's maternity department rose by a factor of 17. Children who were born with these malformations had three times the normal amount of lead in their tooth enamel, compared to children who lived in parts of Iraq that were not impacted by the conflict (Sivakumar, 2017). Despite this, the United States, with the assistance of the United Nations, has covered up its role in destroying the environment in Iraq. The UN Environment Program has recognized that the environment in Iraq is in a precarious

situation. Nevertheless, in general, concerns over pollution and human suffering that is caused by the environment have not garnered the same level of attention on a worldwide scale as the lauded restoration of Iraq's marshes (UNEP, 2013). The lack of attention paid on a worldwide scale to the environmental damage caused by the war in Iraq, in contrast to the widespread public praise around the protection of biodiversity in that country, can be directly connected to the interests of foreign corporations and donors. In spite of the fact that international forces have covered up the role that the United States played in the environmental and health issues in Iraq, they have portrayed themselves as redeeming the country by focusing on environmental restoration. Because of this, “the environment” has emerged as a central factor in political maneuvering (Sivakumar, 2017).

### **2.3.1 Media Coverage of Oil Spills**

The oil leak that occurred during the Gulf War, which took place from 1990 to 1991, was a direct consequence of the conflict. On August 2, 1990, Iraq invaded and occupied Kuwait, which marked the beginning of the war that would later be fought between Iraq, led by Saddam Hussein, and the troops of the Coalition. Long-running disagreements over territory and oil production led to the filing of the complaint (Joyner and Kirkhope, 1992). On January 16, 1991, when the conflict was already several months old, coalition forces conducted operations against Iraqi military installations in both Iraq and Kuwait. One week later, in response to these strikes, Iraqi soldiers reacted by pouring oil into the Persian Gulf, which resulted in a huge oil leak during the Gulf War (Joyner and Kirkhope, 1992). Because Saddam Hussein had previously threatened to dump oil into the Persian Gulf, the United States military had reportedly been prepared for such a maneuver, as stated by the Secretary of Energy, James D. Watkins.

At the end of January 1991, Iraq started dumping enormous volumes of oil on purpose into the Persian Gulf in what appeared to be an attempt to thwart a possible landing by United States Marines on the coast of Kuwait (Joyner and Kirkhope, 1992). Since of this, taking control of oil supplies by United States and Coalition forces was fraught with peril because sight and mobility were restricted. There is also the possibility, according to Joyner and Kirkhope (1992), that the leak was an effort by Iraqi forces to shut off crucial water supplies to coalition forces stationed in Saudi Arabia. In a protest to the United Nations, Iraq disputed charges that they had purposefully caused the spill and claimed that American bombings had triggered a release of oil from two Iraqi tankers. The allegations were that Iraq had caused the disaster intentionally (Rosenthal, 1991). The Sea Island Oil Terminal in Kuwait, which leaked between 70,000 to 80,000 tons of oil per day for a week, was identified by coalition troops as the principal source of oil that was released into the environment (Linden and Husain, 2014). On January 26, three United States F-117 fighter aircraft blew up pipelines to stop additional oil spilling into the Persian Gulf (Dorr, 1991).

The majority of the oil that was spilled was retrieved after the accident by skimming it off the top of the water using various cleaning equipment (Booth, 1991). It was thought that hundreds of thousands of barrels of oil had already been retrieved by the time April 1991 rolled around (Ali, 2019). Nevertheless, the effort of cleaning up was made more difficult by a shortage of finance and equipment, as well as by the continuing Gulf War. Due to the presence of these impediments and the fact that the majority of clean-up efforts were concentrated on oil recovery, relatively little clean-up work was done on the beaches of Saudi Arabia (Booth, 1991). Ken Wells claimed that an estimated 375 miles (604 kilometers) of shoreline continued to be blanketed in



oil in a piece that was written for the Wall Street Journal 14 months after the disaster occurred. Environmentalist organizations who were concerned about the long-term impacts of the oil attacked the Saudi government because it did not pay enough care to the beaches and other vulnerable habitats in Saudi Arabia, such as mangrove forests and marshes. Since the initial news of the leak in January 1991, many people have had the possibility that it may inflict damage to the environment at the forefront of their thoughts. Booth (1991), reporting for The Washington Post on January 26, 1991, identified many specialists who had profound worries about the leak and its implications on the ecosystem, calling it a “ecological disaster” (Lippman and Booth, 1991). (Lippman and Booth, 1991). In spite of the heavy industrialization that surrounds the Persian Gulf, there is still a rich biodiversity to be found in this region, including several species that are in risk of extinction (Booth, 1991).

On the other hand, more recent scientific research has a tendency to disagree with the estimate of long-term ecological harm that was done in 1993. Dr. Jacqueline Michel, a geochemist from the United States, stated in 2010 that the oil spill had significant and long-lasting consequences on the ecosystem. According to the findings of her investigation, a sizeable portion of the oil persisted after 12 years because it had an extraordinarily high capacity to permeate the sediments of the Gulf. According to the findings of Linden and Husain (2014), the oil reached a depth of around 10 centimeters in 2002. In spite of this, oil was found to have penetrated about 50 centimeters in certain areas, a depth that greatly slows down the natural decomposition process (Linden & Husain, 2014). In 2001, after conducting research on the sediments of the Gulf of Mexico as well as the ostracods, which are small crustaceans that live in the sediment deposits, Mostafawi discovered that offshore sediments and the organisms

that live in them were still impacted by the oil spill that occurred in 1991. This discovery was made after Mostafawi had studied both the sediments of the Gulf of Mexico as well as the ostracods. In their study published in 2017, Joydas et al. came to the conclusion that while open water areas had low concentrations of hydrocarbons in the sediment, isolated bay areas had "alarming levels" that impacted the quality of life of species living in such places and regions (Joydas; Qurban; Borja; Krishnakumar; Al-Suwailem, 2017).

The vitality of the Persian Gulf's many ecosystems, such as its coral reefs, salt marshes, mud flats, and mangrove forests, has been the primary subject of studies conducted by researchers (Booth, 1991). Researchers Linden and Husain (2014) and Issa and Vempatti (2018) came to the conclusion that the oil spill had a little impact on coral reefs. After more than nine years had passed, several experts discovered that marshlands and mud tidal mudflats remained to hold significant quantities of oil, and it is possible that complete recovery will take decades. In 2001, a German geographer by the name of Dr. Hans-Jorg Barth discovered that the spill had not completely repaired the damage done to salt marshes, although rocky beaches and mangroves had fully recovered. He links the slow healing of the salt marshes to the absence of wave action/physical energy and oxygen in the environment, both of which are crucial components in the natural decomposition of oil. In addition, he cites a lack of oxygen in the ecosystem as another contributor. Issa and Vempatti (2018) also discovered that by 1995, the majority of mangrove forests had already recovered. Issa and Vempatti (2018) discovered that salt marshes had a slow rate of recovery following the oil spill, however they discovered that mangrove forests had not recovered by the year 2003. It was stated by Linden and Husain (2014) and Issa and Vempatti (2018) that the oil had

lost the majority of its toxicity by the time it reached the coast; nonetheless, the oil-coated oil-coated plant obstructed light and air, causing damage to the vegetation. Both teams of experts came to the conclusion that the spill was responsible for the deaths of a great number of seabirds, including over 30,000 grebes and cormorants, since the spill coated the feathers of the birds. Linden and Husain (2014) discovered that the leak had virtually little impact on marine turtles, with the exception of the Hawksbill Sea turtle, which saw a lower hatching rate than the 1991 spill might have produced. In addition, they came to the conclusion that the spill had a little impact on the fish species found in the northern Gulf. The oil spill had little effect on the fish species that live in the northern Gulf of Mexico.

In the early days of the oil leak, President George W. Bush referred to Saddam Hussein's approach as a "sick" act. He termed it a "sick" act because it allowed oil to seep into the Persian Gulf. In January 1991, Andrew Rosenthal of The New York Times stated that the United States administration was ready to use the legislation to further demonize Saddam Hussein and establish Hussein as terribly evil. Rosenthal's observations were published in The New York Times. Pete Williams, a spokeswoman for the Pentagon, referred to the leak as "environmental terrorism," while Roger E. McManus, from the Center for Marine Conservation, remarked that Hussein "should be held responsible for his horrible crimes against the environment." Many people believe the oil leak that occurred during the Gulf War to be "the world's first known act of large-scale eco-terrorism" (Linden and Husain, 2014). The fisheries and oil businesses near the Persian Gulf suffered severe economic loss as a result of the oil leak that was triggered by the Gulf War. In 1991, fishing for fish and prawns was prohibited in the Gulf of Mexico as a direct result of the war and, more specifically

and primarily, the spill. Additionally, fishing equipment and infrastructure were destroyed as a result of the leak (Linden and Husain, 2014). Issa and Vempatti (2018) state that the accident resulted in a loss of between 1.5% and 2% of Kuwait's oil reserves, which equates to a loss of between \$12.3 billion and \$38.4 billion.

In the event of a leak, the Coast Guard would also be responsible for overseeing the work done by private contractors such as Usher, whose business, Marine Pollution Control, was one of a handful of companies recruited in 1991 to mitigate the effects of an oil spill on the coastline of Saudi Arabia. During the event that occurred in 1991, approximately 6 million barrels of crude oil were spilled into the Persian Gulf. That oil disaster was the worst one in history, but Iraq is capable of causing considerably more destruction than that. Iraq "may deliberately discharge up to 2 million to 3 million barrels a day of oil into the gulf," according to a source from the Pentagon who spoke with reporters in January of last year. "Because of the oil manifolds in Al-Faw peninsula," the source said. Protecting the desalination facilities that provide millions of people living along the Gulf coast with fresh water would once again be the primary concern, as it was in 1991. In 1991, filters and "booms," which are floating, caged cages that prevent oil from leaking through, were installed to protect input valves from contamination. "Skimmers" were utilized to collect any oil that got through the booms despite their best efforts. Two Coast Guard planes supported crews by photographing and mapping the flow of the oil spill, while experts from the United States contributed to the development of computer models. This time around, the preparation incorporates more modern technology, such as the recent deployment of twenty buoys into the Gulf of Mexico that carry sensors to assist in predicting the flow of oil spills.

The massive amount of crude oil that was discharged into the Persian Gulf demanded efficient cleanup efforts. As a result of this, the utilization of microorganisms and bacteria for the purpose of bioremediation of this spill was favored. The ruling favored the prevention of the dumping of more chemicals into the waterways, which would have made the situation worse. Because of the oil disaster, the quality of the drinking water in Saudi Arabia and Kuwait was already in jeopardy because these countries were dependent on desalination plants (Ali, 2019). Ali (2019) conducted research to determine the species of bacteria that were responsible for the most efficient removal of crude oil from water and soil samples collected in the Persian Gulf. These bacteria were ineffective in extensive bioremediation unfortunately due to the fact that many strains of bacteria work inside a niche and are selective in what they break down. Instead, the focus of this study was on the bacteria that are found along the beaches and are responsible for the natural attenuation. This research is only one of several that have been conducted to investigate bacteria in various areas around the Persian Gulf. This is due to the fact that each strain of bacteria has its own distinct characteristics.

Several times during the course of the conflict, Saddam Hussein not only threatened but also carried out purposeful attacks against the environment as a method of waging war. When the coalition forces crossed the border into Kuwait to recapture the country, the Kuwaiti oil wells were already engulfed in more than 500 roaring fires that had been started purposely by Iraqi troops. An additional form of Iraq's deliberate assault on the environment was the country's decision to spill oil into the Persian Gulf. This decision necessitated an effort on the part of the international community to clean up two to three million barrels of oil, which put at risk the wildlife, water desalination plants, and industrial facilities in Kuwait, Saudi Arabia, Bahrain, Qatar, the United

Arab Emirates, and Oman. By executing these heinous acts of environmental terrorism, Iraq has breached a number of international laws and treaties pertaining to the environment as well as rules governing the conduct of war (Werrell & Femia, 2017).

In addition to this, Saddam Hussein engaged in environmental sabotage in the form of deliberate oil leaks. In the early morning hours of January 22, 1991, two Iraqi tankers operating in the northern Gulf of Mexico started leaking oil into international seas. After that, there were three more drops that were done on purpose: the first was in the Khafji region, the second was at the Sea Island Terminal at Mina Al Ahmadi in Kuwait, and the third was from the Iraqi offshore terminal at Mina Al Bakr. It is estimated that the total amount of crude oil that was released exceeded three million barrels. This is about 10 times the amount of oil that was released into the seas of Alaska as a result of the Exxon Valdez disaster. It is on par with the Ixtoc catastrophe in the Gulf of Mexico in 1979, which holds the record for the greatest accidental oil leak in history (Suryati, Khair & Gusrianti, 2019). According to statements made by Saudi spokespeople, the waterfall was around nine miles long and had been flowing for three days (Ali, 2019). The strategic importance of oil was the primary motivation for the deliberate pollution of the Gulf of Mexico. Iraq was concerned that such a large oil spill may cause difficulties for coalition soldiers if they attempted to land on the coast of Kuwait (Ali, 2019). In addition, the igniting of the oil slicks may have produced a firewall wall, which would have effectively forced allied naval vessels to operate further offshore. The three million barrels of oil that were spilled were not useful for any military purpose, however, because the liquid evaporated and spread out, and there were not sufficient amounts of oil that were discharged. They did nothing but do

damage to an ecology that was already vulnerable in the Persian Gulf (Suryati, Khair & Gusrianti, 2019).

As a result, the Gulf area would continue to be impacted by any oil leak until the oil was completely gone. The aftermath of the oil spill has resulted in cataclysmic consequences for the world. Over 450 continuous miles of shoreline have been contaminated as a result of the oil leak. The beaches and marshes on the Persian Gulf's northern shore have sustained significant damage as a result of the storm. The beaches have been paved over with thick mats of congealing oil, and it has also washed into coastal wetland areas such as mangrove swamps and salt marshes. Oil that was stored in ponds and lakes has caught fire. It is possible that it may take twenty years for the Gulf of Mexico to recover from the consequences of the oil slicks that were generated by the war, according to experts from the Royal Society for the Prevention of Cruelty to Animals in Britain. The environment of the Gulf of Mexico is one that is both sensitive and rich. It is home to shrimp fisheries, more than one hundred kinds of fish used in commercial fishing, and dozens of species of animals, birds, and reptiles, some of which are threatened with extinction (Sardar et al., 2013). It is possible that dolphins in the Gulf of Mexico suffered injuries for the same reasons. Other marine animals, such as porpoises, seabirds, sea turtles, and sea snakes, might have been negatively affected as well. The danger also exists for species that live anywhere from the midwater zone, which is home to plankton-eating anchovies and larger fish, all the way down to the rich seabed, which is covered in seagrass meadows that are home to shrimp, pearl oysters, and a variety of other species that are important for the economy (Ali, 2019).

### **2.3.2 Media Coverage of Land Decay**

Land usage in Iraq has been heavily impacted by the role that it plays in the country's economy, as well as by military wars, population relocations, and interventions by the government in regulation of agricultural output (Schnepf 2003). 34 million hectares, or 77.7 percent of the total national area of 47.3 million ha, is not suitable for agricultural use under the current environmental and economic conditions. Less than 0.4 percent of the land in Iraq is covered with forest and woodland, most of which may be found near the country's northern border with Iran and Turkey. Agriculture takes up around 9.5 million acres of land, or 22% of the total land area. However, almost half of this land has only a limited usefulness because it is utilized year-round just for grazing seasonal animals, most often goats and sheep. About 340,000 hectares are devoted to the cultivation of principal tree crops, including grapes, olives, figs, and dates, with the latter being the most common. The majority of tree crop production takes place in and around Karbala (Schnepf 2003). Field crops consist of vegetables, cereals, pulses, and fruit, and the areas under cultivation at any one moment might vary depending on the market and the weather conditions, although they typically range between 3.5 and 4 million hectares (ha). 75–85 percent of the agricultural land is devoted to the production of grains, particularly barley and wheat (Schnepf 2003).

In Iraq, cultivated land usage may be broken down into two distinct regions: the central-south irrigated zone, which is responsible for the production of fruits, vegetables, and cereals; and the rain-fed northern site, which is responsible for the production of winter grain. Around one-third of the nation's grain crop is produced in a particularly fertile region that is located in the foothills of the Kurdish autonomous zone. These characteristics allow for the crop to be watered by rain. In addition, the



crop yield from rain-fed agriculture is often modest and fluctuates depending on the amount of rainfall. The irrigated zone that extends along and between the Tigris and the Euphrates rivers accounts for the remaining portion of Iraq's cereal output (Schnepf 2003). (Figure 1). Although there is only one harvest cycle each year, some vegetables can be harvested numerous times if they are grown in areas that are irrigated. Due to the presence of a salty water table, the irrigated lands in the central-south region of Iraq have been subject to salinization over the country's entire history. Because of this, even a slight excess of irrigation can cause the salty water to rise to the top (Schnepf 2003). The grazing of livestock takes place in all agricultural zones as well as in places that are solely utilized for pastoralism, whereas the production of poultry takes place near urban centers. The United Nations imposed sanctions on Iraq beginning in 1990, which resulted in a large reduction in the country's poultry and animal numbers owing to the conversion of rangeland to cereal crops, as well as a decrease in the importation of feed grain and veterinary medications.

The Gulf War in 1991 caused substantial damage to the irrigation and transportation infrastructure, which resulted in a major fall in agricultural production. After this point, salinization spread throughout a significant portion of the irrigated land in the country's center and southern regions, causing these areas to become significantly less useful. After the conflict in 1991, there was a lack of rural labor, which led to a reduction in the amount of land used for agriculture. A large portion of this reduction was due to the departure of foreign guest workers (Schnepf, 2003). Following the end of the war, the government increased the official price of the primary field crops in order to control the use of land and increase agricultural output. It increased the amount of land that could be used for cultivating cereal crops in the northern part of the country. Farmers

whose crops did not match the required output levels had their land taken away by the government. Farmers expanded their cropped areas primarily by cultivating land on unstable hillsides and marginal pastureland in response to rising food prices and financial incentives offered by the government. The record number of hectares dedicated to crop agriculture reached its highest point in 1992 and 1993. (Schnepf 2003). The Middle East was struck by a prolonged drought from 1999 to 2001, which had a substantial impact on agricultural productivity in Iraq. Cereal production in the rain-dependent north of the country was notably hit by the drought (Schnepf, 2003).

The deterioration of land in Iraq as a result of climate change is a big problem, but fighting is making the problem worse (Adamo et al., 2018). When the so-called Islamic State grabbed control of regions to the west and north of Iraq in 2014, rural families were compelled to abandon their homes, fields, and animals and flee the country. The Founding Fathers and Mothers were deprived of their principal source of food and money, forcing them to rely on little savings and assistance from regional and international organizations. In 2016, when it was finally safe for them to come home, many farmers were met with another setback: their homes had been destroyed by the fire, and their farms were parched. Because the water infrastructure was not maintained for two years, and some of it was damaged during that time, they were unable to replant the area (USAID, 2017). Because of the relocation, the land became more prone to desertification, which led to an increase in the degree of instability over time. According to some reports, the rate of desertification in Iraq might reach up to 90 percent of the country's total area, and 45 percent of the agricultural land in the country is at risk of drought and land degradation. It is concerning that Iraq is losing arable land at alarmingly high and quick rates, which might bring the country to the brink of

another disaster. Land reclamation is an essential component in the battle against food insecurity, and international organizations such as the United Nations High Commission for Refugees (UNHCR) are aware of its significance. The UN High Commissioner for Refugees (UNHCR) in Iraq is providing assistance to local farmers so that they can replant their land and contribute to the improvement of Iraq's security. Around 8500 displaced farmers were encouraged to return to their farms and replant native vegetables and fruits after the United Nations High Commissioner for Refugees (UNHCR) reconstructed the irrigation system and rehabilitated the central water canal in the village. This was made possible with the assistance of local partners (USAID, 2017).

### **2.3.3 Media Coverage of Climate Change**

The East Mediterranean Region includes Iraq due to its location, which is in that region. It is bounded to the north by South Anatolia, to the east and northeast by Iran, to the west by Syria and Jordan, and to the south by Saudi Arabia, Kuwait, and the Gulf. The most northern component of the region is where one will find South Anatolia. As a direct outcome of changes in the global climate, this geographical location is characterized by a variety of meteorological variables that are subject to variation. This contributes to the diverse topography of Iraq's surface. The consequences of climate change are currently being felt in Iraq in ways that are equivalent to or maybe worse than those in many other nations. The impacts of these climatic alterations are being felt in a variety of ways, including changes to weather-driving elements, increasing sea levels, and global warming. Multiple variables, including rising temperatures, decreased precipitation rates, changed distribution patterns, and growing evaporation rates, are causing water stress in Iraq. On the other side, they start off a chain reaction that leads to droughts, desertification, and

sandstorms. Iraq's southern portion of the Tigris-Euphrates delta is at risk of flooding due to rising sea levels. This indicates that Iraq is susceptible to the effects of increasing sea levels. The anticipated rise in sea level poses a threat to the Iraqi ports and shoreline.

Reduced water availability for arable areas has had a significant negative effect on the agricultural industry in Iraq up to this time. This is true for both rain-fed regions, such as those in the north and irrigated lands, such as those in the center and south, which utilize the declining flows of the Tigris and Euphrates Rivers. These flows have already been subjected to increased strain as a result of Turkey's unfair sharing policies, which are the primary source of the water resources carried by the two rivers. As is evident from all of the predictions and research conducted yet, the present negative trends about climate change look to continue into the future. The pattern of change in Iraq's already fragile environment includes the loss of arable land owing to desertification, the recurrence of droughts and sandstorms, and a drop in agricultural output. In the future, there will surely be far greater suffering among the public, which will finally result in civil unrest.

Countries and communities throughout the globe are already experiencing the intensified consequences of climate change, including rising temperatures, droughts, floods, shortages, and more intense and frequent natural disasters, as well as a rise in sea level. The worst blows are being dealt to the most defenseless of these nations. Iraq is one of these nations; it has been dealing with tremendous, interconnected environmental, security, political, and economic problems for some time, and climate change is predicted to make it considerably more difficult to overcome these obstacles. The subsequent paragraphs provide a more in-depth study of these alterations and the

impacts they have produced. The consequences of global warming, including water shortage and climate change, have altered all of the factors that govern the weather in Iraq and its neighboring countries, including water scarcity and climate change. These changes include a rise in temperature, fluctuations in air pressure, changes in the intensity and temporal and geographical distribution of precipitation, and a rise in humidity. All of these causes have also led to yearly streamflow volume discrepancies between the Tigris and Euphrates rivers. Model-based research indicates that these adverse trends will endure at least until the end of this century, and they may become considerably more prominent if greenhouse gas (GHG) emissions, notably CO<sub>2</sub>, continue at their current rates.

Another study has revealed an alarming reduction in precipitation over the whole Iraqi Tigris watershed, which has catastrophic ramifications. This is because the northern and northeastern portions of the bay are mountainous and get a substantial quantity of precipitation and snowfall, whereas the southern portions of the bay are rather flat. In contrast, the lower and western areas have lower average heights and get less precipitation on average. According to calculations, the reductions under the pessimistic emission scenario (A2) will be 18% and 38%, respectively, over the same two time periods. Under scenario (B1), precipitation in the Diyala River basin will fall by 17% throughout the two future periods, but under scenario (A2), precipitation will decrease by 26% and 40%, respectively. In the near future, the water levels in the basins of the Greater Zab, the Lesser Zab, and the Al-Adhaim Rivers will all decline to comparable levels, according to study by Adamo et al (2018 b). The stream flows of the Tigris and Euphrates rivers are also being affected by climate change. These rivers begin their trips near the borders of Iraq, and their watersheds are located in

places that are similarly impacted by climate change, as seen by the progressive reduction of their natural streamflow. The increased need for water in Turkey, Iran, and, to a lesser degree, Syria, which has led to a rise in water withdrawals in those countries, has exacerbated the problem over the last few decades, and it continues to worsen even now. This need has led to a rise in water extractions.

Due to the continuous pollution and salinization of the two rivers, which is caused by a rise in the use of fertilizers and the discharge of industrial effluent as well as residential waste and sewage without adequate treatment, these resources are under increased strain. Water is becoming increasingly scarce throughout the region, especially in Iraq, as time passes. This is due to climate change, environmental consequences, and continued human exploitation. Climate change exacerbates desertification because it alters the geographical and temporal patterns of precipitation. Variations in the quantity of precipitation that occur across a number of dry years or seasons cause alterations in the vegetative cover of the land, which in turn results in extremely protracted periods of drought. These modifications are the result of the soil's exposure to higher temperatures (IPCC, 2007). By modifying the regime of regional water resource systems, climatic change leads to the acceleration of desertification. Variable rainfall levels and rising temperatures, both of which lead to an increase in evaporation and evapotranspiration, induce a disruption in the balance between water outflow and water input. In recent years, the reality that climate change is causing droughts and rising desertification in Iraq and Syria, which are part of the Fertile Crescent, has been increasingly apparent. The two branches of the Fertile Crescent are Iraq and Syria.

Research also predicts the effects of current climate change trends on the water resources of the Middle East to the end of the current century, indicating significant decreases in the yearly flows of the region's rivers. These findings are crucial because they demonstrate that climate change will have a substantial effect on the region's water supply. In one scenario, the yearly flow of the Euphrates River may decline by 29–73 percent, while the streamflow of the Jordan River increases (Kitoh et al., 2008). This severe drought, which occurred during the rainiest season of the year, impacted the bulk of Syria and northern Iraq. As a result of global warming, the Mediterranean and Middle Eastern regions are witnessing a drying trend that is accelerating. Consequently, this landscape is growing increasingly susceptible to drought (Holthaus, 2014). The consequences of climate change, both now and in the future, will unavoidably affect the local ecosystem by shrinking lakes and increasing the number of dry wetlands (Sivakumar, 2007). This trend will disrupt and complicate existing efforts to restore the marshes of southern Iraq, and it may lead to the ultimate drying up of these wetlands. If they do not totally disappear, environmentalists predict that Iraq's wetland regions will remain a small percentage of their former size (Schwartzstien, 2015). This is due to the effects of insufficient rainfall and unsustainable irrigation methods. In 2009, the United Nations Development Program (UNDP) released a report on the implications of global warming on Iraq. In the five to ten years preceding the publishing of the study, precipitation in the Tigris and Euphrates basins decreased to 25 to 65 percent of normal levels, highlighting the severe droughts that Iraq had endured. According to the conclusions of this study, the fundamental reason for observed changes in global warming and oscillations in the North Atlantic Oscillation (NAO) is climate change (UNDP, 2009). According to the same study, the loss of soil moisture and plant cover would increase the likelihood of

catastrophic dust storms. In addition, it is projected that the extent of the impacts would increase over time. They will accelerate the degradation of the physical and chemical characteristics of the soil in arable and non-arable locations across Iraq. Sandstorms are happening more frequently as a direct result of the huge increase in aridity that is now being observed. According to the findings of Sissakian et al. (2013), who studied the incidence of sand and dust storms in Iraq, the frequency of dust storms has increased dramatically over the previous decade. In 2012, the Iraqi Ministry of Environment reported 122 dust storms and 283 dusty days, according to the United Nations report. In addition, the report adds that these figures were recorded in 2012. According to their forecasts, there would be an average of 300 dusty days each year by 2030. (UN. 2013).

Recent changes in the Middle East's climate are nearly completely attributable to the effects of global climate change. Significant changes in the region's normal annual temperatures and precipitation have contributed to the escalation of desertification and storms involving sand and dust. As a direct result, a substantial chunk of Iraq's landmass has been changed into a zone with a Very High Potential for the occurrence of dust storms, while the sole region with a Moderate Potential for dust storms is a very tiny one in the far north-east of the nation. Taking into account the just-explained present trends of future climate change on the Tigris and Euphrates river basins, the phenomena of rising sand and dust storms would reach unthinkable proportions by the end of the century, unless regional and local corrective actions are implemented. Examples of such measures include the stabilization of dunes, the creation of comprehensive and extensive green zones around cities, the use of trees and shrubs



with a high tolerance to moisture deficiency in large-scale afforestation projects, and the implementation of modern practices to conserve water and soil resources.

In addition, climate change computer models project that sea levels would increase by more than 0.5 meters by the end of the century. Low-lying coastal districts in the Gulf and Shatt-al-Arab region as well as those in North Africa would be particularly at risk, according to one study. The article specifically names Iraq as one of these locations (World Bank, 2013). In a study on the implications of global warming on the coastal regions of the Arab Region, the sensitivity of Arab nations to the prospective effects of sea level rise was highlighted. (El Raey, 2010). According to the study's results, the majority of these nations are particularly vulnerable to the rising sea level, not only due to the possibility of direct flooding, but also due to the potential of saltwater infiltration. Another study evaluated the impacts of SLR on the Arabian Peninsula's coastline and found the nation's most at risk from the phenomenon (Ghoneim, 2009). In one simulation model assessment of the SLR, data from the Geographical Information System (GIS) and the Shuttle Radar Topography Mission (SRTM) were utilized. According to the simulation, about 41,500 km<sup>2</sup> of land area belonging to Arab states would be directly affected by a 1-meter increase in sea level if this particular SLR scenario were to occur. Taking into consideration the whole plausible range of projected temperature rises, it is possible that SLR will be aggravated to the amount of 1.4 meters by the year 2100. In comparison to the Shatt al-Arab estuary, which is located at the head of the Arabian Gulf, the Iraqi coastline is comparatively limited; nonetheless, due to its low elevation in respect to the sea level, it is considered as one of the region's most vulnerable areas. Even after accounting for the one-meter rise in sea level, regions of normal elevation extend north of Basra City. The potential impact

might have an influence on the salinity of the soil due to the intrusion of seawater. It is probable that severe flooding may occur in many sections of the delta formed by the Tigris and Euphrates, forcing the population to leave and destroying infrastructure.

Climate change works as a hazard multiplier by exacerbating pre-existing socio-political and economic vulnerabilities, diminishing people's capacity to make a livelihood, increasing the possibility of violent conflict, and making it harder for people to remain in their current places. Rapid climate change has an impact on a region's natural resources, which in turn has repercussions on the countries and global socioeconomic problems. These tendencies include population displacement, migration, political upheaval, the fragility of states, and internal conflicts. In addition, the authors infer that the transboundary character of certain climate change consequences may result in interstate conflict. In the third and final scenario, the Tigris and Euphrates Rivers' flows might serve as an example.

It is likely that violent confrontations might break out between Iraq and Turkey, Iran, or Syria as a result of the declining water supplies brought on by natural climate change as well as the uneven distribution of water resources by Turkey and Iran. Syria is the other riverside country. In times of desperation, when there is widespread discontent and population pressure, similar tactics may be employed. In view of current socioeconomic events in Iraq, it is plainly obvious that climate change is having a negative impact on the country, and it is realistic to assume that these consequences will grow far more severe in the coming years. Climate change is one of the key reasons leading to the decline in the number of people working in agriculture in Iraq during the past many years. The rising migration from rural regions to urban centers and the significant importation of food and farming supplies are two signs that indicate

to a negative trend in agricultural productivity as well as in the quantity of acreage that is being farmed. The impacts of global warming on agriculture were the focus of study undertaken by Cline (2007), who published a list of such effects for the majority of nations, including Iraq. Agricultural impact models of two distinct types, known as "Ricardian" statistical economic models, as well as process-based agronomic crop models and leading climate model projections were applied.

Then developed a set of geographically specific forecasts for the changes in temperature and precipitation that will take place by the 2080s, and we applied those estimates to the agricultural impact model that we picked, which was the Agriculture Mendelson- Schlesinger Model. Following the comparison of the changes in the predicted agricultural outputs values against the actual output values in 2003, which were then compared to those values in 2007 and then projected to the future period 2070-2099, these estimates were obtained and used for 116 countries, regions, and subzones. The climatic values for these nations, regions, and subzones were collected from the period 1961-1990 as the base period. According to this research, Iraq was one of the countries throughout the world that had been hit the hardest, along with another 30 countries. The provision of these services is already subpar due to a number of factors, including incompetent management and a lack of available resources. Diverse consumers' rivalry for irrigation water has frayed social ties and precipitated the beginning of violent warfare between different tribes in southern Iraq. The Iraqi security forces have been requested to act in order to put such situations under control. Only if these trends continue at the expected rates can they be regarded warning signs of the worst-case scenarios.

Water shortage on irrigated land necessitates conserving and optimizing every drop of water. These enterprises require higher-quality agricultural and crop producing land. To stop the existing wastage of this scarce resource in the agricultural, residential, and sanitation industries, it is strongly advised to implement more equitable price for water. Consideration should be given to the utilization of reclaimed water and desalinization of salty water to assist prevent and minimize future water shortages. In addition to planning and implementing these measures, the administration must focus on obtaining a fairer and more equitable distribution of Tigris and Euphrates water from the nations of origin, notably Turkey and Iran. This is possible through ongoing talks based on the exchange of advantages. In order to resist the effects of sea level rise on the southern delta and coastline, it is required to do further research to determine the precise nature and locations of the alterations. On the basis of these proposed studies, plans for the phased deployment of protective works in the form of dikes and shoreline revetments can be developed. Settlements in unprotectable regions must be delimited, and permanent effects are prohibited. In addition, the established people must be relocated to other safe places where they will be provided with adequate living environments.

#### **2.3.4 Media Coverage of Pollution**

Due to the numerous chemical interactions and physical changes that impact air quality, this chemical composition is in a constant state of flux with respect to location and time (Al-Duhaidahawi, 2015). Air is one of the most significant environmental media because it facilitates the transmission and dispersion of both gaseous and suspended contaminants (Alghamdi, 2016). Air pollution is presently one of the most important challenges confronting both developed and emerging nations due to its detrimental impact on the quality of the atmosphere and the resulting threat to public

health (Al-Hassen et al., 2015). This is due to the enormous economic expansion, fast industrial development, population growth, building and demolition projects, and a significant rise in traffic, especially in metropolitan areas that the globe is currently experiencing (Ali, 2019). Air pollution is described as the presence of undesired chemicals in the air in sufficient quantities to cause harm to humans, animals, plants, and public property, or it interferes with lawful human uses and has colored air, such as brown, or the presence of offensive odors (Al-Kasser, 2018). In addition, air pollution may be described as the buildup of chemicals in the atmosphere as a result of excessive emissions from human-made and natural sources in sufficient amounts to threaten human health and the ecosystem (Alves, 2018).

Considering that breathing is a continuous activity, it is believed that people take in 20 m<sup>3</sup> of air every day (Chaichan et al., 2016). Compared to the daily intake of water and food (Alves, 2018; Ali, 2019) kg/day, air pollution is of utmost significance to the health of people and other living species, which is why scientists pay so much attention to it. Numerous studies have demonstrated that exposure to gaseous (Alves, 2018). Due to the potential of these pollutants to travel great distances from their origins via wind, air pollution is also defined by their indefinite impact on the location where pollutants are produced (Ali, 2019).

Gaseous pollutants: Population growth, together with concomitant increases in industrial development and traffic, has a significant impact on the growing concentrations of air pollutants, which has a negative effect on the health of both individuals and the environment (Ali, 2019). According to BahBacino'al (2018), there is a substantial association between the emissions of ozone-depleting species and hazardous gases such as carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen

oxides (NO<sub>x</sub>), sulphur oxides (SO<sub>x</sub>), and oxygen oximes (O<sub>3</sub>). The effects of exposure to gaseous pollutants include respiratory allergies and infections, a decrease in lung function, asthma, cardiovascular illness, a detrimental influence on the nervous system, and a rise in the incidence of bacterial and viral disorders (Bacino et al., 2018).

The destruction of oil refineries, wellheads, pipelines, and other oil infrastructure has led to the formation of pollution hotspots. There is a great likelihood that people have been exposed, either acutely or chronically, to a broad array of toxic chemicals, heavy metals, and particulate matter, all of which may have had major health impacts. Ground and surface rivers have been contaminated with oil compounds as a consequence of soot and oil spills, which has an effect on the availability of drinking water and water for agricultural purposes. Affected are both agricultural and grazing lands, posing significant difficulties for people attempting to earn a living from the land. Assessing, addressing, and monitoring the impacts of these attacks on health, the environment, and the economy will place a substantial technical and monetary burden on the Iraqi government (Kumar et al., 2022). Alghamdi (2015), Al-Kasser (2018), Ali (2019), and Abdul-Reda and Al-Shammari (2020) came to the conclusion that gaseous pollutants such as CO, O<sub>3</sub>, NO<sub>x</sub>, and Sox should increase due to the increased combustion of fossil fuels in industry, transportation, the generation of electricity, and agricultural fires. All of these researchers reached the same result.

## **2.4 Theoretical Framework**

### **2.4.1 Framing Theory**

According to framing theory, how something is presented to the audience (called "the frame") determines how individuals choose to receive the information. Frames are abstractions that serve to arrange, structure, or organize the meaning of a

communication. The most prevalent application of frames relates to the context in which the news or media present the information they provide. According to the notion of framing, the media build this frame by presenting news items with predetermined and limited contextualization. Frames can improve comprehension or be utilized as cognitive shortcuts to connect stories to the larger context. While there is a significant conceptual overlap between framing and agenda-setting (Weaver, 2007), framing is analogous to the second "level" of agenda-setting, which examines the relative significance of qualities of topics, as McCombs (2005) and Ghanem (1997) explain in detail. This agenda of the attribute is referred to as the second level, which differs from the first level, which has typically focused on issues (objects), despite the fact that the name "level" suggests that attributes are more particular than objects" (Weaver, 2007).

In the fields of communication studies and political science, the word "framing" is typically used in two different meanings (Scheufele, 1999). To begin, a frame in communication or a media frame is a term that refers to the words, images, phrases, and presentation styles that a speaker (such as a politician or a media outlet) uses when providing information about an issue or event to an audience. In other words, a frame in communication or a media frame frames the information that is presented to the audience (Druckman, 2001). The lens that was selected sheds light on the speaker's perspective of the topic's applicability. For instance, in the case of the Brooklyn Museum, the city's legal counsel emphasized on the right of the government to withdraw funds based on the artistic content of the project. They stated that "the city's view of art is that it is improper, because of the nature of the art itself." The disturbing, violent, and filthy outlook presented in some of these artworks shouldn't be supported by money that comes from the public. (Koromvokis, 1999). Second, the term "frame

of mind" or "individual frame" refers to a person's way of thinking about or cognitive comprehension of a certain scenario (e.g., Goffman, 1994). Forms in cognition, as opposed to structures in communication, which are indicative of the focus placed by a speaker, refer to what a member of the audience considers to be the most important facet of a problem. A person who believes that the Brooklyn Museum should have the authority under the First Amendment to select the exhibits that it presents is said to have a "free-speech frame of mind."

The practice of establishing an agenda is connected in some way to the idea of framing. However, it broadens the scope of the research by concentrating not on a specific topic but rather on the core of the problems that are now being faced. The idea that the media focuses attention on particular specific occurrences and then positions those events within a framework of meaning provides the foundation for the framing theory. Because framing is such an important issue because it has the potential to have such a large and substantial effect, the notion of framing has now been extended to organizations.

#### **2.4.1.1 Framing as the Relationship Between Issuer-Receiver**

Framing is a personal mental and strategic process, and a political strategic instrument. It can fundamentally influence how individuals make and plan ideas on any phenomenon. The debilitating of the goal functions made an ideal environment for the improvement of discourse that gives a different meaning inside the communication cycle. As per Lähtenmäki (1998), this present circumstance leaves different emotional perspectives in the information cycle that can get together with other individual perspectives in a dialogic interaction. Postmodern perception is that every single person has their own special perspective on the world. In order to get a deeper



comprehension of the connection that exists between objectivity and the dialogue that takes place between experts and the general public, it is important to examine the research that was conducted by Buber (1955) and Bakhtin (1986). Both parties emphasized the significance of conversational elements within human interactions.

Buber (1955) made reference to technical conversation directly in his work. This comprehension of contemporary life was brought about entirely by an insatiable thirst for objective information. The development that took place in the twentieth century may be observed when this idea is transferred to other forms of media. This perspective is relevant because the dialogical element takes control even in electronic communications. During the 1980s, they carried out a technique known as a "dialectic turn," which was founded on electronic discussions and electronic media. This has been true throughout postmodern times as well as the digital age (Soffer, 2009).

#### **2.4.1.2 The Visibility and Thematization of the Information**

The circumstances of communication in contemporary society are being altered as a result of the growing role that the media plays as a mediator of human connections. According to Thomson (2005), there has been a shift in the perception of one's own invisibility. In ancient civilizations, the visibility of persons, activities, and events was inextricably related to the sharing of a locale. This was especially true of social hierarchy. The individuals' spatial and temporal contexts were identical to one another. This condition's prominence has decreased as a result of the proliferation of various media. People are made visible despite the fact that they are situated in other, more remote and varied environments. The sort of visibility that occurs face-to-face is very different from the kind of visibility that occurs via the use of media. The rise of mediated visibility has resulted in the emergence of a wide range of new phenomena

connected to the manner in which information, pictures, and other types of materials are made visible to other people. Because of this, "the effect of the mass media varies greatly among subjects." [Citation needed] (Green-Pedersen & Stubager, 2010; Van Aelst & Walgrave, 2011, p. 297).

The process of thematization in communication assumes that this is carried out using the selection criteria outlined by Luhmann as "rules of attention," as noted by Noelle-Neumann (2003). According to Piel and Moya (2010), the norms that exist before thematization imply that individuals, despite the fact that they may have preferences, are only able to pick amongst the several thematic options that have been predetermined by the mass media.

Lastly, what Teez and Guevara (2009) refer to as "thematization" might be understood in a more general sense as "what is distributed in informative time and space from the media." According to the explanation provided by Fontcuberta and Borrat (2006), the agenda is a polyphonic communication of the media to their audience. This communication needs to be understood as the result of "the ultimate authority, supreme, final, of this production process: where all newsworthy events become selected current issues narrated and commented and grouped by areas and sections, where each theme unfolds in a narrative or argumentative under its theme" (pp. 56-57). These ideas are in line with the gatekeeping theories because, seen from the perspective of the media's role as selectors who are able to make information visible and thematize public opinion, the media functions as a gatekeeper. According to Giménez and Berganza (2009), one component of framing theory acknowledges that selection is an important component of the framing processes.

### **2.4.2 Agenda-Setting Theory**

The year 1922 is considered to be the year that marked the birth of agenda-setting theory. Lippmann illustrates how a certain agenda may be formed by the mass media, which can then affect the attitudes of the general people. In spite of this, he was the one who laid the groundwork for the philosophy of setting the agenda. McCombs and Shaw (1972) came to the realization that a certain proportion of the general populace frequently depended on the information that was supplied by the mass media. Those individuals who are eager and devoted to carrying out the message of the presidential campaign have a larger chance of having their rate boosted. According to Matsaganis and Payne (2005), after the publication of McCombs and Shaw's results in 1972, more than 350 investigations were conducted, which resulted in the enormous expansion of agenda-setting theory. This was highlighted as having occurred.

The agenda-setting hypothesis investigates the influence of mass media in influencing which problems are prioritized by the public and why. The focus or principal concern of the members of the society and the broader public is directed toward the overall plan. McCombs and Shaw are credited with coining the phrase agenda-setting theory (1972). This theory describes the connection between the media's focus on a problem and the response or characteristics that media audiences or the general public have in response to such a circumstance (Littlejohn and Foss: 2009). The agenda-setting theory begins by analyzing how the impact of the media may affect the pattern of political action during elections (Cohen: 1963).

Since then, the notion has generated and encouraged the production of hundreds of other studies on the manner in which the mass media frames and prime's themes for viewers. The subject of discussion is not limited to this, but rather involves how the

media depict a particular event to viewers (Matsaganis and Payne: 2005). Therefore, it is legitimate to ascribe responsibility for shaping public opinion and establishing the agenda to the mainstream media. It is conceivable for the mass media to intentionally or unintentionally influence the public agenda in this way (Iyengar & Kinder, 1987). The agenda-setting hypothesis is a foundational concept in mass communication, and its usefulness extends to other key domains of social science study, such as political communication (Reese, 1991). According to the agenda-setting hypothesis, it is argued that the mass media lack the ability to set the agenda for the general public, particularly in terms of ideas and attitudes (Cohen, 1963). Nonetheless, the mass media have a unique opportunity to impact the public's views, values, emphasis, and goals. Due to a large amount of influence exerted by the mass media, viewers prefer to construct their own opinions or hone in on topics they think essential enough to include in their mental agendas (Littlejohn & Foss, 2009).

According to the findings of a number of previous studies, politicians and public relations specialists have a strong relationship (Walgrave & Aelst, 2006; McCombs & Shaw, 1993; Roberts & McCombs, 1994). These findings raise the possibility that the government might have a role in creating the agenda for the promotion of its programs via mainstream media. Regarding election seasons or political ambitions, we concur entirely on this point (Walgrave, Soroka & Nuytemans, 2008; Rogers & Dearing, 1988).

#### **2.4.3 The Framing and Agenda-Setting: The Role of the Issuer in the Informative Communication**

When it comes to framing and defining an agenda, there are a few different ways to classify information. Within the framework of the notion of creating an agenda, there

are three different kinds of agendas that are connected and influenced by numerous aspects associated with the communication process: 1) the press, 2) the general populace, and 3) the political system. According to Dearing and Rogers (1996), agenda-setting happens when a subject is included on the agenda of a particular media outlet. The relevance of a matter will be evaluated by the audience in light of the coverage provided by the media. Therefore, the relationship between the media agenda and the public agenda has to be the focus of the most critical problem measurement or the initial topic of study on how to create the agenda for the future (Rodríguez, 2004). The current condition of an issue that affects other people can be ascertained through the use of the public plan.

In their study of the elections that took place in the United States in 1968, McCombs and Shaw (1972) discovered a connection between the many issues that were on the public agenda and the media coverage of those issues. Additional study has corroborated and demonstrated that there is a connection between the agenda set by the media and the general populace. The function of the media in selecting the subjects that demand the attention of the general public is the primary focus of the first level of agenda-setting. However, the initial scope of the agenda-setting process has been significantly broadened.

According to McCombs and Evatt (1995), the term "agenda-setting" refers to the issues that are included on the agenda and includes imagery and prospects that impact the emotional state and viewpoint of the audience. The designation of this research level as the second dimension of agenda-setting is as follows: (McCombs, 1994). The second level is determined by how an individual understands the items that pique their

attention. At this phase, the picture's subjective qualities and emotional undertones are established (Coleman et al., 2009).

In addition to the formulation of an agenda, one may see inter-media agenda-setting, which illustrates how the media elite conveys the powerful and important ecocritical agenda to other media. On the other hand, research on setting agendas has given rise to a conversation on priming and framing. When attempting to describe these themes in terms of the impact of establishing the agenda, this situation has arisen (Weaver, McCombs & Spellman, 1975; Coleman et al., 2009). By operating in this manner, the media create what is known as the priming effect, which primes the audience for the issues that they have selected. As we have seen, the concepts of priming and framing are related to the second level of agenda-setting because, despite the fact that some ideas were developed by McCombs and Evatt (1995) and McCombs and Bell (1997) in the last two decades of the 20th century, many current studies focus on these dimensions. This is true despite the fact that some ideas were developed by McCombs and Evatt (1995) and McCombs and Bell (1997) in the last decade of the 20th century.

#### **2.4.4 The Convergence of Agenda-Setting and Framing**

Over the last three decades, the notion of agenda-setting theory has expanded because to its compatibility and parallels with other schools of thought. It has featured concepts such as gatekeeping and conceptual completion, as well as a strategy based on public perception of the spiral of silence. Additionally, it is complete theoretically. Researchers in a range of fields, including the media, have recognized for a considerable length of time that agenda-setting and framing are fundamentally similar concepts. Agenda-setting is currently an intrinsic component of the scope of research on framing theory. To guarantee that the choice determined by the agenda-setting

procedure is the one that determines how to think, it is essential that the agenda-setting procedure be transparent. Framing defines the processes that decide how an individual feels, and as a result, it primes acquired arguments to choose what should be examined (Weaver, 2007). These points of coherence include the frames and framing techniques, the results of framing, the features of the agenda, the dynamics of agenda-setting processes, contingency situations, and the impact of agenda-setting and its influence (McCombs et al., 2003). According to Entman et al. (1993), “in the terminology of agenda-setting, framing is the choosing of a restricted number of topics to form a cohesive image of a given object”. Framing is the process of constructing an agenda by selecting a restricted set of subjects to build a coherent image of a certain thing (p. 51).

In addition to the images that are generated in our minds, according to McCombs et al., frame predisposes the person who hears the message to proceed down a certain path of thought (2003). This irony creates a new criterion for evaluating the media's effect on public opinion and the social attitudes of the mass populace. This applies to the processes of both framing and agenda-setting.

#### **2.4.5 Effects of Framing and Agenda-Setting on the Public Opinion**

Entman, Matthes, and Pellicano (2009) claim, regarding the impact of framing and agenda-setting on public opinion, that elites frequently strive to shape the media frame and affect the views of other elites and public opinion. This impact of structure on the press manifests itself in three distinct ways. First, the results of public opinion surveys on a subject or circumstance. Thirdly, via their evolutions within this rivalry among elites, elites use the information's context to draw their own conclusions and so influence public opinion. Thus, the authors observe that the war for the frame becomes

a complex chess game in which strategy is essential. Obviously, this implies that the actor that dominates the media infrastructure controls public opinion.

Several research, such as Chong and Druckman (2007), demonstrate, based on surveys regarding the framing effect, that many people avoid incorporating contradictory information into their thinking. Whether or whether framing impacts the majority of attitudes, "framing" the reality through social surveys and media is likely to alter the political level (Entman, Matthes and Pellicano, 2009). This indicates that both popular opinion and written opinion are quite limited. The significance given to particular topics by the media, or lack thereof, impacts public opinion, the significance assigned to particular concerns, and how individuals view them (Giménez, 2006). The general public, the media, and the elites evaluate, structure, and transmit information to influence public opinion. This should not be confused with the public's emotions, tastes, and feelings, which affect public opinion, and the official information divulged by journalists (Entman, 2010).

Framing analysis can aid in deciphering the significance of meta coverage. The two primary issues of the meta coverage (news and publicity) appear in conjunction with other stories in the media coverage: political topics, different themes, elections, etc. The combined presence of information and advertising in the media's communication environment provides a full picture of current events. In this respect, the news depicts the world as perceived and reconstructed by media professionals. The meta-coverage represents the journalistic perspective of a campaign (political or military) that cannot be observed as its whole. This results in journalists employing all three sorts of frames in their meta-coverage and explaining it under the idea of "media professionalism."



Agenda-setting theory is an essential mass communication theory. The agenda of the media may be inferred from the agenda of the audience. The aforementioned agenda-setting can also be determined by government policies or politicians. There are three basic agenda-setting entities, namely the public agenda, the media agenda, and the policy agenda. I believe that mass media agenda-setting simply informs audiences of what they should think, not what they should think. The mass media are capable of influencing the attitudes of media audiences and the general public. This may be accomplished by establishing the agenda of the mass media on a certain subject or agenda. The greater the influence of the media, the faster devices are employed to transmit information. In order to accommodate the effects of mass media on society or media audiences, society or the public must be equipped with the information necessary to analyze the overall facts and create an accurate judgment on the problem at hand. This is necessary to prevent society or media audiences from becoming dependent on the information provided by the media.

## **2.5 Review of Related Studies**

### **2.5.1 2001-2003**

Regarding the well-being of journalists, five out of six respondents felt that the salaries they were provided were inadequate. One of the journalists believed that the remuneration was "somewhat" acceptable. Iraqis were compelled to undergo hardships as a result of economic sanctions, which is the fundamental cause of this scenario. Every single respondent to the study claimed to have several jobs in order to make ends meet. Three respondents said that the alternative employment was unrelated to the media sector. Surprisingly, four of six respondents believed that journalistic ideals such as objectivity, balance, and impartiality were upheld within the relevant time frame. As five of the six respondents hold doctoral degrees in media and

communication, I will assume they have a thorough comprehension of these media-related terms. In addition, four of the respondents stated that they had received media training in a variety of contexts prior to 2003, the bulk of which was arranged by the Iraqi Journalists Syndicate. The editorial control exerted over the publications was one of the answers that stood out the most. Five of the respondents agreed that their editor used to provide them the freedom and power required to produce news. According to one responder, Iraqi journalists who got material from INA lacked the crucial independence to develop fresh news reports. This was brought up by only one of the responders. Both the editorials that were written and the events that were covered made this pretty evident. However, the great majority of outliers would not have been detected by the censoring radar, therefore they would have been dismissed. Every Iraqi journalist was informed that it was illegal to contradict the official line or spread banned materials, and that if they were detected doing so, they would either be imprisoned or subjected to torture. Regarding the gatekeepers, enormous pressure was applied to guarantee that no critical perspectives were disseminated with the broader public. In Iraq, criticizing the nation or the government was absolutely prohibited.

It was not until the early years of the new century that the Internet became accessible in Iraq, making it one of the world's least developed countries in this respect. Since it precluded unlimited communication with the rest of the world, the Iraqi public was only granted limited access to it. For example, ordinary Iraqis were unable to access email services such as Yahoo and Hotmail owing to limitations. The only permissible email account had to be created through uruklink.net, the government-run Internet service provider. An anti-Baath proclamation was posted on the official website of the Iraqi government in March 2003, barely a few days before the beginning of the military

operations that were being carried out in Iraq. The website seemed to have been compromised by American hackers. There were 45,000 individuals utilizing the Internet, the bulk of them were officials from various government departments (OpenNet Initiative 2007, pp. 1–2). (OpenNet Initiative 2007, pp. 1–2).

Following the invasion of Kuwait and subsequent bombing of the country's leading television and radio stations, there was a significant deterioration in the quality of the country's media due to a lack of both financial and human resources. Uday Saddam Hussein, a former chairman of the Iraqi Journalists Syndicate, launched his own publications with current news, Babil (Arabic and English translations) and Ba'ath al-Riadhi (sports). In addition, he developed Shabab (Youth) radio and TV stations that used to broadcast Western stolen movies and programs in order to offer a link for Iraqis to the outside world. These publications, radio and television networks were all Several of Iraq's neighbors maintained clandestine radio stations that transmitted to Iraqi residents as a result of Saddam Hussein's interference in world affairs. Saudi Arabia was responsible for founding the educational radio station Voice of Iraq, which was managed by Georges Mansour, an exiled Iraqi journalist (RSF 2003b, A new but fragile freedom). In the years following the 2003 invasion of Iraq, Mansour worked for the Iraqi Media Network.

Additionally, Iran was especially active in sponsoring anti-Saddam radio and television networks, such as SCIRI's Voice of the Islamic Revolution in Iraq, which later became Voice of Rebellious Iraq. Iran accomplished this in a number of ways. Syria was also participating in the covert transmission of radio stations such as Voice of Iraq, which it backed (Al-Rawi 2010, pp. 196–200). Due to the nature of the former government in Iraq, journalists did not have the freedom to voice their opinions

publicly. In brief, this was the situation. Due to the nature of the one-party system, journalists were financially rewarded and professionally obligated to report on the government's triumphs rather than policies that were hostile to the government. Both the published opinions and the reported events made this very evident. However, the great majority of outliers would not have been detected by the censoring radar, therefore they would have been dismissed. Every Iraqi journalist was informed that it was illegal to contradict the official line or spread banned materials, and that if they were detected doing so, they would either be imprisoned or subjected to torture. Regarding the gatekeepers, enormous pressure was applied to guarantee that no critical perspectives were disseminated to the broader public.

According to Ali (2019), Iraq commenced flying domestic passenger flights for the first time since the Gulf War in 1991 between March and October of the year 2000. The reinstatement of commercial airline links with Russia, Ireland, and the Middle East has taken place. In 2001, free-trade zone agreements were created with the countries surrounding the United States. In May, a train connection to Turkey was re-established after being lost in 1981. In an effort to disrupt Iraq's air defense network, the United States and the United Kingdom launched bombing operations in February 2001. As in the month of April in 2002, Baghdad agreed to cease the shipping of oil as a form of protest against Israeli incursions into Palestinian Territories. Despite Saddam Hussein's requests that other Arab regimes follow suit, none have done so. After a period of 30 days, shipments are restarted. In addition, the United Nations Security Council struck an agreement to overhaul the sanctions system in May of 2002. At the time, the sanctions system consisted of a blanket prohibition on a range of commodities. This limitation was replaced by "smart" sanctions aimed at dual-use and

military technologies. In September 2002, after the return of the weapons inspectors, world leaders convened at the United Nations General Assembly to confront the "grave and growing threat" presented by Iraq.

The United Nations Monitoring, Verification, and Inspection Commission (UNMOVIC) dispatched inspectors back into Iraq in November (for the first time since UNSCOM inspections were halted in 1998) with the support of United Nations Security Council Resolution 14, which threatens severe consequences if Iraq is in "material breach" of its terms. In March, the Executive Chairman of UNMOVIC claimed that Iraq had accelerated its cooperation, but that inspectors require further time to confirm Iraq's adherence to the provisions of the agreement. As a result of the failure of intensive deliberations among members of the Security Council on possible next steps to ensure Iraqi compliance, the UK's ambassador to the United Nations announces that the diplomatic process on Iraq has come to an end; the UN Secretary-General orders the evacuation of arms inspectors from Iraq; and President Bush gives Saddam Hussein 48 hours to leave Iraq or face the possibility of war. The Secretary-General of the United Nations addresses the Security Council of the United Nations and expresses his alarm and dismay about the near prospect of war. The missiles hit their targets in Baghdad, heralding the commencement of a United States-led assault to depose the Iraqi government. The following day, foot forces from the United States and Britain entered Iraq from the south, and many targets in Baghdad and other major cities were attacked on the same day.

The United Nations Environment Program (UNEP) produced research titled "Desk Study on the Environment in Iraq" in 2003, which is the most comprehensive review of current environmental challenges in Iraq. The goal of this study is to swiftly analyze

the overall situation relevant to Iraq's environment and to determine the environmental challenges that are the most urgent in Iraq. The article provides an overview of Iraq and claims that military operations can directly cause the country's ecological problems and environmental consequences. The paper also contains an overview of Iraq. Existing ecological issues in the nation can be directly caused by military exercises and actions, and environmental effects can be directly caused by environmental issues and the country's environmental impact. In response to this Desk Study, the UNEP conducted a field survey in July and August of 2003, and subsequently released a Progress Report. It identifies the steps in the reconstruction process that should receive top priority.

After Iraq's loss in the Gulf War in 1991, the Marsh Arabs rose up in opposition to the government of Saddam Hussein. The government began to construct dikes and drainage systems to deflect water input and drain the marshes in order to develop them for agriculture, a project that resulted to the drying out of more than 90 percent of the marshes. This strategy was also intended to eradicate rebel members utilizing the marshes as a base of operations. Reed beds are supposed to have been intentionally set on fire, and the water is said to have been polluted. It is thought that more than 500,000 Marsh Arabs were forced to seek safety in other parts of Iraq or Iran as well as other neighboring nations, and by the time January 2003 rolled around, the marshes had been left barren. The southern marshes of Iraq were once a large, lovely, and fantastic expanse of wetland in western Eurasia and a significant home for wildlife, including several endangered species. However, they were drained by the Saddam Hussein tyranny. In addition, the area has served an essential purpose by providing a stopover for migratory birds and contributing to the Persian Gulf's fishing industry. The loss of

the wetlands has had a terrible effect on the surrounding environment, putting the lives of a number of native plant and animal species in peril. The Shatt al Arab canal and the Persian Gulf are also harmed as a result of these effects, which reach beyond the marshes. For example, the marshlands in the Persian Gulf functioned as a breeding ground and a nursery for the diverse types of marine life that reside there. The Gulf's fishing industry has taken a huge damage as a result of the abrupt decline in these capacities, which has been caused by draining. Almost immediately after the Iraq War came to an end in May 2003, work began on demolishing the dikes and re-inundating the area. By the month of May in 2004, the Iraqi Ministry of Water Resources and the local population had successfully re-flooded around forty percent of the marshes. The rehabilitation of the marshes has been inconsistent, however, due to the haphazard method in which this reflooding was carried out. Some places have had rapid vegetation recovery, whereas others have not.

On the other hand, their recovery has been significantly more gradual, and some of them have not showed any evidence of improvement at all. In addition, Marsh Arabs have begun the process of repopulating the reflooded marshes. By the beginning of May 2004, around 40,000 people had returned to the marshes to resume their traditional way of life as an integral part of the ecosystem of the wetlands. However, due to the devastation of the fisheries and other factors upon which they had previously relied for their livelihoods, this group of individuals who have returned to their former homes has considerable issues in terms of quality of life and public sanitation.

The majority of hospitals in the central region of Baghdad employed incinerators for the disposal of medical waste, according to a 2001 survey. Despite this, they fell out of use during the Iraq War due to a lack of resources like as money, gasoline, and

components. After the war, the United Nations Environment Program (UNEP) performed an on-site assessment and discovered that huge quantities of medical waste had been left uncollected and unsupervised (Alves, 2017).

In September 2003, the Iraqi Governing Council announced that it would be assembling a cabinet of ministers, one of whom will serve as Minister of Environment. After that, a new plan for the Ministry of the Environment's structure was created and approved by the temporary parliament. EPID occupied the heart of the new Ministry and began operating under the supervision of two undersecretaries: one for the Technical Units and one for the Administrative Units. Iraq's Ministry of Environment is primarily responsible for the drafting and revision of environmental legislation, the implementation of environmental monitoring and the identification of pollution sites, the monitoring of water quality, the formulation of national strategies for environmental protection, the management of solid and hazardous waste, countermeasures against desertification, rehabilitation of the southern marshes, and other responsibilities. As of 2005, it consisted of fifteen distinct directorates (Ali, 2019).

### **2.5.2 2004-2006**

Prior to the publication of these publications, the United Nations Environment Program (UNEP) produced 2001 a technical report titled *The Mesopotamian Marshes: Decline of an Ecosystem*. This statement utilized satellite imagery to warn of the worst-case scenario, which was that 90 percent of the southern marshland (Mesopotamian Marshes) had disappeared. In 2005, the United Nations Environment Programme (UNEP) also conducted an investigation of environmental hotspots. Since the end of the Iraq War, the Japan International Cooperation Agency (JICA) has also



conducted needs assessments for human resource capacity building in the environmental sector and infrastructure restoration in Iraq.

Additionally, pertinent persons were interviewed to get particular and the most up-to-date information on areas not fully addressed in the reports. In August of 2005, officials from the Iraqi Ministry of Environment, Ministry of Water Resources, and other Iraqi government agencies who were traveling in Japan were interviewed. These interviews focused mostly on the southern marshlands. In September, a study team was dispatched to Italy to interview officials from the Italian Ministry of Land and Environment. In March 2006, while in Japan for JICA training sessions, Iraqi government officials participated in a roundtable discussion and presented their thoughts. The Committee examined records of events such as meetings between donors of reconstruction assistance for Iraq and press briefings held by Yuriko Koike, Minister of the Environment in Japan, and Nasreen Berwari, Minister of Municipalities and Public Works in Iraq, in an effort to obtain more information on Iraq's environmental problems in a number of ecological fields. This action was taken to meet the Committee's mandate.

There were at least 250,000 Marsh Arab refugees who have not returned to their nation as of 2005. Marsh Arabs' traditional occupation is fishing, and currently, around 90 percent of returns to reflooded districts are employed in the fishing industry. The coastline of Iraq is extremely restricted, and while the marshlands' freshwater fishing sector was formerly responsible for two-thirds of Iraq's annual catch, experts estimate that this number is currently far below 10%. The great majority of Iraqis desire to see the wetlands restored to their pre-war state. Nevertheless, according to a poll performed by USAID on the wishes of the people, there appears to be a generational

divide in aspirations for life and employment in the southern marshlands. The poll was undertaken to determine the particular desires of the population. According to the findings of the survey, those who were born and raised in the region and are at least forty years old are pleased about the proposal to restore the marshes. Simultaneously, the younger generation under the age of 25 that has been largely active in agriculture (i.e., the age group that has no prior experience with living in the marshlands and the traditional fishing business) is keen to see additional agricultural growth. The generation that falls between these two hopes that agriculture will become a sustainable source of livelihood and desires the restoration of the marshlands.

According to the UNEP Progress Report for 2004-2006, the overcrowding of the new Ministry of Environment's offices is having a negative effect on its operations. The laboratory in Baghdad had been looted, the equipment at the regional labs had long ago grown obsolete, and there was a significant shortage of necessary chemicals. The study emphasized the significance of enhancing the Ministry's technical capacity through the provision of adequate training for its personnel, the formulation of regulations and standards, and the provision of appropriate equipment (both field and lab), buildings, computers, automobiles, funding, etc. On the administrative side, there is a need for stronger environmental governance, the enhancement of ecological assessment capacities, measures for the most contaminated areas, increased public awareness, and the creation of an environmental infrastructure through laws and regulations. All of these items are required.

The American objectives in the early part of the year 2004 in the cities were to round up the withdrawal of their soldiers, set up for legislative elections by the first month of 2005, and ensure that political control is handed over to the sovereign interim Iraqi

authority by the CPA. However apparently straightforward, substantial issues triggered the American objectives. This implies that America is conceding power to agitators with their withdrawal from the urban areas at whatever point the Americans were not effectively available, which was excessively frequent because of the prevalent lack of enough soldiers. Iraq was ready for a revolt by 2004 spring and simultaneously, a repelled class of former Ba'athists and jobless troops has been driven by the Americans into the control of insurgents while obliterating the generosity of the Iraqi people via careless activities. Similarly, the American troops that invaded Iraq were starting to be supplanted and rotated (White, 2017; Haupt, 2019; Kymlicka & Pförtl, 2018). Politics is applied predominantly in Arab culture by private connections and collaborations, so incoming troops really found their associations with the Iraqis reorganized. Taking advantage of what is going on was increasing hostility and dissatisfaction with the issue of a return to prosperity against Kuwait's situation after the war in 1991. Numerous Iraqis started to think that the Americans were more worried about neo-imperialism compared to assisting them with recuperating from the insurgency. battling. The agitators had support in the early part of 2004, an opportunity to coordinate and the craving to wage a complete crusade against the agitations (Bernis, 2019).

In the western section of the province of Anbar in Iraq, a new development began to take shape between the years 2005 and 2006. In reaction to AQI's power grabs, executions, and intrusion into the illegal economic operations of the western tribes, a number of Sunni tribal organizations, warlords, rebels, and militants took the choice to turn against their erstwhile friend, al-Qaeda in Iraq. This decision was made in reaction to AQI's actions (Le Billon, 2021; Le Billon, 2018). (Le Billon, 2021; Le

Billon, 2018). The western Sunni tribal sheikhs founded the Anbar Salvation Council in order to offer their support to this emerging movement. Since the rebellion of the Sunni tribal chiefs against AQI occurred before to the admission of extra combat forces in 2007, the introduction of more combat troops in 2007 was not directly linked to these events. However, experienced U.S. military commanders were able to exploit the rift that had grown between western Sunni tribes and AQI in order to put an end to the insurgency (Jacobsen, 2017). This operation eventually transformed into the "Sunni Awakening" initiative, which was a US-a designed plan to persuade various Sunni tribes and former terrorists to join a coalition against AQI (Fahim, 2018; Tankel, 2018).

### **2.5.3 2007-2009**

According to Hall (2017), a vast number of nations and a wide range of international organizations are contributing to the reconstruction of Iraq through multilateral or bilateral collaboration. In March of 2003, a multinational force headed by the United States commenced operations in Iraq. At the time, 48 nations comprised the so-called "coalition of the willing," and they provided political, military, and financial backing for the United States' efforts in Iraq. 38 of the 48 nations that did not include the United States deployed forces (Carothers, 2019). As of the month of May in 2007, 25 coalition nations have given around 12,600 soldiers to the multinational force operations in Iraq. During the same time period, the United States had 145,000 troops stationed in Iraq (GAO, 2007). Due to the battle that has persisted for the past eighteen years, Iraq's socioeconomic growth and development have suffered significantly. In post-conflict contexts, recognizing, analyzing, and fixing the huge economic and social inadequacies provides both potential and challenges. Formulation and implementation

of effective post-conflict agriculture evaluation procedures are essential for post-conflict economic reconstruction (Habib, 2020).

According to Briers and Shinn (2009), the United Nations Millennium Development Goals were woven into the very fabric of the Iraqi development programs. The actions of Team Borlaug (2008e) are supported by eight global development goals, sometimes known as the Millennium Development Goals or MDGs. These are the objectives: Put a stop to widespread hunger and poverty. Ensure that everyone has access to elementary education. Promote gender equality and the growth of women's rights. Ensure that everyone has access to primary education. 4. Decrease the infant mortality rate 7. Ensure environmental sustainability Establish a global partnership for the purpose of progress. The objectives of the Multinational Division–Center (MND-C) of the United States Department of Defense were matched with the Millennium Development Goals, which intended to promote development and reconstruction in order to generate conditions conducive to peace, stability, and prosperity. (Atta-Obeng, and Dadzie, 2020; Fukuda-Parr, and McNeill, 2019) The objectives are consistent with the Millennium Development Goals of the United Nations (MDGs). The goals were incorporated into the fabric of our development processes.

Team Borlaug (2008e) was entrusted with supplying farmers with onsite, real-time information and advising the command on agricultural issues. This was intended to increase farm output.

AO Vanguard Karbala undertook a comprehensive and in-depth assessment of the agricultural, educational, and commercial sectors on August 30, 2008. During this phase, the team was provided with a complete overview of national events. Team

Borlaug (2008e) engaged in different days, frequently heading out for on-site contact and returning for a meeting in the afternoon. This was performed often. Team Borlaug (2008f) was able to effectively meet with over 100 local farmers and municipal authorities after spending over 500 hours in the field and half of that time in on-site discussions. In addition, the organization was able to successfully hold two distinct seminars, one on irrigation and wind power and the other on the growth of non-governmental organizations. Over a hundred local farmers and business owners received a copy of this.

Over the course of 22 days, a total of 110 person-days were devoted to field observations and interviews with around 50 key agricultural stakeholders, in addition to local farmers and civic leaders. Six crew members recorded daily field notes, capturing a total of around 560 hours of observational data. Along with a functional agricultural strategy at the provincial level, one of the objectives was a memorandum of understanding. The Iraqi government's 2009 budget included allocations for planning. Each province's Breeze® and written materials detailing specific and generalized results projected strategic methodologies, and pertinent recommendations were created in English as distinct internal midterm reports. The adage The team picked "pale ink is better than brilliant memory" as its guiding philosophy (p. 4).

The American military sent 20,000 soldiers that covered five brigades with their support components almost instantly when the insurgency was declared. Simultaneously, the majority of the American troops had their operation stretched in Iraq. This implies that General Petraeus will be in control of 20 brigade-size armed forces (in addition to grouped external armed forces) in Iraq. The 2007 Iraqi Army was an extraordinary advancement because it was a result of the long-term base-up and

purposeful instructional program organized by the Americans following the 2004 disasters. As at the emergence of the insurgency, there was an increase of 20% in the number of Iraqi Armed Forces since the year before and kept on increasing to 25% towards the end of the insurgency. Interestingly since the invasion of Americans, at the divisional and brigade levels Iraqi Armed forces were capable of discharging their responsibilities. Notwithstanding, they were currently in the “led” period of the "led, lead, leave" instructional program and dependent on the Americans for leadership and logistic aid, yet this can demonstrate a substantial resource for the Americans, particularly in holding control of the urban areas after the Americans handled the hard work of overcoming the rebels. The Shi'a volunteer armies in Baghdad had vigorously penetrated Iraq. The new Military Head responsible for the preparation of the Iraqi Armed Forces settled on an extreme strategy to recognize the Shi'a volunteer army's penetration and was able to cleanse the Iraqi Police of compromised police officers, debilitating Shi'a volunteer army impact to the detriment of having less but more faithful personnel in Iraqi Police. Leaders of Iraqi Police felt a sense of urgency to act in the partisan interests of the volunteer armies, raising public assessment of the authenticity of the Iraqi Police and bringing about what was a fortified, not so much partisan, but rather more steadfast Iraqi Police.

#### **2.5.4 2010-2013**

If the upheavals in Iraq had happened concurrently with those of the Arab Spring of 2010/2011, when the United States and Britain were enjoying more peaceful internal circumstances and had more media bandwidth available for foreign news, Iraq may have garnered greater worldwide attention. But editors at major American and British outlets, whose editorial resources are diminishing and whose primary audiences are focused on domestic issues, face a delicate process of prioritization in the current

media landscape, resulting in fewer prominent media spots being allocated to international stories. And the simultaneous outbreak of anti-establishment protests in Chile, Lebanon, Iraq, and Hong Kong, hailed in some circles as the beginning of a globalized mass movement, resulted in each protest movement competing for the limited space allocated to international stories, thereby further reducing coverage. This resulted in overall less coverage.

In 2010, it began leaking damaging material on the United States, notably concerning the situation in Iraq. Since the beginning of 2011, when it began publishing the first of 250,000 released private US diplomatic cables, WikiLeaks has been the object of considerable media criticism in the United States. Some have even advocated for its official designation as a terrorist group. The leaks started at the end of 2010, when the first of 250,000 secret US diplomatic cables that had been leaked were made public. This caused a considerable scandal in the United States, and discussions over WikiLeaks remain contentious (whether it is indeed performing a democratic function of providing information citizens should know, even filling the gaps of the mainstream media that fail to do this, whether it has gone too far, etc.).

On a variety of fronts, the group is now in the public spotlight; for example, certain Internet hosting businesses are dissolving relations, their website confronts denial of service efforts, and numerous service providers are under pressure to dissolve ties with the organization (such as payment providers, etc.). In addition, the group has garnered attention on other fronts. Their founder, Julian Assange, has also been accused of rape, which is viewed by many as a brazen attempt to stifle a critic of the US system. As a result of his role with WikiLeaks, Julian Assange has been charged with a number of crimes. However, each of these issues already has its own page, therefore they will not



be explored further here. However, in the context of Iraq, it showed more about what has been going on and reiterated more of our typical cynicism about politicians; they say one thing, but they frequently do another thing. This contributes to our general lack of confidence in politicians (Pfister, 2021; Tosi & Warmke, 2020).

Because the United States and Baghdad were unable to reach an agreement in 2010 on a Status of Forces Agreement, the United States withdrew all of its troops from Iraq (Cooley, 2020). The Islamic State of Iraq and al-Sham (commonly known as ISIS) controlled more than a third of the nation by the end of 2014. As a direct result, the strength and power of the Shia militia, a significant portion of which is sponsored and funded by Iran, grew tremendously. The religious divide became even more pronounced than before. It became increasingly complicated for the administration in Baghdad to maintain up favorable connections with both Washington and Tehran at the same time. And the bulk of Sunni states in the Gulf area abandoned Iraq because they saw it to be an Iranian satellite state. At a period when the globe was believed to be unipolar, the United States intervened in Iraq to fight the proliferation of weapons of mass destruction and depose a dictator. It triggered a series of consequences, the great majority of which were unexpected but not necessarily unforeseen. These implications, along with the crisis in Syria, have resulted in the formation of a scenario that is incomparable to the relatively simple one that existed in 2003. Even though it has been seventeen years, the United States is still involved in military operations in Iraq; nonetheless, these operations now take place in a fundamentally different environment (Niva, 2019; Butt, 2019). (Niva, 2019; Butt, 2019).

High-quality freshwater sources are crucial not only for the production of potable water, but also for the development of tourism resources. In this context, assessing the

quality of freshwater is essential for both the management and development of freshwater sources in order to achieve sustainability.

### **2.5.5 2014-2017**

Critical difficulties are currently confronting Iraq because of climate change's effects on the globe and Iraq's responsibilities in battling these, be that as it may, are restricted. In December 2015, Iraq before now assented to the Paris accord on climate change, promising that between 2020 and 2035 they will have a 15% decrease in greenhouse gas emissions, which can be compared to 90 million tons of carbon dioxide. As per an article by Abu Zaid (2016) and distributed in Al-Monitor, be that as it may, "the country does not have such a large number of industrial facilities or power plants or even so much use of fossil fuel, as it is the case in industrialized countries, and the rates of fuel combustion in Iraq are much less than those of said countries". As a result, it is vital that Iraq immediately implement corrective and preventative measures to limit and diminish the possibility of future negative effects. In 2015, the Ministry of Health and Environment, with assistance from the United Nations Environment Program (UNEP) and a few other regional organizations, launched the National Action Program to Combat Desertification as the only significant action taken to date in response to environmental changes. This was the sole action of significance done thus far in relation to environmental changes. However, despite the fact that this just addresses one of the many components of climate change, it is believed that the program's needed tasks have not yet been completed for a number of reasons. There are references to a lack of financial resources and instability in various places in Iraq. To alleviate the repercussions that are projected to come from the effects of global change, it is vital to design a plan that is both comprehensive and continuous as soon as feasible in view of the immense problems Iraq is presently facing.

In 2014, Iraq was vulnerable to acts of terrorism, including assaults on a number of dams that impacted the rivers' capacity to regulate water flow. This caused an increase in the severity of the water shortage, particularly in the southern provinces of Iraq, among which Wasit is one. Water quality and availability concerns have a detrimental influence on the natural environment, water bodies, agricultural industry, and economy (Aljanabi et al., 2018a, 2018b; Consuelo, 2020). Additionally, Iraq faces the severe consequences of climate change, which are expected to grow even more severe in the form of a rise in temperature and a decrease in precipitation (Yassin Osman et al., 2017). The investigation conducted to examine the water quality of the Tigris River revealed an increase in the number of different pollutants (Abdulwahab & Rabee, 2015; Al-Obaidy et al., 2015; Omar, 2017). Determining the level of people's understanding of water pollution and the role that awareness plays in mitigating the severity of the crisis became vital.

#### **2.5.6 2018-2021**

In February 2016, the exact period that ISIS warriors were preparing for their retreat from Ramadi, a city in Iraq, Hassan Mohammed was struggling to breathe and was lying in bed. For a considerable length of time, via the jihadist control of his old neighborhood, this asthmatic young engineering student had heaved and wheezed from morning till evening and had pretty much supported himself with inhalers and self-inflicted house detention, claiming that he was unable to go out because of air pollution as a result of the manufacturing plants and the desert dust and the battle exacerbated everything. Except now, as the invaders prepare not to withdraw their jets, Mohammed thinks he might lose his life. In the first place, ISIS warriors were on the roads setting tires on fire, and afterward, they exploded key installations that include a pesticide plant in urban areas. As the tufts of dust and poisonous smoke travel into Mohammed's

room via the window cracks, no medicine or safety measures could keep the surging rottenness under control. It's a frightening inclination when your lungs cannot function, he can actually feel it, and does not disappear (Hashim, 2018).

Among the first of seven nations chosen to take part in UN climate's extraordinary program is Iraq, a drive intended to assist states with meeting their waste and chemical management commitments under the Rotterdam, Basel, Stockholm, and Minamata conventions and as well as the Strategic Approach to International Chemicals Management (Nikogosian, 2021). Selected in excess of 40 candidates, these nations will get everything from specialized expertise to help with drafting dangerous waste control regulations. The expectation is that once the institutional capability is developed, these countries will actually want to take care of themselves. Nalini Sharma who is the head of the secretariat of the Special Chemical and Waste Management Programme noted that their thought is that this initiative will influence the reinforcement of the institutional frameworks, structures, and individuals, and afterward, they will guarantee its maintainability. This program is supported by the EU, the US, and eight European nations (Ahmad et al., 2019).

## **2.6 Chapter Summary**

Under the review of related literature in this study, many concepts were defined and reviewed; such concepts include Iraqi Media: An overview, media coverage on environmental issues, oil spills, land decay, climate change and pollution. They are measuring measure media coverage on environmental issues, oil spills, land decay, climate change and pollution associated with Iraqi governance and government. The meanings of the concepts as they relate to this present study were equally given.

The Arab media's coverage of the environmental issues and war on Iraq played a remarkable role in forming people's opinions, and perceptions toward the event, especially the considerable skepticism roused towards the US motive. It could be argued that the discourse featured by the Arab media produced community viewers who interpreted the discourse as a typical reflection of their rejection of the invasion. The participants in the discourse created some common everyday awareness among the Arab nation, where most people were united in opposing the war.

Experts showed from the literature reviewed the impacts and importance of media on different issues in Iraq and other neighboring countries surrounding them. These factors could increase the populace's awareness of various topics about the Iraqi government.

These theories include Agenda-setting Theory and Framing Theory. The literature reviewed also described the empirical studies conducted on Iraqi environmental issues (Oil spillage, Pollution, Climate change and land decay) in Saudi Arabia, Turkey, Iran, Kuwait, America, China, Europe, India, and Canada on related studies. Studies have been carried out in Iraq on environmental issues, and the study was limited to media coverage on environmental issues in Iraq between 2001 and 2021.

## Chapter 3

### RESEARCH METHODOLOGY

#### 3.1 Introduction

The research sought to investigate how the media portrays oil spills, climate change, pollution, and land degradation in Iraq. Newspaper editorials were used as media texts for this study.

According to McClure and Patterson (1976, p. 45)

*“Newspapers thrive where television news fails because they can illustrate their importance on a particular subject.” Newspapers have the usual techniques of displaying emphasis and significance at their disposal: lengthy tales, short stories, stories with photographs, stories without pictures, huge headlines, tiny headlines, front page, back page, above the fold, below the fold. As a result, the print media provides readers with a powerful, long-lasting visual indicator of significance”.*

#### 3.2 Research Design

The research design involves “the methodological and associated process used and it covers a theoretical framework and data collection and manipulation (Maxwell 2012). Also, Mitchell and Jolley (2012) define the research design as a plan or structure for any type of research. This plan referred to the selected concepts, hypotheses, paradigms analytical, specific sampling techniques, tools, instruments for data collection, hypotheses testing, and the most efficient format to present the investigation report. According to Leavy (2022), there are five approaches to research design, these approaches are; qualitative, quantitative, mixed methods, community-based participatory, and arts-based research. For brevity purposes, explanations of

these five approaches will be limited to the first three which are quantitative, qualitative, and mixed methods. Quantitative exploration values statistical descriptions, breadth, and generalizability by focusing on accomplishing control, objectivity, and exact estimation, and these approaches methodologically depend on deductive designs pointed toward discrediting or constructing proof for certain hypotheses and theories (Leavy, 2022). Fallon (2016) added that quantitative approaches are most usually utilized in descriptive, exploratory, and explanatory studies examining relationships, associations, and causal connections. Qualitative approaches deal with studies that value depth of significance and individuals' subjective encounters and their meaning-making processes and they provide room for people to construct a strong comprehension of a subject, revealing the meanings individuals attribute to circumstances, conditions, individuals, items, and activities. Qualitative approaches are methodologically in general dependent on inductive designs pointed toward creating meaning and delivering rich, engaging information while mixed methods recovered the integration of both quantitative and qualitative in one study (Leavy, 2022).

Since this study focused on environmental issues such as oil spillage, climate change, air pollution, water pollution, and land decay and how they are framed by Iraq News media (pro-government political side and anti-government political side), this made the research to be descriptive in nature because the ideas and objectives of this research inflict an expressive principle upon the study, as they include questions: (i) To understand how the Iraqi news media cover and frame the issues of oil spilling affecting oil-producing regions in the country. (ii) To know how the Iraqi online news media cover and frame climate change issues in the entire country. (iii) To know how

the Iraqi online news media cover and frame air pollution issues in the entire country. (iv) To know how the Iraqi online news media cover and frame water pollution issues in the entire country. (v) To know how the Iraqi online news media cover and frame the issues of land decay in the entire country. (v) To understand how the pro-government and anti-government frame the environmental issues (climate change, oil spillage, air, water, and land pollution) in Iraq.

### **3.3 Research Methods**

Based on the objectives established above, one research method that specifically shows up as firmly appropriate is the quantitative content analysis to examine the reflection of newspapers in media framing of oil spills, climate change, pollution, and land destruction in Iraq. The quantitative content analysis referred to the method for interpreting typically written communication that is usually corporate and the strategy is established in communication sciences with the target to aid interpretation and comprehension of the manifest as well as the concealed content of communication in regards to an organization's ethical conduct, behavior, and understanding (Lock & Seele, 2015). The suitability of this method for this study is attached to existing studies such as Boettger and Palmer (2010), Nimrod (2010), Hinduja and Patchin (2008), Sjøvaag and Stavelin (2012), and Bicen and Adedoyin (2022). Content analysis is embedded in quantitative content analysis (Coe & Scacco, 2017), and it will help in assessing the existence of specific words, themes, or concepts in qualitative data (Stemler, 2000). Content analysis can be applied to measure and evaluate the presence, meanings, and connection between certain words, articles, or ideas. Therefore, this study generates data from existing reports of local and international newspapers dealing with Iraq news media reportage on environmental issues in Iraq.



### **3.4 Sampling & Data Collection**

This study is highly dependent on the secondary source of data collection. According to Dziak et al. (2020), secondary data is information that has already been gathered for another purpose but is relevant to your present investigation.

#### **3.4.1 Scanning Criteria**

The sample was taken from the Library of Congress's (<https://www.loc.gov/newspapers>) database, containing the most extensive Iraqi newspaper and magazine articles collection. The essential terms "environmental difficulties" are not often included in investigative reports on environmental issues. Following several tests and careful evaluation of the results, the following keywords were combined to search in the titles and primary texts of articles published: any one word/phrase from the list 'environment, environmental protection, ecology, or climate change' and any one word/phrase from the list 'rice, air, food, water, soil, health, oasis, grassland, desert, river, mountain, forest, cancer village, desertification, haze, heavy metals, pollution, problem, or crisis'. The selection was limited to items that met the requirements for investigative reports. These terms are linked to environmental issues, but they do not imply a personal assessment of those issues.

Based on the above scanning criteria, 10 newspapers were selected for this study because these newspapers met the following additional threshold; 1) They are all essential investigative journalism venues. Even though Iraq has thousands of newspapers, few are well-known for investigative reporting. These ten newspapers are among the most influential; 2) they are all well-known for covering environmental issues; 3) they have large circulations; 4) they are based in various geographic places, and 5) they provide variety in terms of time and media. Our goal is to fill the gap in

media framing of oil spills, climate change, corruption, and land decay in Iraq. There is a need to understand that this topic has not been researched in Iraq comprehensively. The relevant information and data come from editorial pieces in newspapers on environmental issues such as oil spillage, land poisoning, climate change, and pollution in Iraq. The table below displays the names of selected newspapers with year founded, political side, and monthly readership.

Table 3.1: Selected Newspapers with year founded, political side, and monthly readership.

	<b>Newspapers</b>	<b>Year founded</b>	<b>Political Side</b>	<b>Monthly readers</b>
1	Imn.iq	2003	Pro government	42200
2	Newsabah.com	2003	Pro government	11200
3	Alsabaah.iq	2004	Pro-government	17900
4	Rudaw.net	2013	Pro government	288800
5	Azzaman.com	1997	Pro-government	18900
6	Alsumaria.tv	2004	Pro-government	311300
7	Basnews.com	2011	Anti-government	66000
8	Awene.com	2006	Anti-government	19700
9	Kitabat.com	2006	Anti-government	38800
10	Speemedia.com	2013	Anti-government	11100

These selected 10 newspapers are also the top 10 nationally recognized and most popular newspapers on the world wide web that report on environmental issues. Out of ten sets, six are pro-government, and four are anti-government. Eight are in Arabic,

while two of them have English translations. They all have stories on environmental issues such as oil spillage, land poisoning, climate change, and pollution in Iraq. Because, unlike in America and Canada, there are many news stories on this issue (oil spillage, land poisoning, climate change, and pollution) in newspapers. There are fewer new stories in these newspapers because of the daily bombings in the country. For this reason, the study has selected the contents of the newspapers published in three years, from January 2018 to January 2021. The selection of both pro-government and anti-government newspapers is to have a balanced view on environmental issues.

### **3.5 Reliability**

According to Coe et al. (2017), one of the core precepts of social scientific exploration is that it tends to be imitated and developed in further examinations. Someone playing a round of darts is referred to as reliable provided that person can hit the same spot on the dartboard a few times. Similar to darts, research is regarded as reliable when the research constantly shows a similar outcome. Getting those directing the coding to constantly make a similar code in quantitative content analysis is referred to as intercoder reliability, which is a critical precept (Coe et al., 2017). To ensure reliability in this study, the scanning criteria with certain keywords and terms was employed to eliminate human predispositions and environmental noise such as culture.

### **3.6 Validity**

Validity zeroed in on whether measures of a certain study examine the appropriate phenomena. Coe et al. (2017) noted that validity can be challenging to directly ascertain, especially in content analysis studies. For example, a scholar that is interested in capturing value-loaded appeals in a content analysis of speeches delivered by a manager of an organization on corporate social responsibility might restrict the search to a couple of keywords or terms like corporate sustainability, corporate

conscience, sustainable business, corporate citizenship, responsible business, or conscious capitalism. While conducting content analysis studies, Coe et al. (2017) recommended that analysts must consider the validity connected with both theory and practice. Social validity is the major validity that content analytic research experiences (Krippendorff, 2018) and it refers to the degree to which study results add to the comprehension as well as public issues resolutions. For instance, content analysis studies that focused on health communication such as Kline and Mattson's (2000) self-assessment of breast brochures, Cho et al.'s (2010) study on cancer risk and tanning, and Bicen et al.'s (2022) assessment of assistive technology in education. These sorts of investigations that involve individual medical care choices and practices, and inclusive education represent only a portion of the manners in which content analysis studies can illuminate down-to-earth points that goes beyond the basics. As for this current study, social validity is embedded in the objectives of the study.

### **3.7 Analysis Procedure**

Every editorial concerning the issue of oil spills, climate change, pollution, and land degradation in the selected Iraqi Newspaper will be analyzed by the study by marking the editorials as positive and negative based on their content and views.

### **3.8 Quantitative Analysis**

Biereenu - Nnabugwu (2006) stated that the descriptive quantitative analysis depends heavily on rigorous thought of the "investigator" style, a presentation of sufficient evidence, and careful consideration of interpretations alternatives. One of these essential characteristics of descriptive quantitative analysis involves fracturing data into parts and meanings (Friese, 2019). The fracture leads to the formation of explanations of concepts, events, actions, and statements. These are obtained by categorizing, examining, tabulating, restricting, styling, and developing relationships

between categories to meet the original proposition and purpose of the study. The framing analysis technique was applied in this study to code data into positive and negative contents for better analysis using simple percentages, histograms, and pie charts.

## Chapter 4

### FINDINGS AND DISCUSSIONS

#### 4.1 Introduction

To conduct this research, newspaper editorials were selected as media texts. Using the quantitative content analysis method, the study analyzed the media framing of environmental issues on oil spills, climate change, pollution, and land decay in the Iraqi media. Newspapers existing from 2003 were examined and the invasion of the US military caused many Iraqi newspaper publications to be destroyed, limiting the analysis to only news published prior to the invasion.

For this research, ten newspaper editorials were selected to enable research aims on how they have portrayed oil spills, climate change, pollution, and land degradation in Iraq. The newspapers were analyzed based on positive and negative editorials. Thirty-seven editorials were drawn from [innme.iq](http://innme.iq), 24 editorials were drawn from [newsabah.com](http://newsabah.com), 19 editorials from [Al-Sabah.iq](http://Al-Sabah.iq), 30 drawn from [rudaw.net](http://rudaw.net), 40 drawn from [azzaman.com](http://azzaman.com), 58 were drawn from [alsumaria.tv](http://alsumaria.tv), 11 was drawn from [basnews.com](http://basnews.com), 27 was drawn from [awene.com](http://awene.com), 21 was drawn from [kitabab.com](http://kitabab.com), and 12 was drawn from [speemedia.com](http://speemedia.com).

In this work, framing is the primary variable and the major component of the framing theory and agenda-setting theory. This study used framing analysis to examine how newspapers in Iraq have presented environmental issues such as oil spills, climate

change, pollution, and land deterioration. Iraqi newspapers will also conduct a comparative analysis of ten newspaper editorials on how they have depicted environmental concerns such as oil spills, climate change, pollution, and land deterioration-the research tool calculated this.

The study describes the coverage pattern of the three different newspapers on environmental issues such as oil spills, climate change, pollution, and land deterioration. To analyze the frame of the environmental issue, the researcher has categorized the frame into five segments: oil spills, climate change, pollution, and land decay. To examine environmental issues from *imn.iq*, *newsabah.com*, *alsabaah.iq*, *rudaw.net*, *azzaman.com*, *alsumaria.tv*, *basnews.com*, *awene.com*, *kitabab.com* and *speemedia.com*. SPSS was adopted to analyze variables.

## **4.2 Quantitative Analysis of Newspapers**

This section examines the analysis of newspapers used for this analysis. Several news stories were given alongside the percentage of each Newspaper's editorials.

Figure 4.1 detailed the frequency of editorials of newspapers selected on environmental issues Iraqi newspaper editorials selected on Iraqi ecological problems. *Alsumaria.tv* had the highest number of editorials with 20.8% regarding environmental issues in Iraq, followed by *Azzaman.com* with 14.3% and 13.3% of editorials from *imn.iq*. With 4.3%, *Speemedia.com* had the lowest number of editorials. This shows variations in newspapers published between 2003 to 2021.

Table 4.1: The frequency of Selected Newspaper's Editorials on Environmental issues in Iraq

Newspaper	Number of News stories	Percentage
Imn.iq	37	13.3
Newsabah.com	24	8.6
Alsabaah.iq	19	6.8
Rudaw.net	30	10.8
Azzaman.com	40	14.3
Alsumaria.tv	58	20.8
Basnews.com	11	3.9
Awene.com	27	9.7
Kitabat.com	21	7.5
Speemedia.com	12	4.3
<b>Total</b>	<b>279</b>	<b>100.00</b>

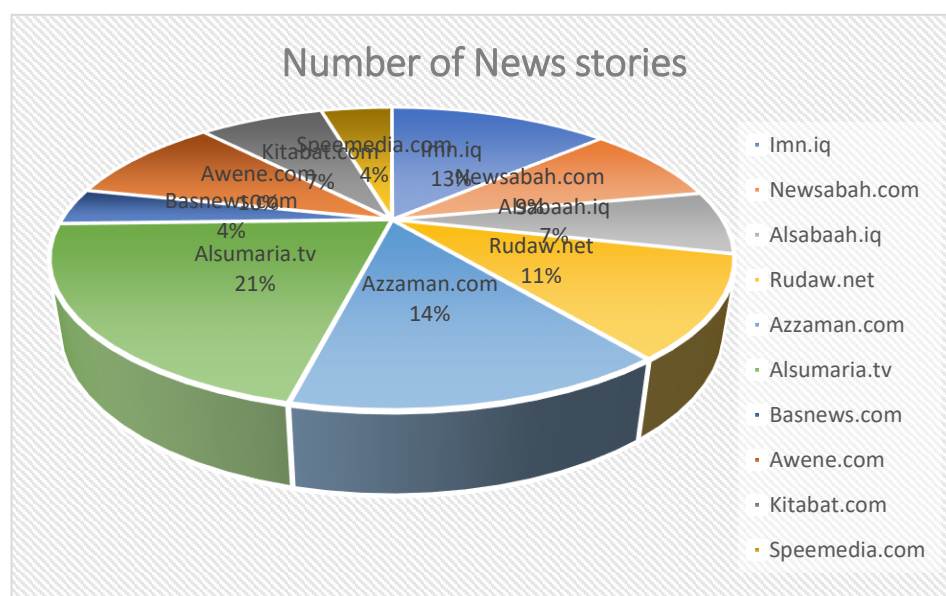


Figure 4.1: The frequency of Selected Newspaper's Editorials on Environmental issues in Iraq



As shown in figure 4.2, immn.iq newspaper had the highest article length with 12 (4.3%) of its publications having 2001-5000 words. Also, Alsabaah.iq had 12 (4.3%) reportage, between 501-and 1000. Also, Azzaman.com has 11 (3.9%) articles over 1001-2000. This indicated the article length of these newspapers from 2003-to 2021.

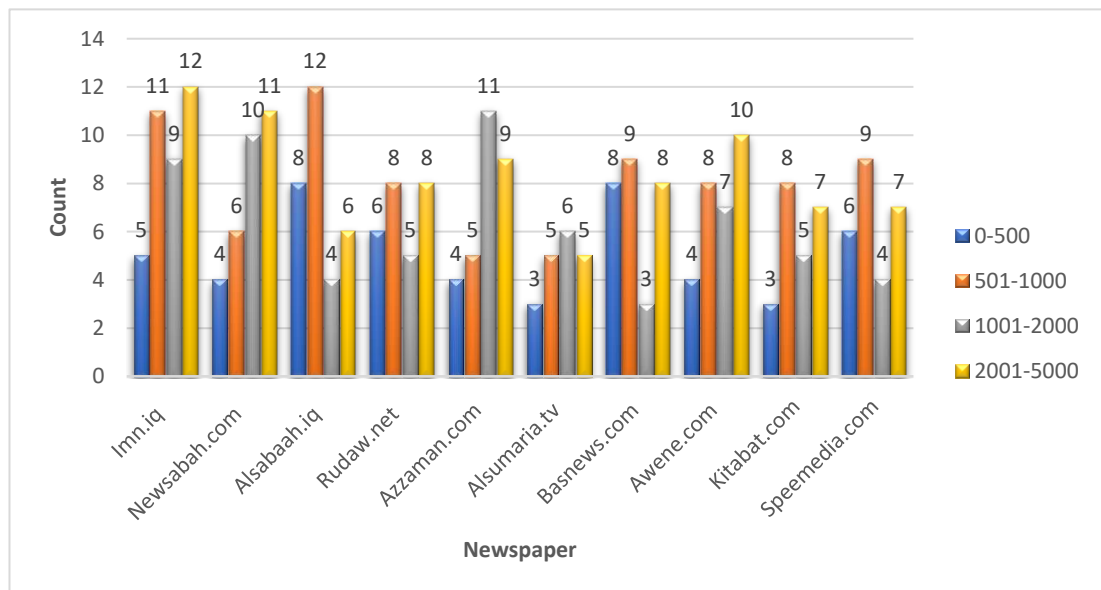


Figure 4.2: Length of Newspaper coverage on Environmental Issues in Iraqi Media

### 4.3 The Media Framing of Oil Spills in the chosen Iraqi Newspapers

To answer research question one, this study analyzed pro-government and anti-government newspapers in Iraqi media and it was evident that the pro-government newspapers were optimistic regarding oil spills in Iraq. As showed on Fig. 4.3 with newspapers such as immn.iq, newsabah.com, rudaw.net and Alsumaria.tv having over 60% positive reports. While anti-government newspapers were hostile, over sixty per cent of news from basnews.com and speedmedia.com gave a negative piece of the oil spill in Iraq. According to Michael (2014), the newspaper’s portrayal of news in a political setting is basically influenced by the views of those who support the government or are against the government. The newspaper functions as a means of communication that makes it simpler to generate, publish, and share political

information on platforms and within networks that enable collaboration and participation. They have made rapid advancements over the course of the past three decades, and they continue to develop in novel and frequently surprising ways today.

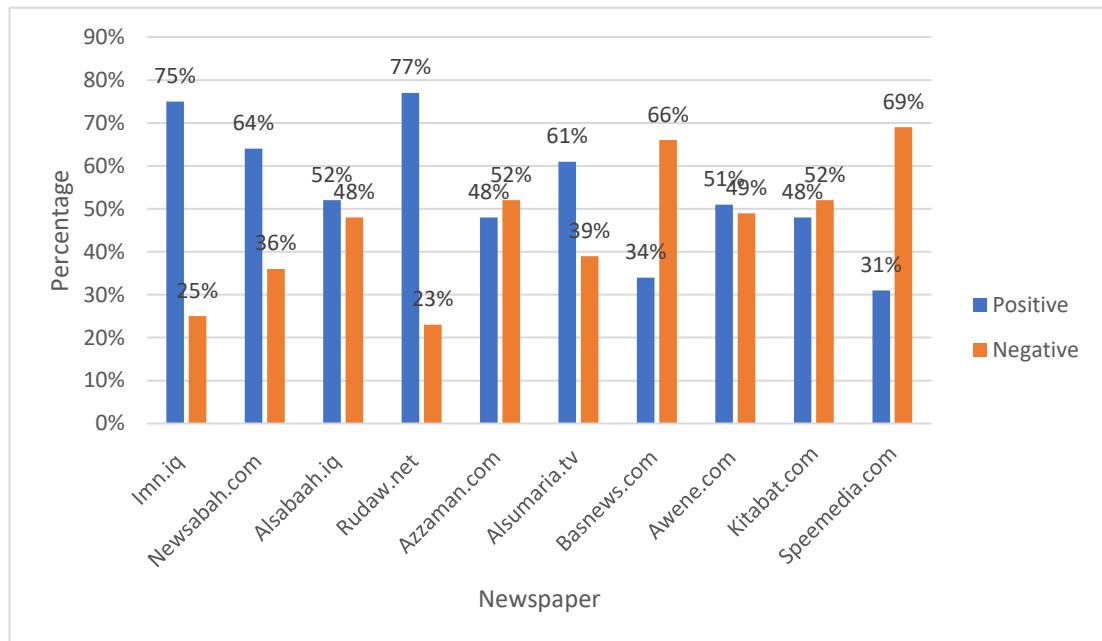


Figure 4.3: The media frame of Oil Spills in the chosen Iraqi Newspapers

#### 4.4 The Media Framing of Climate Change in the Chosen Iraqi Newspapers

To answer research question two, this study analyzed pro-government and anti-government newspapers in Iraqi media and results indicated that the media portrayal of climate change in selected Iraqi newspapers was high and low. The findings implies that the framing of climate change is poor, as noted in the newspapers. From the newspaper reportage, it was deduced that both the pro-government and anti-government newspapers established that media framing of climate change in Iraqi media is relatively low. According to Lewandowsky (2013), in the case of climate change, a similar media failure is undoubtedly taking place right now. The recent report from the Intergovernmental Panel on Climate Change (IPCC) came to the

conclusion that human economic activity is almost certainly to blame for the ongoing global warming, and some of the largest insurance companies in the world have attributed the rise in losses from dangerous weather events to climate-linked calamities.

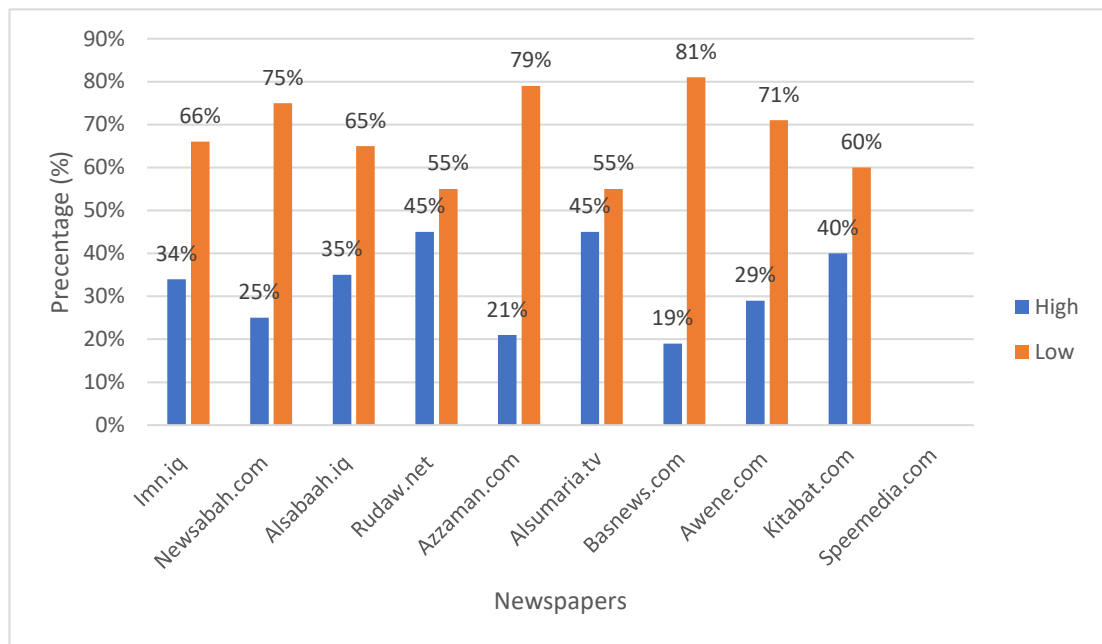


Figure 4.4: The media frame of Climate Change in the chosen Iraqi Newspapers

#### 4.5 The Media Framing of Pollution in the chosen Iraqi Newspapers

To answer research question three, this study analyzed pro-government and anti-government newspapers in Iraqi media and results revealed that the framing of pollution in Iraq is more prominent and often portrayed as negative by the newspapers. The portrayal of pollution was categorized into positive, negative, unclear position and natural attitude. Both anti-government and pro-government newspapers portrayed pollution based on different perceptions. From Fig. 4.5, Inn.iq with 56% and Alsabaah.iq with 50% portrayed a neutral attitude in their publications on pollution. Most the newspaper maintained a negative position. Newsabah.com has 61%, rudaw.net with 58%, azzaman.com raked in 51%, Alsumaria.tv has 49%,

Basnews.com scored 65%, awene.com with 75%, kitabat.com garnered 64% and speemedia.com with 54% all maintained a negative position in publication of news on pollution in Iraq. According to McCombs, Einsiedel and Weaver (2017), environmental organizations feel that journalism is the most effective media weapon for influencing public opinion and government institutions in favour of environmental issues and that the media plays a vital role in informing the public). One of the press key functions is to raise environmental awareness and steer people's behaviour toward proper environmental management. The press, by virtue of its functions, can report and address environmental issues in a way that informs people about what they can do to help solve environmental problems.

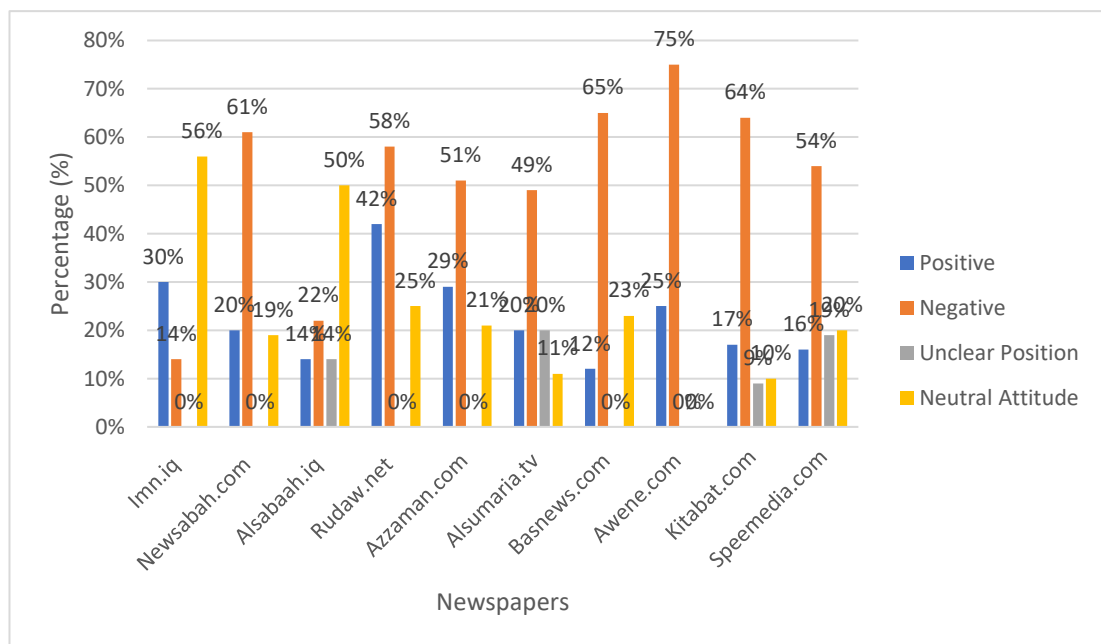


Figure 4.5: The media frame of Pollution in the chosen Iraqi Newspapers

To answer research question four on how the media framed the land decay in the chosen Iraqi newspapers, this study analyzed pro-government and anti-government newspapers in Iraqi media and results indicated that most newspapers portrayed a negative attitude towards land decay in Iraqi media. From Fig. 4.6, Imn.iq has 58%,

Newsabah.com with 49%, alsabaah.iq scored 61%, rudaw.net has 76%, Basnews.com with 61%, Awene.com with 44%, and Kitabat.com raked in whooping 80% all maintained a negative attitude towards land decay in their reportage over the years, while Azzaman.com with 44% and Alsuma with 61% maintained a positive attitude in their reportage. Speemedia.com with 69% portrayed a neutral attitude. Shain (2010), claimed that Iraq's exiled journalism reflects the country's split opposition. The Iraqi press in exile, like the Iraqi opposition, is fragmented and politically split. There are roughly 20 newspapers, as well as radio and television stations, that are published on a regular basis. Most of these news organizations, but not all, are based in London. In the United States, Europe, and Syria, opposition media funded by Arab regimes hostile to Iraq, Iran, and the United States are appearing. The Iraqi National Council (INC), which consists of representatives of the key opposition groups in exile, suspended broadcasting in May 2002. Since February, the money granted by the United States Congress had not been paid. In September 2001, Liberty TV was launched with financial help from the United States government. Its programs, which were aired from Western countries, were available in Iraq, the Middle East, Europe, and a few African and Asian countries. Azzaman (The Times), one of the largest and most financially healthy publications, was launched in 1996 by Saad Al-Bazzaz, who is now its editor-in-chief.

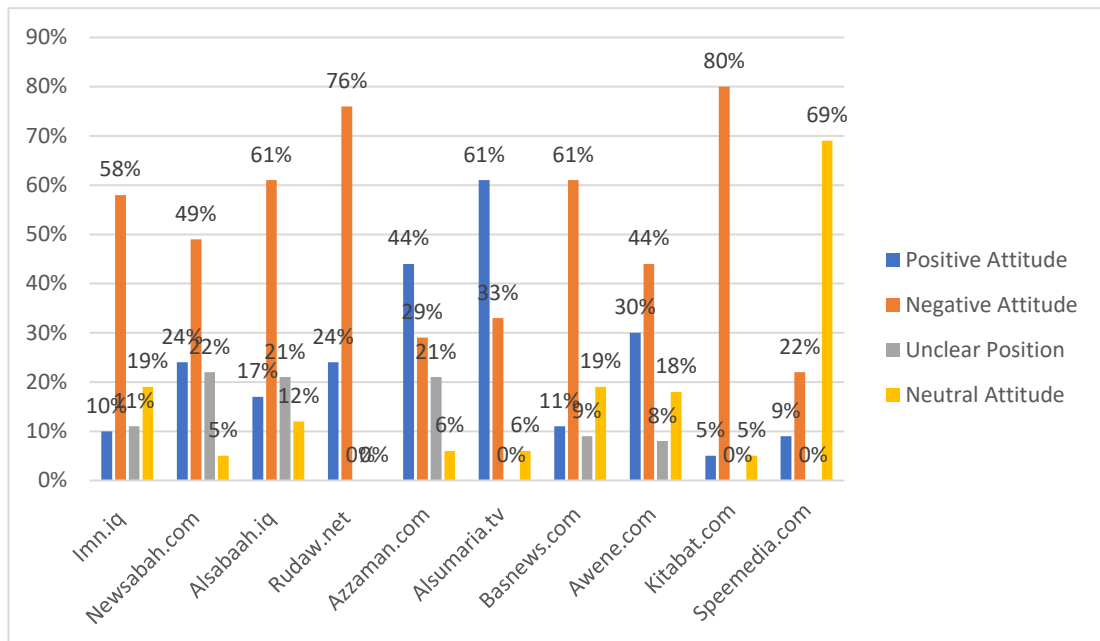


Figure 4.6: The media frame of land decay in the chosen Iraqi Newspapers

## 4.6 The difference in Pro-government and Anti-government Framing of Environmental Issues in Iraq

To answer research question five on the differences between pro-government and anti-government media framing of environmental issues in Iraq, this study analyzed pro-government and anti-government newspapers in Iraqi media from the perspectives of epistemic, attitudinal, and style.

### 4.6.1 Epistemic Stance

In this section, editorials were analyzed to check the existence of an epistemic stance. From Table 3, there were 205 editorials out of 279 in all ten selected newspapers expressing an epistemic view. On environmental issues in Iraq, *imn.iq* offered 29 editorials on epistemic stance, *newsabah.com* had 13, *alsabaah.iq* had 16, *rudaw.net* had 18, *azzaman.com* had 27, *alsumaria.tv* had 42, *basenews.com* had 9, *awene.com* had 22, *kitabab.com* had 18, *speedmedia.com* had 11 editorials, and it offered light comments without covering it critically. Editorials are mostly opinionated and depict what newspapers police are all about. At the same time, the analysis of ten newspapers

highlighted that editorial has a more epistemic stance. azzaman.com and plumeria. tv seems to cover environmental issues in Iraq, which makes their opinion influential while discussing environmental issues in Iraq.

Table 4.2: Epistemic stance Used by the Editors in Editorials of Pro-government and Anti-government Newspapers in Framing the Environmental Issues in Iraq

	Epistemic stance		Total
	No	Yes	
Imn.iq	8	29	37
Newsabah.com	11	13	24
Alsabaah.iq	3	16	19
Rudaw.net	12	18	30
Azzaman.com	13	27	40
Alsumaria.tv	16	42	58
Basnews.com	2	9	11
Awene.com	5	22	27
Kitabat.com	3	18	21
Speemedia.com	1	11	12
Total	74	205	279

#### 4.6.2 Attitudinal Stance

While examining the editorials to check the existence of attitudinal stance, it has been found that there were many occurrences of expressions showing the editor's attitudinal stance. 178 editorials out of 279 in all ten newspapers expressing an attitudinal stance. From Table 4, Imn.iq offered 28 with 15.7% editorials on attitudinal stance,

newsabah.com had 16 with 9.0%, alsabaah.iq had 12 with 6.7%, rudaw.net had 19 with 10.7%, azzaman.com had 26 with 14.6%, alsumaria.tv had 37 with 20.8%, basenews.com had 7 with 3.9%, awene.com had 14 with 7.9%, kitabat.com had 12 with 6.7%, speedmedia.com had 7 with 3.9% editorials. The overall attitudinal stance on environmental issues in Iraq was portrayed in 178 editorials. The analysis gives you an idea about attitudinal stance that had more occurrences, same as the epistemic stance. The editor tried to show that he was portraying the opinion of the mass regarding environmental issues in Iraq.

Table 4.3: Attitudinal Stance Used by the Editors in Editorials of Pro-government and Anti-government Newspapers in Framing the Environmental Issues in Iraq

	Attitudinal stance		Total
	No	Yes	
Imn.iq	9	28	9
Newsabah.com	8	16	8
Alsabaah.iq	7	12	7
Rudaw.net	11	19	11
Azzaman.com	14	26	14
<u>Alsumaria.tv</u>	21	37	21
Basnews.com	4	7	4
Awene.com	13	14	13
Kitabat.com	9	12	9
Speemedia.com	5	7	5
Total	101	178	101



### 4.6.3 Style Stance

While examining the editorials to check the existence of style stance, it has been found that their different expressions show the editor's style stance. From Table 5, there were 279 in all ten newspapers, and other editorials had various face of style stances and were divided into four types of style stance, namely; aggressive, polite, dramatic, and opinionated. *Imn.iq* has used bold expression in 7 editorials; whereas *newsabah.com* had 6, *alsabaah.iq*, had 5, *rudaw.net* had 2, *azzaman.com* had 6, *alsumaria.tv* had 12, *basenews.com* had 1, *awene.com* had 5, *kitabab.com* had 4, *speedmedia.com* had one editorial. This shows that *Alsumaria.tv* had more aggressive behaviour towards environmental issues in Iraq than other newspapers. *In.it* had the highest number of editorials (11) for polite style; whereas *newsabah.com* had 10, *alsabaah.iq* had 8, *rudaw.net* had 8, *azzaman.com* had 3, *plumeria.t v* had 4, *basenews.com* had 3, *awene.com* had 4, *kitabab.com* had 6, *speedmedia.com* had seven editorials. This indicated that *imn.iq* was the politest among the editorials, while *azzaman.com* and *basenews.com* were the least courteous among the ten editorials. There is not much of a difference in the dramatic expression editorials ratio in any of the publications; the ratios are nearly identical. Editorials are almost always opinionated and describe the editor's viewpoint, hence the number of editorials that express an opinion is significantly higher than the number of editorials that express any other style. whereas *Alsumaria.tv* had the greatest rate of editorials with an opinion, which was 24, more than any other station. The findings indicate that the total number of opinionated editorials were 102, followed by 64 editorials written in a courteous manner, 64 editorials written in a dramatic style, and 49 editorials written in an aggressive style. The number of editorials written in an aggressive style was 49. Editorials are based on the author's opinion, and it is the role of the editor to convey that perspective in a

manner that is both professional and in accordance with the guidelines established by the publication. The environmental problems in Iraq have been portrayed in a dramatic and opinionated manner in a number of the country's periodicals. In spite of this, people's perspectives on environmental issues vary widely depending on location (Bakir, 2010; Saleh, 2018).

Table 4.4: Style Stance Used by the Editors in Editorials of Pro-government and Anti-government Newspapers in Framing the Environmental Issues in Iraq

	Style stance				Total
	Aggressive	Polite	Dramatic	Opinionated	
Imn.iq	7	11	7	12	37
Newsabah.com	6	10	4	4	24
Alsabaah.iq	5	8	2	4	19
Rudaw.net	2	8	9	11	30
Azzaman.com	6	3	9	22	40
Alsumaria.tv	12	4	18	24	58
Basnews.com	1	3	1	6	11
Awene.com	5	4	8	10	27
Kitabat.com	4	6	4	7	21
Speemedia.com	1	7	2	2	12
Total	49	64	64	102	279

## 4.7 Discussion

The general objective of this research work was to examine media framing of oil spills, climate change, pollution, and land decay in Iraq. These was achieved under the following specific objectives which were to understand how the Iraqi news media cover and frame the issues of oil spilling affecting the country's oil-producing regions; know how the Iraqi online news media cover and frame climate change issues in the entire country; know how the Iraqi online news media cover and frame air pollution is in the entire country; know how the Iraqi online news media cover and frame the issues uses water pollution issues dire country; know how the Iraqi online news media cover and frame the issues of land decay in the entire country; and understand how the pro-government and anti-government frame the environmental issues (climate change, oil spillage, land poison, air, water and land pollution) in Iraq. The two theories adopted in this research work were the framing theory and agenda setting theory. According to Goffman (1974), the Framing Theory has been historically used to explain various issues. As of 1974, Goffman (1974) believes that as individuals, we use our representation of the world to frame, i.e., “to locate, perceive, identify, and label” people, issues, occurrences, and events. Since this research dealt with location, perception, identity and label of environmental issues in Iraq, it was deemed relevant for the purpose of this study. Also, agenda setting theory was adopted which looks at how the media provide coverage of environmental events in Iraq. According to Harder, Sevenans, and Van Aelst (2017), “Agenda-setting theory suggests that by often covering and providing emphasis to subjects in the media, the audience assigns greater importance to those issues than to others.

The methodology adopted for this study was quantitative content analysis to understand Media framing and coverage of environmental issues in the Iraqi media. The adoption of this methodology was necessary due to essential content-oriented data collection techniques of quantitative Content analysis. To gain a better understanding of how Iraqi media covered environmental concerns such as oil spills, land poisoning, climate change, and pollution in Iraq, the researcher selected the top ten nationally recognised newspapers and examined their coverage of environmental issues. The top newspapers were picked based on their popularity on the internet. Six of the ten sets are pro-government, while the remaining four are anti-government. Eight are in Arabic, while two are in English. They all have a story to tell about environmental challenges like as oil spills, soil contamination, climate change, and Iraqi pollution. Data collected were represented in charts and tables, this was accompanied by the interpretations of the charts and the tables.

The research findings revealed that the pro-government newspaper was upbeat about Iraq's oil spills, with newspapers such as [imn.iq](http://imn.iq), [newsabah.com](http://newsabah.com), [rudaw.net](http://rudaw.net), and [Alsumaria.tv](http://Alsumaria.tv) reporting positive stories at a rate of more than 60%. While anti-government newspapers were antagonistic, more than 60% of news on [basnews.com](http://basnews.com) and [speedmedia.com](http://speedmedia.com) focused on the Iraq oil spill. According to Michael (2014), the newspaper's portrayal of news in a political context is largely determined by individuals who favour or oppose the administration. The newspaper is a medium of communication that enables the creation, distribution, and exchange of political information on platforms and within networks that facilitate collaboration and interaction. They've advanced at a dizzying pace over the previous three decades and continue to do so in novel, frequently unexpected ways. The findings revealed a similar

conclusion, namely that the media's framing of climate change is inadequate. From newspaper reporting, it was concluded that both pro and anti-government publications established a low level of media framing of climate change in Iraqi media. According to Lewandowsky (2013), a similar media failure is probably occurring right now in the case of climate change.

The examination of selected publications found that the framing of pollution in Iraq is more prominent and frequently portrayed negatively. The way pollution is portrayed was classified as positive, negative, uncertain, and natural. Both pro and anti-government newspapers presented pollution differently. *Imn.iq* and *Alsabaah.iq* exhibited a neutral attitude against pollution in their articles. The majority of newspapers maintained a negative tone. *Newsabah.com*, *rudaw.net*, *azzaman.com*, *Alsumaria.tv*, *Basnews.com*, *awene.com*, *kitabab.com*, and *speemedia.com*, all maintained a bad position in the publication of news on pollution in Iraq. According to McCombs, Einsiedel, and Weaver (2017), environmental organizations believe that journalism is the most effective medium for influencing public opinion and political institutions in favour of environmental concerns and that the media is critical for public education). According to newspaper reporting, the majority of Iraqi newspapers expressed an unfavourable stance toward land deterioration. *Imn.iq*, *Newsabah.com*, *Alsabaah.iq*, *rudaw.net*, *Basnews.com*, *Awene.com*, and *Kitabat.com* all reported on land decay negatively over the years, while *Azzaman.com* and *Alsuma* reported positively. *Speemedia.com*, on the other hand, exhibited a neutral opinion. According to Shain (2010), Iraq's expatriate journalists reflect the country's fractured opposition. As with the Iraqi resistance, the Iraqi press in exile is fragmented and politically divided. There are approximately 20 daily newspapers, as well as radio and television

stations. The majority, but not all, of these news organizations are headquartered in London. Opposition media supported by Arab countries opposed to Iraq, Iran, and the United States are emerging in the United States, Europe, and Syria.

In the final section of chapter four, editorials were analyzed for the presence of an epistemic stance; 205 editorials out of 279 in all ten selected newspapers expressed an epistemological position. *Imn.iq* published 29 editorials on epistemic stance on environmental issues, *newsabah.com* published 13, *alsabaah.iq* published 16, *rudaw.net* published 18, *azzaman.com* published 27, *alsumaria.tv* published 42, *basenews.com* published 9, *awene.com* published 22, *kitabab.com* published 18, and *speedmedia.com* published 11. Editorials are largely opinionated and reflect the newspaper's mission. Simultaneously, an examination of ten articles reveals the editorial adopts a more epistemic stance. Both *azzaman.com* and *plumeria.tv* appear to address environmental issues in Iraq, lending their perspective credence when discussing environmental issues in Iraq.

## Chapter 5

### CONCLUSION AND RECOMMENDATION

#### 5.1 Conclusion

Based on the findings, the research study concludes that news on environmental issues has been well discussed in the Iraqi media. This research demonstrates a reflective discourse established through newspaper investigative reporting to convey environmental concerns as a warning sign and to advocate for the creation of a humane and animal-friendly environment. Nature has never been portrayed as a human's "enemy" or as infinite. Nature, on the other hand, is portrayed as subservient to human activity and adverse to expansion. Nature destruction, in turn, will have a negative impact on humanity and civilization. This is highlighted by the report's prominent conflict between economic advancement and environmental protection. Furthermore, when environmental concerns are considered as a result of economic transition and modernization, their specificity is lost. The media has been sounding the alarm about environmental threats. Concerns over Iraq's economic development are reflected in the prominence of reflexive discourse in newspaper coverage. Such intuitive judgments of Iraq's current national drive for economic expansion and its capitalist method of production have the potential to culminate in a cultural revolution.

In this case, the reflexivity shown in newspaper coverage suggests that Iraqi investigative journalism may play an advocacy role in portraying environmental problems in a reactive manner that confronts and criticizes Iraq's official goals. This

spontaneous conversation highlights how investigative journalism may be used to reduce the risk of economic development in Iraqi society. Nonetheless, this does not imply that the Iraqi government's media control is broken, nor does it represent the full of Iraqi reality. This is the picture that eleven newspapers known for their investigative reporting have painted. More research is needed to establish why such discourse emerges in newspaper coverage and whether comparable addressing can be found in a range of other news sources. Doing interviews with investigative journalists about their work, for example, or conducting a content analysis of various types of environmental reporting will be valuable. In addition, newspaper readers could be polled to learn about their attitudes toward environmental issues and reactions to investigative reporting. Based on data from the social context, the remainder of this article will address many plausible causes for the recurrence of this type of talk.

It's important to recognize the study's limitations, such as the fact that it's based on a review of investigative pieces in newspapers, but the Internet has become an increasingly important source of news. In recent times, the Internet, especially social media platforms, had a huge impact on Iraq's political and public life. Because of the growth of the Internet, ordinary people can now speak out in critical or dissident voices on social and environmental issues (Goldkorn, 2012; Davies, 2012). Internet users may access environmental information online, and environmental debates put governments under pressure.

As previously said, environmental issues allow for more journalistic freedom than other themes. This is due not just to the central government's recognition of the crucial role of sustainable development and the long-term repercussions of environmental problems, but also to the fact that the bulk of environmental problems are of a local



rather than national origin. Because of the decentralization of government ties, the central government can use such environmental reports to address local issues in a proactive manner (de Burgh & Zeng, 2011). This explains why the majority of the text is devoted to environmental issues that occur outside of the region where the journal is based. Investigative journalists have called attention to social logic inconsistencies about the environment and nature, the central government's conflicting attitudes toward environmental concerns, and Iraq's decentralized media-government relationship.

Furthermore, environmental issues are a top priority for the general public. As a result, in order to maintain their pro-people image, news organizations encourage reporting on environmental issues. This appraisal of reader wants is exemplified by the marginalization of the topic of climate change. Local readers may find international environmental issues dull. The nine commercial newspapers are all well-known for their investigative reporting. Their editorial values reflect their status as urban newspapers, valuing journalistic freedom, social responsibility, and the vital duty of speaking for the people. This editorial support for populist ideology is also a result of commercial demands being realized. People's Daily, as the ruling party's most important organ, must contribute to the formation of a self-reflexive image of the ruling party. Non-partisan newspapers, on the other hand, cover the majority of the model. This may have an impact on the findings in some way.

Understanding the reflexive discourse entails looking at the survivalist discourse's impact on the environment, which Iraq developed alongside the dominant Promethean narrative of economic modernization's climate. Whereas passionate supporters of modernization believe in a Promethean attitude of "man conquering nature," these

investigative studies mirror the survivalist view of limited resources and warn of the negative ramifications and repercussions of excessive economic growth excitement on the environment. In this approach, the rhetoric generated in investigative reports is derived from and justified by the survivalism ideology of environmentalism. As a result, reporting environmental dangers in the way described in this work is very risk-free.

*Research question and theoretical implication*

According to the research questions outlined in this study, findings tend to be in harmony with the question raised. For instance;

(1) How did the media frame the Oil Spills in the chosen Iraqi Newspapers?

- Through the analyzed newspapers it is imperative to note that the pro-government newspapers were optimistic regarding oil spills in Iraq. This is evident with some newspapers having over 60% positive reports. However, anti-government newspapers were hostile, this is represented in over sixty per cent of news from such newspapers indicating negative publications of the oil spill in Iraq.

(2) How did the media frame Climate Change in the chosen Iraqi

Newspapers? - According to the analyzed pro-government and anti-government newspapers in Iraqi media, the result shows that the media portrayal of climate change in the selected Iraqi newspapers was high and low. The findings implies that the framing of climate change is poor. From the newspaper reportage, it was deduced that both the pro-government and anti-government newspapers established that media framing of climate change in Iraqi media is relatively low.

(3) How did the media frame the Pollution in the selected Iraqi Newspapers? This study tends to answer the question by analyzing the pro-government and anti-government newspapers in Iraqi media. The results shows that the framing of pollution in Iraq is more prominent and often portrayed as negative by the newspapers. The portrayal of pollution was categorized into positive, negative, unclear position and natural attitude. Both anti-government and pro-government newspapers portrayed pollution based on different perceptions.

(4) How did the media frame the Land Decay in the chosen Iraqi Newspapers? In responding to this research question, this study analyzed pro-government and anti-government newspapers in Iraqi media and results indicated that most newspapers portrayed a negative attitude towards land decay in Iraqi media.

(5) What is the difference in how the pro-government and anti-government frame the environmental issues in Iraq? This study answered this question by analyzing the pro-government and anti-government newspapers in Iraqi media from the perspectives of epistemic, attitudinal stance, and style stance. Result shows that Editorials are mostly opinionated and depict what newspapers policies are all about. At the same time, the analysis of ten newspapers highlighted that editorial has a more epistemic stance. While it has been found that there were many occurrences of expressions showing the editors attitudinal stance. This can be reflected in theory and principle as editor tried to show that

he was reflecting the opinion of the mass regarding environmental issues in Iraq.

The findings of this study collaborate with the two major theories established in this research questions and its answers. They include framing theory and agenda setting theory. According to Goffman (1974), the Framing Theory points out that as individuals, we use our representation of the world to frame, i.e., “to locate, perceive, identify, and label” people, issues, occurrences, and events. Since this research dealt with location, perception, identity and label of environmental issues in Iraq, it was deemed relevant for the purpose of this study. In addition, agenda setting theory was adopted which looks at how the media provides coverage of environmental events in Iraq. According to Harder, Sevenans, and Van Aelst (2017), “Agenda-setting theory suggests that by often covering and providing emphasis to subjects in the media, the audience assigns greater importance to those issues than to others.

## **5.2 Recommendation**

In Iraq, newspapers are a widely used news medium; however, the news may now be sent to individual residents via social media 24 hours a day. Future research should look at the same topic in several formats. According to this study, the frames utilized by newspapers may have been influenced by news published on social media. The study did not investigate how news broadcasts affected the audience's views and opinions, even though it was primarily looking into newspaper media's reaction and subsequent effects on coverage were not examined. Public opinion is frequently linked to a shift in government policy (Hobley, 2012). This fact has far-reaching ramifications for a variety of future research topics. Finally, further research should be conducted to

determine why thematic framing is more prevalent in conservative media and what types of rhetoric conservative reporters use in their descriptions and interpretations of tragic environmental issues like the one discussed in this thesis.

### **5.3 Contribution to Knowledge**

This study added to the current body of knowledge in three ways. To begin, it was one of the first studies to examine the framing of environmental issues news in Iraq. There is a dearth of literature on environmental issues in Iraq. However, a study of newspaper framing is necessary due to its widespread distribution. Second, this is one of the few studies that examine how environmental issues in Iraq are framed across a 20-year span. Numerous previous research examines a time range of one to three years. A longer time enables the discovery of trends, whereas a shorter time provides a picture of current events. Finally, this study discovered similarities and discrepancies in the way environmental issues are portrayed along with the political alliance of newspapers.

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