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**MARITIME BOUNDARY DELIMITATION
OF THE KINGDOM OF SAUDI ARABIA
A STUDY IN POLITICAL GEOGRAPHY**

Faraj Mobarak Jam'an Al-Muwaled

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ABSTRACT

Saudi Arabia was the first Arab country to claim offshore jurisdiction and the first Middle Eastern state to define its offshore waters. This study examines the principal geographical factors which have resulted in the present Saudi maritime boundary. The semi-enclosed sea, islands, reefs, natural resources of the continental shelf, exclusive economic zone and coastline, can all be considered principal geographical factors that have influenced Saudi territorial waters policy. Islands, for example, play an effective role in increasing the area of Saudi internal waters, increasing the breadth of the territorial sea, straight baseline and the delimitation of maritime boundary in the Red Sea and the Arabian Gulf with opposite and adjacent states. Natural resources demanded the swift implementation of unique agreements, used later as an example worldwide.

The author has drawn the 1958 Saudi straight baseline and a theoretical straight baseline based on the 1982 Convention and states practice. The territorial sea which is drawn on this basis along the Red Sea and the Arabian Gulf coasts, is affected by the presence of islands and reefs. The Saudi Exclusive Fishing Zone claimed by the 1974 decree gave the Kingdom the same right as the 1982 Exclusive Economic Zone (EEZ), but the Kingdom had to adapt the latter in order to gain more control over its resources and non-mineral activities. The importance of the 1949 Saudi decree can be found in the contribution made by Saudi Arabia to the development of the law of the sea, and to safeguarding the national hydrocarbon resources (natural gas and oil) on and below its seabed. Saudi Arabia engaged in several agreements, mainly in the Gulf, in order to define its boundary. This study has highlighted these agreements as a model which can be used in different parts of the world to solve similar disputes, and can be adopted as methods of maritime delimitation between opposite and adjacent states. The importance of the economic factor has been shown, along with security, as the main factor influencing the successful conclusion of such agreements, but where there is no such importance, the boundary may become less significant and by the absence of such motivation the boundary may not be defined.

Saudi waters are a rich and highly important maritime area. This is based on the facts that Saudi Arabia has 30 per cent of the world seawater desalination plants; that the sea represents food, fuel and wealth to Saudi Arabia; and that the existence of huge deserts emphasises the importance of the sea.

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Declaration

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Dedication

To My Country.

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ABBREVIATIONS

AALCC	Asian-African Legal Consultative Committee
ADMA	Abu Dhabi Marine Areas
AJIL	American Journal of International Law
ARAMCO	Arabian American Oil Company
BOIESA	Bureau of Ocean and International Environmental and Scientific Affairs (US)
CMEIS	The Centre of Middle East and Islamic Studies (UK)
DEPT	Department
DRY	Democratic Republic of Yemen
EEC	Eastern European Countries
EEZ	Exclusive Economic Zone
EFZ	Exclusive Fishing Zone
FAO	Food and Agriculture Organization
FMJ	The Author
FMS	Faculty of Marine Science (KSA)
GCC	Gulf Co-Operation Council
IBRU	International Boundary Research Unit (UK)
ICJ	International Court of Justice
ICLQ	International Comparative Law Quarterly
IDS	Institute of Diplomatic Studies (KSA)
IPAC	Iran-Pan American Oil Company
km	Kilometre
KSA	Kingdom of Saudi Arabia
LOS	Law of the Sea
m	Meter
M.A.	Master Degree
MEED	Middle East Economic Digest
MEES	Middle East Economic Survey
MEPA	Meteorology and Environmental Protection Administration (KSA)
MFA	Ministry of Foreign Affairs (KSA)
MFRDC	Marine Fisheries Research and Development Centre (KSA)
NICO	National Iranian Oil Company
nm	Nautical Mile
ODIL	Ocean Development and International Law Journal
PLO	Palestinian Liberation Organization
SIRIP	Societe Irano-Italienne des Petroles
sq	Square
SR	Saudi Riyal
UAE	United Arab Emirates
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
US	United States
USA	United States

**YAR
YFC
YOMINCO**

**Yemen Arab Republic
Yemen Fuel Company
Yemen's Oil and Minerals Corporation**

IN THE NAME OF GOD THE MOST MERCIFUL

Chapter One

INTRODUCTION

It need hardly be said that the Middle East has been of global importance since the emergence of the three great monotheistic religion of Judaism, Christianity and Islam. The holy Cities of Mecca, Medina and Al-Quds (Jerusalem) are the focal point for millions of Muslims. The discovery of huge quantities of oil reinforced world interest in the region, and political events such as the Arab-Israel conflict, two Gulf wars, and the collapse of the Soviet Union have increased this interest, as reflected in the western media, in literature and research. The area differs from the rest of the world, and particularly from the West, not only in religion, but also in culture, language, political system and lifestyle. That is to say that the people of the Middle East, being distinct in a variety of ways from the people in other parts of the world.

The Kingdom of Saudi Arabia is at the "epicentre" of this focus of interests because of its immense oil wealth which represent 47.6 per cent of the Middle East's proven offshore oil reserves and about 22 per cent of the area's proven offshore gas reserves [Offshore, 1990]. Mecca is the heart of the Islamic world, to which city as many as 1,200 million Muslims turn for prayer five times a day. The Kingdom is strategically located between the African and Asian continents, and connects the Indian Ocean with the Mediterranean via the Red Sea. The Kingdom also enjoys a location beside the two international waterways of Hormuz on the Arabian Gulf, and Bab Al-Mandab on the Red Sea. These two are vital to international trade movement and the world economy. Saudi Arabia also controls the eastern flank of the Red Sea and the Gulf of Aqaba, thus having

control of access to the Suez Canal and the Strait of Tiran.

Many of these geopolitical aspects of Saudi Arabia have been extensively analyzed and researched. The literature on oil pipelines, strategic waterways, and the politics of oil is huge. One reason for this is that geopolitical relationships in the Middle East change very fast. One aspect of the political geography of Saudi Arabia which has been surprisingly neglected is the state's land and maritime international boundaries. Saudi Arabia has a large number of boundaries, and their delimitation has been a sequence of successes. Some of the peaceful solutions to Saudi boundary problems are of importance as examples to the rest of the world. Saudi Arabia has seven land boundaries; only seven states in the world have more. Saudi Arabia also has ten potential maritime boundaries, the largest number in the world. Together, the number of Saudi Arabian land and maritime boundaries rank the kingdom as being among the leading countries with the highest number of boundaries in the world. The delimitation and peaceful management of these boundaries is of vital importance to the peace of the Arabian Peninsula, and it is government policy to try to reach formal agreements with all neighbouring states. Territorial and boundary disputes can easily cause the breakdown of relations between states. At other times these are used to symbolise poor political relationships.

The land boundary of Saudi Arabia is relatively new. The territorial domination of Saudi Arabia, as shown in Figure 1.1¹ took only 32 years to complete. In 1902 Riyadh City alone was the limit of Saudi Arabia

¹. See the companion Atlas.

[Abu-Dawood, 1984]. The Saudi state had grown from a small city of less than 5000 sq.km. in the heart of Arabia, to about 400,000 sq.km. by 1905 [Al-Mankori, 1988]. With expansion under Ibn Saud it grew to a large country of about 2,239,832 sq.km. (864,800 sq.mile) [Saudi Statistical Yearbook, 1989] in 1934, with land boundaries today of about 4400 km. Table 1.1² shows the length of the seven Saudi land boundaries with its Arab neighbours, six of which have been defined and partially demarcated. Only the southern Saudi boundary with Yemen has not yet been agreed.

Table 1.1
Saudi Arabia Land Boundaries Length (km)

Country	Boundary
Qatar	80
Kuwait	220
UAE	560
Oman	676
Iraq	686
Jordan	740
Yemen	1438
Total	4,400

Source: Adapted from 1) Couper, 1983. 2) Al-Mankori, 1988

². The author has found three different sources which give different figures to the total Saudi boundary length. This may be related to unpublished data of the 1974 Saudi-UAE boundary agreement and unsettled Saudi-Yemen boundary. So, the figures shown here have been adapted by the author from the above sources.

Saudi Arabia's maritime boundaries have received little attention from specialists in maritime boundary delimitation. One reason for this is the lack of information on which maritime studies are based, such as marine charts. With a coastal length of 2424 km. (1515 miles) [Couper, 1983], its ratio of coastal length to land area is 0.001082 or about 924.0 sq.km. per kilometre of coast [Drysdale and Blake, 1983]. Saudi maritime boundaries present an almost unique case study of boundary delimitation both for the problems presented and their solutions. The aim of this thesis is to examine the role of geography in the delimitation of these boundaries.

The geographical setting is unusually complex with features such as the Red Sea rift, long coastlines, narrow entrances to the Red Sea and the Gulf, and numerous islands. There are 144 Saudi islands in the Red Sea alone [Al-Sultan, 1984]. There are also at least 8 Saudi islands in the Arabian Gulf. The potential maritime boundaries of Saudi Arabia are shown in Table 1.2. There are two kinds of maritime boundaries: opposite maritime boundaries in the Red Sea with Egypt, Sudan and Eritrea, and in the Arabian Gulf with Bahrain and Iran; adjacent maritime boundaries with Jordan and Yemen in the Red Sea, and with Kuwait, Qatar and the UAE in the Arabian Gulf. By 1992 only 5 formal maritime agreements had been reached, half the potential total. Globally, out of 420 maritime boundaries, 147 agreements (approximately 35 per cent) of potential maritime boundaries have been agreed by 1991. In the Middle East the total is 25 (about 27 per cent) of the potential 92 maritime agreements.

Table 1.2
Saudi Arabia Potential Maritime Boundaries

Seas	Opposite States	Adjacent States	Total
The Red Sea	3	2	5
The Arabian Gulf	2	3	5
Total	5	5	10

Source: US Department of State, 1990).

1.1 Saudi Arabia and the Law of the Sea (Decrees)

The Kingdom of Saudi Arabia was one of the earliest Middle Eastern states to become aware of the importance of sea resources. As a result, the kingdom was the first Middle Eastern state to proclaim by the Royal Pronouncement of 28 May 1949 its jurisdiction and control over the resources of the seabed and subsoil lying under the sea contiguous to its territory [El-Hakim, 1979]. Before that, Saudi Arabia had issued the Fishing and Shells Regulation of 22 July, 1932 [Umm Al-Qura, 1932]. This was followed by the Regulation for the Coast Guard Directorate and its Divisions on May 13, 1934 [Umm Ai-Qura, 1934]. The 28 May 1949 Decree was revoked by the Royal Decree No. 33, of 16th February 1958 concerning the territorial waters of the Kingdom of Saudi Arabia. On 7th September 1968 a Royal Decree relating to the acquisition of the Red Sea Resources, No. M/27, was issued. Another declaration concerning the Limit of the Exclusive Fishing Zones of Saudi Arabia in the Red Sea and the Arabian Gulf dated 1 May 1974, was announced. The Royal Decree No. M/27 dated 9th November 1975 relating to Port, Harbour and Lighthouse Regulations

was issued in order to regulate all the Saudi coasts, ports and their activities and to safeguard the national interests [Umm Al-Qura, 1975]. The 1975 decree, counted as the most comprehensive Saudi decree ever, was issued and this covered a variety of issues. In 1978, the Government of Saudi Arabia published The Anti-Pollution Port Regulations. Finally, in 1986, Saudi Arabia issued a ministerial decree which dealt with the fishing regulations which was intended to distinguish between commercial and other vessels in order to develop sea food resources and give them more rights over Saudi waters and regulate Saudi rights from alien ships.

Saudi delegates and technical experts attended all three of the UN Law of the Sea Conventions in 1958, 1960 and 1973-1982. The third convention was signed by the Government of Saudi Arabia on 7 December 1984 following a recommendation from a committee established in 1982 to study the third LOS Convention and its implications for the kingdom [Al-Shora, no date].

Saudi Arabia has been more active than any other country in the Middle East in respect to maritime affairs. Only Iran in the Arabian Gulf has similar perspectives on law of the sea issues, due to the length of Iran's Gulf coastline, and to the large quantities of natural resources found offshore. This in turn led to successful agreements between the two states and their neighbours. Both Saudi Arabia and Iran have adapted international law to suit their region and serve their national interests. MacDonald [1980, p. 204] stated:

Iran and Saudi Arabia have used international law as an instrument to support their respective interests in a given context and they have recognized international law as a constraint on what actions would be appropriate.

An example of this use by Saudi Arabia is that

The Saudi extension of its territorial sea to twelve nautical miles in 1958 represented the use of law as a tool to support Saudi interests in response to the presence of Israel in the Gulf of Aqaba [MacDonald, 1980, p. 204].

In the Red Sea, Sudan is the only Red Sea state which has defined its opposite boundary with Saudi Arabia, and claims its right over Red Sea resources along with Saudi Arabia.

As part of the process of establishing maritime claims, Saudi Arabia conducted a survey carried out by a Saudi firm in order to update and gather information related to Saudi maritime affairs and its coasts. The result was new charts which cover the whole Saudi Red Sea coast published in 1983.

1.2 Objectives

The thesis has four main objectives. The first is to analyze existing continental shelf agreements, and in particular to examine geographical influences and to explore whether the delimitation methods involved are applicable elsewhere. The second objective is to examine those boundaries over which there is dispute or no agreement, with a view to suggesting possible delimitations. The third objective is to draw the 1958 Saudi straight baseline and another based on the 1982 Convention. The fourth objective is to assemble a comprehensive bibliography on the maritime geography of the Gulf and the Red Sea. It is hoped that this research will lead to a better understanding between states and the peaceful resolution of boundary problems.

1.3 The Methodology

The basic methods of research used in this thesis were varied, involving libraries, interviews, field work, and analysis of maps and charts. Libraries in the UK, Saudi Arabia and Egypt were used in a variety of ways. Data collection was from bibliographies, primary documents, periodicals, books, theses, newspapers and magazines, much of which was on microfilm. These selected library materials were used for the following enquiries:

- 1) Identification of the number of countries potentially involved in boundaries with Saudi Arabia, and accumulation of treaties concerning each boundary together with official charts.
- 2) Information about hydrocarbon exploration before and during negotiations, which would indicate the geographical knowledge available to diplomats at various times, and surveying of newspaper files during the period of negotiations.
- 3) Examination of official correspondence between governments and between members of a single government from the archives of different Saudi institutions.
- 4) Analysis of appropriate historical and geographical accounts which include references to the boundary; a computer search was used to assist with this.
- 5) Interpretations of various decrees and treaties. The first difficulty is translation of the language from Arabic to English, including the numerous notes and quotations from books, articles and reports. The second problem of interpretation is to decide upon the precise meaning of the Saudi

decrees and to produce them in the form of maps and diagrams.

Prescott [1972, p. 28] pointed out three stages through which research in political geography should be conducted

First, it is necessary to observe and collect the facts related to the subject. Secondly, the collected material must be organized and described. Finally, the organized material should be analyzed so that the nature of the subject can be explained.

The analysis of cartographic materials is one of the methods used to assist in explanations. The author employed 22 charts (scale 1:150,000) covering the whole coast of Saudi Arabia along the Red Sea and the Arabian Gulf and others charts of different scales were used to cover various parts of the two seas.

Field work was carried out by the researcher for the purpose of general observation and to familiarise himself with the features of the border areas. Clearly, direct observation of traffic counts across international boundaries is not feasible in maritime boundary studies, but observing the extent of boundary demarcation (if any) and the ownership of islands along the zone of the boundary line between the parties is feasible. Sample fieldwork areas were chosen in the Red Sea and the Arabian Gulf where islands and reefs are found. However, the author covered nearly the whole Red Sea coastline visiting fishermen and coast guards and interviewing experts, many of whom were first contacted during three different conferences dealing with international boundaries held at University of Durham (IBRU) in 1989 and the University of London (SAOS) in 1990 and the University of Durham (IBRU) in 1991.

The use of computers proved valuable in time saving and flexibility. Computer use was not restricted to word processing, which permitted editing and

spelling to be checked, but was extended to simple computer graphics, which is one of the important techniques learnt in the preparation of this work (see Figure 9.3).

1.4 Research Problems

Existing written work studying Saudi maritime boundaries in terms of political geography is limited. Only two major works, both dated 1990, have been found. This problem was not easily overcome by interviewing experts, because of the sensitive nature of the matter looked at from a security and political point of view. Nor did the subject lend itself to the use of questionnaires. The total coastline being so long, field observation could be conducted only on part of the coast. Even the area to be sampled for fieldwork could not be adequately covered. For example, an island may not be photographed close-up. The Saudi EEZ measures about 186,200 sq. km. [Couper, 1983], only a section of which can be seen by a researcher without extensive time and facilities. A visit to one island 30 km. offshore may take one hour to reach and such a journey may take a month to organise. The author was forced to extend his field work by a further two months in order to cover a few islands lying off the Saudi coast in the Arabian Gulf.

International boundary studies encounter other particular set of difficulties because of the kind of security with which every state surrounds its documents, maps and charts. This may relate to political, economic or military factors. As a result the author faced a serious threat to his project. But this was overcome by serious study and hard work.

1.5 Previous Studies

Maritime boundary agreements around Saudi Arabia took place as early as the 1950s. Table 1.3 shows Saudi agreements in the Red Sea and the Arabian Gulf and their dates. The methods of maritime delimitation had not yet been agreed, and therefore a variety of approaches were adopted in these agreements. Some were median lines e.g. Saudi-Qatar and some parts of the Saudi-Iran and Saudi-Bahrain, while others depended on equitable principles.

Table 1.3
Saudi Arabia Maritime Agreements

Agreements	Type	Signature Date	In Force Date
Saudi-Bahrain	CS	22/2/1958	22/2/1958
Saudi-Qatar	TS	4/12/1965	24/10/1965
Saudi-Iran	CS	24/10/1968	29/1/1969
Saudi-Sudan	CS	16/5/1974	26/8/1974
Saudi-UAE	TS and CS	19/8/1974	19/8/1974

Source: Adapted from 1) Conforti, and Francalanci, 1979.
2) Ministry of Foreign Affairs, 1936/1973.
3) Al-Sayf, 1990.

Two research thesis have been written on the Political Geography of Saudi Arabia's maritime area reflecting Saudi policy. The first, *The strategic importance of the Gulf of Aqaba*, was written by Prince Fahad bin Saud in 1990. The study is considered the most extensive and complete work ever written on this arm of the Red Sea. The second, *The Territorial Waters of the Kingdom of Saudi Arabia*,

carried out by H. Al-Sayf in 1990, was the first Saudi study in Political Geography to deal with Saudi maritime boundaries. It covers a wide range of topics which have negatively affected maritime boundary delimitations.

Several studies deal with maritime boundary delimitation, disputed islands and maritime agreements. These include Hussain Al-Baharna, *The Legal Status of the Arabian Gulf States* (1968). This study is almost historically based and is a well documented study reflecting international relations and their significant influence in the region. However, the work was carried out 23 years ago, and is now out of date, the area being renowned for rapid change. Nasser Al-Arfaj, in *Saudi Arabia's Maritime Policy* (1970), analyses the Saudi attitude towards the sea from a legal point of view. The study deals with the legal aspects of the Saudi decrees and the Saudi state practice on maritime issues. M. Al-Sayari's *Legal Aspects of the control over Mineral Resources of the Red Sea* (1973), is an MA thesis which covers the legal aspect of Red Sea mineral resources and parties rights and aliens claims over the area. T. Awad's *The Submerged Maritime Zone of International Boundaries: Case Study the Arabian Gulf* (1974) is a Ph.D. thesis and a comprehensive study in the delimitation of international maritime boundaries between opposite and adjacent states. The study covers different aspects of the law of the sea particularly in the Gulf. It is an important source for any maritime study. Ali El Hakim's *The Middle Eastern States and the Law of the Sea* (1979) discusses the attitudes of Middle Eastern states towards maritime issues and their claims to offshore jurisdiction. The study provides a valuable store of source material for students of maritime legal questions and maritime

boundaries in particular. Charles MacDonald's *Iran, Saudi Arabia and the Law of the Sea* (1980) focuses upon the approaches of two developing states, Saudi Arabia and Iran, to the law of the sea in the Arabian Gulf and the contribution which has been made by them locally and on an international level. M. Al-Shubaili's *Saudi Arabia-Sudan Agreement on the Joint Development of the Natural Resources of the Seabed and Subsoil of the Red Sea in the Common Zone* (1981) is an M.A. thesis dealing with the 1974 Saudi-Sudan Red Sea agreement, its legal aspects, the Red Sea common zone and the Red Sea Commission, with a brief historical study on the development of the law of the sea. Sayed Amin's *International and Legal Problems of the Gulf* (1981) concentrates on subjects such as the legal significance of the Gulf as a semi enclosed sea, rights of passage, the implications of the Iran-Iraq conflict, constitutional problems in the Emirates, regional arrangements over pollution and fisheries and the delimitation of the continental shelf.

Some specialized works on maritime boundaries in the Middle East, their problems, joint agreements, disputed territory, and conflict resolution have been written or edited by Gerald Blake over more than two decades. *Maritime Boundaries and Ocean Resources* was edited by him (1987). *Maritime Aspects of Arabian Geopolitics* was published by the Arab Research Centre (1982), and *The Middle East and North Africa: a Political Geography* in 1985, was written with A. D. Drysdale. *Boundaries and State Territory in the Middle East and North Africa*, was edited with R.N. Schofield (1987). Some of the most valuable sources on international law related to maritime boundaries and straight baselines have

been written, the best of which is P., Beazley's *Maritime Boundaries*, 1982, Beazley's *Developments in Maritime Delimitation*, 1986, Beazley's *Maritime Limits and Baselines*, (1987), and also Beazley's *Reefs and the 1982 Convention on the Law of the Sea*, 1991. They are very important references on international law studies and on straight baselines in particular. They are primary sources for such works. Then there is J.R.V. Prescott's *The Maritime Political Boundaries of the World* (1985), which is organized in two sections. The first five chapters treat maritime claims and their boundaries in a systematic way. The remaining nine chapters provide a regional treatment of the world's oceans and seas. The book is a well-illustrated and authoritative text, which includes a glossary of technical terms and extensive notes and references. Ted McDorman (ed) *Maritime Boundary Delimitation: a Bibliography* (1982), is very useful to all researchers as a ready-made bibliography. An International Court of Justice memorial produced by Libya *Continental Shelf Case "Libyan Arab Jamahiriya/Malta"* (1983) includes 72 case studies. *Canada's Delimitation of Maritime Boundary in the Gulf of Maine Area with the USA* (1983) includes 85 cases which provide a comprehensive record of state practice in delimitations of maritime boundaries by agreement beyond the outer limit of the territorial sea.

The contribution made by this thesis is that it covers the whole Saudi maritime domain, and discusses Saudi Arabia's maritime boundaries more comprehensively than previously attempted. It raises questions about the proclamation of an EEZ and discusses continental shelf delimitation in respect of Saudi Arabia's neighbours. The thesis reveals the methods used between Saudi

Arabia and the UAE Boundary Agreement, drew adjacent lines show for the first time the Saudi-Yemen maritime boundary, the Saudi-Kuwait maritime boundary and the Saudi-UAE maritime boundary along with Jordan maritime boundary. Saudi-Egypt maritime boundary in the Red Sea and the Gulf of Aqaba also studied for the first time. This study is the first to examine all of Saudi Arabia's maritime zones, and it incorporates the first attempt to draw the kingdom's 1958 straight baseline and compare it with a theoretical straight baseline based on the 1982 Convention (Chapter 2).

1.6 Thesis Summary

The thesis consists of nine chapters, the first of which is an introduction. Chapter 2 deals with the baselines from which the territorial sea and the Exclusive Economic Zone (EEZ) are measured. The straight baselines as declared by the 1958 Saudi decree are mapped, defined and described for the first time, and a comparison is made with the straight baselines permitted by the 1982 Law of the Sea Convention, this also includes definition of the terms used in the Saudi 1958 Decree and the 1982 Convention dealing with straight baselines. Some attention is also paid to internal waters. Chapter 3 focuses on the development of Saudi territorial sea claims, measured from the system of baselines. These are particularly important in a narrow sea such as the Gulf of Aqaba (Saudi Arabia-Egypt) where there is considerable debate about the status of the waters and in the Arabian Gulf between Saudi Arabia and the UAE. The delimitation of maritime boundaries between opposite and adjacent coasts has become increas-

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ingly important because of competition for resources particularly in small seas. Chapter 4 deals with the EEZ and its significance for resource exploitation, especially living resources. The chapter first highlights the marine resources which include the marine environment, living resources and the fishing community. The Saudi 1974 EFZ claim is also dealt with in order to emphasise the need for an EEZ claim by Saudi Arabia. The chapter concludes with a discussion of the role of an EEZ within the Kingdom. Chapters 5 and 6 continue the discussion concerning resources by considering Saudi claims to the continental shelf, its definition, breadth and delimitation of continental shelf boundaries with other states by which Saudi Arabia contributed to the development of the law of the sea. The methods used in these agreements are discussed in Chapter 6. Chapter 7 highlights the most remarkable of these agreements in the unique Saudi-Sudan Red Sea Commission, the principles of which might be applied elsewhere. Saudi Arabia has made considerable efforts to settle boundaries with its neighbours, but a number of problems remain, which are discussed in Chapter 8. The chapter answer some of these problems by defining the unsettle Saudi boundaries with its neighbours. The Saudi-Kuwait, Saudi-Yemen and Saudi-Egypt boundaries are all defined and demarcated by equidistant line. Chapter 9 concludes the study with its finding and most important contribution of the thesis in its addition to knowledge. Each of the thesis chapters is concluded with a summary of the main points, reflecting the author's opinion.

1.7 Characteristics of the Red Sea and Arabian Gulf

The coasts of the Red Sea and Arabian Gulf, and the seabed beyond, display contrasting characteristics which have greatly affected maritime boundary delimitation. The Red Sea is generally taken to include the Gulfs of Suez and Aqaba. It is a long narrow feature which follows the great rift which runs from East Africa to the Jordan Valley, extending almost 2,000 km. Its width varies generally between 145 and 306 km although Bab Al Mandab narrows to 26 km. The centre of the Red Sea reaches considerable depths of over 2,400 m. The Saudi Red Sea coastline is generally smooth, but the offshore areas are strewn with about 146 islands (table 1.4), and numerous coral reefs, generally close inshore. There are two types of coral reef in the Red Sea: isolated reefs which generally lie between 18°-20° north, and sometimes located as far as 80 km from the shore; and reefs which are more extensive and lie close inshore in shallow water. The three most important areas for coral reefs are:

*Table 1.4
Distribution of Islands Along the Red Sea Coast*

State	Islands	State	Islands
Saudi Arabia	146	Sudan	36
Eritrea	126	Egypt	24
Yemen	41	Djibouti	6

Source: Adapted from Al-Sultan, 1984

1. from Ra's Al-shayk Humaid to Al-Wajh;
2. south of Al-Wajh to Al-Liyth;
3. south of Al-Liyth, an area of about 18,000 sq.km in which there are about 500 islands and coral reefs [Al-Muwaled, 1986]. The existence of this coral reef system, together with the numerous islands greatly complicated Saudi efforts to draw acceptable straight baselines in the Red Sea.

The Arabian Gulf lies between the Strait of Hormuz in the south east and Shatt Al-Arab in the north west, covering an area of 250,000 sq.km. The western coast of the Gulf measures 1,357 km. from Al-Faw to Ra's Sandam on the Strait of Hormuz, and the eastern coast measures 860 km. Its breadth varies between 180-280 km. The Gulf seabed is asymmetric with the Arabian side of the basin sloping gently to a trough near Iran. The water shallows longitudinally from 90 meters in the south to 70 meters in the mid-Gulf and 30 meters near the head of the Gulf. The Gulf is, therefore, a shallow body of water, and the entire Arabian Gulf can be considered a continental shelf, the rise and slope of which lie beyond the Strait of Hormuz in the Gulf of Oman. Locally, the shallow seabed has many highs in the form of coral reefs, islands and sand ridges, as well as areas of depression. The nearshore spits and barrier islands are depositional features from longshore currents, whilst offshore shoals that parallel the coast may reflect the subsurface geology. Active nearshore coral banks and platform reefs lie adjacent to most of the coast, and six small islands with large fringing reefs lie offshore (ARAMCO, no date). The coast is mostly smooth apart from the Qatar peninsula which is a prominent feature of the west coast. The chief difficulty in boundary

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delimitation arises from prevalence of islands of varying size, and numerous reefs. In the following chapters these coastal characteristics provide the essential geographical setting for the political boundary system.

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Chapter Two

BASELINES

2.1 Introduction

The baseline from which the width of the territorial sea and other types of offshore zones are measured is the low water line, or a straight baseline in certain circumstances, as laid down in the 1958 and the 1982 UN Conventions. The importance of these baselines lies in the fact that they separate the internal waters of the coastal state from its territorial sea. The legal status of the internal waters differs from that of the territorial sea; internal waters give the state total sovereignty.

The normal low-tide baseline runs along the coast and generally follows its configuration. This type of baseline is used on smooth coasts which are not deeply indented and this was the basis of the claim used by the Saudis in Article 5(a) of Decree No. 33 of 16 February 1958 [Ministry of Foreign Affairs, no date (KSA)]. The straight baseline is an old concept that goes back to the last century. First mentioned by Norway and Sweden, it was authorised by the ICJ in its 1951 judgment in the long standing argument between Norway and the United Kingdom as to the legality of such lines [Beazley, 1987]. The closing line across the mouth of a juridical bay is another type of straight baseline. This type of bay has to meet two geographical conditions: First, the area of such indentation must be as large or larger than a semi-circle whose diameter is a line drawn across the mouth of the indentation. Second, the closing line of the mouth of that bay must

not exceed 24 nm [Scovazzi, (ed), 1989].

There are 63 states worldwide which have claimed straight baselines, the first was Sweden in 1934 followed by Norway on 12 July 1935 and the latest is Argentina on 13 September 1991 [US Department of State, 1992]. Saudi Arabia was the first Middle Eastern state and the fourth in the world to claim straight baselines after Sweden, Norway and Yugoslavia (see table 2.1). This clearly reflects the importance of the sea to Saudi Arabia and the importance of the natural resources (oil and gas in particular) which lie under the seabed and subsoil. Some of the 63 states which claim straight baselines may not have the ability to carry out their claims due to the technical and legal expertise required.

*Table 2.1
The First States to Claim Straight Baselines*

State	Date of the Claim	State	Date of the Claim
Sweden	1934	Iceland	19/3/1952
Norway	12/7/1935	Ethiopia	25/9/1952
Yugoslavia	8/12/1948	Finland	18/8/1956
Saudi Arabia	28/5/1949	Iran	12/4/1959
Bulgaria	10/10/1951	Ireland	1/1/1960

Source: Adapted from 1) US Department of State, 1992.
2) El-Hakim, 1979. 3) The Geographer, 1972.

Saudi Arabia was party neither to the 1930 Hague Convention, nor to the First UN Convention on the Law of the Sea in 1958. The Kingdom did, however, signed the Third United Nations Law of the Sea Convention, (1973-82). The 1982

UN Convention will come into force for those states which have ratified it 12 months after the deposit of the 60th instrument of ratification or accession. By February 15 1992, 51 states had ratified the convention [US Department of State, 1992], but Saudi Arabia was not among them; however, the Kingdom signed the convention on 7 December, 1984. The baseline from which the territorial sea is measured will be discussed here according to the Saudi 1958 Decree and compared with the 1982 Convention. Since the 1958 Saudi proclamations, no official charts have been produced to show Saudi baselines, so the application of this decree is hard to evaluate. The researcher has examined the 1982 Convention to establish a theoretical baseline, and compared it with the 1958 Saudi decree to highlight the differences between the theoretical claim, and the Saudi claims. Islands, reefs (the term reef here means a feature qualified as an island according to the Saudi 1958 Decree) and the shape of the coast are the most important geographical factors affecting the baseline system.

The desirability of a straight baseline may be related to defence, national security or economic interests. Defence interests relate to the conflict in the Middle East between Arab States and Israel, tension with Iran, and the conflicts between various Arab States themselves. The extension of the seaward area under state sovereignty gives the state time to respond to any armed incursions, while internal waters status (landward of the baseline) gives the state full control of its closest seas. Saudi Arabia has built two major industrial cities, one on the Red Sea (Yanbu) and one on the Arabian Gulf (Al-Jubail), costing billions of pounds, and depending on coastal desalination plants for water. Such locations are

extremely defence sensitive.

Security considerations also arise as a result of the expanding Saudi economy which has brought problems such as smuggling goods, drugs, and illegal immigrants. If Saudi Arabia extends its sovereignty seaward over a large area, this might help prevent such illegal activity by creating a zone at sea to which access is controlled and carefully monitored in order to screen out those who may harm national security. As a result, the government has built quarantine stations at most the Saudi ports along the Red Sea and the Arabian Coasts. Saudi Arabia has also declared a Contiguous Zone under the 16 February 1958 Saudi Royal Decree (see Appendix A Article 8). This zone is also discussed in chapter 3. The Contiguous Zone is primarily to enable the Kingdom to extend sanitary and quarantine regulations especially during the pilgrimage seasons (see Figure 9.1).

Regarding economic interests, the Red Sea is reported to have one of the richest seabed deposits, including petroleum deposits, evaporite deposits (e.g. salt, gypsum) and metallic-rich mud, which lies at the middle of the Red Sea especially in the area between Jeddah and Port Sudan. Together with the resources in the Gulf, nearly two thirds of the worlds offshore oil reserves lie in this shallow body of water. Assd [1981] has shown that the security issue led the Kingdom to pronounce a Royal decree in February 1958 in which Saudi Arabia made its claim to straight baselines. He concluded that the existence of Israeli naval units in the Red Sea was a dangerous threat to the national security of the Kingdom.

A straight baseline may have to be taken into account when boundaries

between opposite states are being delimited for the continental shelf or the exclusive economic zone. Egypt, Sudan and Ethiopia (Eritrea from 1990) have all claimed straight baselines. Saudi Arabia's boundary with Sudan has been agreed without taking baselines into account. With the other two states, baselines may have to be considered in order to reach an equitable solution. Such baselines may be negotiated by agreement. The United States-Cuba Boundary was defined employing an agreed baseline [Alexander, 1983]. Alternatively baselines may be totally ignored in the boundary delimitation.

2.2 Saudi Arabian Baseline Claims

2.2.1 The 1958 Decree

On 28 May 1949, a Saudi Royal Decree proclaimed the Kingdom's rights over its resources in offshore waters and in particular in the Arabian Gulf where oil and gas had been found in commercial quantities. This decree was superseded by Royal Decree No. 33 of 16 February 1958 which specifically dealt with those zones which lie within national jurisdiction. Article 10 of the 1958 Decree stated:

Decree No. 6/4/5/3711 promulgated in Sha'ban corresponding to 28 May 1949 is revoked.

The 1958 Saudi Royal Decree on the territorial sea consists of 12 Articles (see Appendix A). Article 1 defines the meaning of terms used in the decree such as bays, islands, reefs, rocks, shoal, nautical mile and coast. A bay includes any inlet, lagoon or other arm of the sea. Island means any islet, reef, rock, qut'ah, fasht, qasr and any permanent artificial structure not submerged at lowest

low-tide. The term Dhdah "Shoal" describes an area covered by shallow water, apart of which is exposed at lowest low-tide. It is worth mentioning here that "Dhdah" as used by the Saudi decree describes a phenomenon not equivalent to the term "shoal" in the technical description. The word "coast" refers to the Saudi coasts on the Red Sea and the Arabian Gulf.

In order to evaluate the use of terms and the definitions in Article 1, particularly the terms island, rock, reef and shoal, comparison with these terms and definitions as used in the 1982 Convention will be made. This will enable the author to evaluate the Saudi 1958 straight baseline and compare it with the 1982 Convention. Article 121 of the UNCLOS 1982 stated:

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.
2. Except, as provided for in paragraph 3, the territorial sea, the contiguous zone, the exclusive economic zone, and the continental shelf of an island are determined in accordance with the provisions of this Convention applicable to other land territory.
3. Rocks which cannot sustain human habitation or economic life of their own shall have no exclusive economic zone or continental shelf.

Article 6 of the 1982 Convention dealt with those islands situated on an atoll or having a fringing reef; in this respect, the Article stated:

In the case of islands situated on atolls or of islands having fringing reefs, the baseline for measuring the breadth of the territorial sea is the seaward low-water line of the reef, as shown by the appropriate symbol on charts officially recognized by the coastal state

However, Article 13 of the 1982 Convention which is equivalent to Article 11 of the 1958 Geneva Convention, distinguished low-tide elevation from islands. In this respect the Article stated:

1. A low-tide elevation is a naturally formed area of land which is surrounded by and above water at low tide but submerged at high tide. Where low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea.
2. Where a low-tide elevation is wholly situated at a distance exceeding the breadth of the territorial sea from the mainland or an island, it has no territorial sea of its own.

From these definitions some conclusions can be drawn. Firstly, islands have to be above water at high tide, which is not the case in the low-tide elevation. Secondly, the island has a belt of territorial sea and an EEZ as well as a continental shelf, but a low-tide elevation does not have a territorial sea if it is situated at a distance exceeding the breadth of the territorial sea from the mainland. Thirdly, rocks which are above water at high tide and cannot sustain human habitation or economic life of their own do not have an EEZ or continental shelf, but they do have a belt of territorial sea.

Comparing the definition of the 1982 Convention to the terms and definitions used by the Saudi 1958 decree it can be said that there are three distinct types of phenomena, islands, rocks, and low-tide elevations which can be identified in the 1982 Convention, whereas the Saudi 1958 Decree has made no distinction between them (see Appendix A). For example, an island in Article 1(c) in the Saudi decree is defined as

any islet, reef, rock, qut'ah, fasht, qasr or permanent artificial structure not submerged at lowest low tide

The term "reef", renders two Arabic words used in the original text, "fasht", which is used in the Arabian Gulf and "shi'b" which is used in the Red Sea (Figure 2.1). The term "qut'ah" and "qasr" denote two different types of

intermittently submerged obstacles, not properly to be rendered as "bar", the common term for which in the Arabian Gulf is "Hidd", according to the Geographer [1970]. But the author's opinion¹ is that, "qut'ah" and "qasr" as they are used by the Saudi Ports Authority are reefs named by the local fishing community who would be unlikely to distinguish between the different types of features. They named them with names describing their size or shape, but not the type of feature, e.g. "qut'ah" means a small piece of area (see Figures 2.15, and 2.19 which show their small size), and "qasr" describes a feature which takes the shape of a palace.

The terms "qut'ah" or "qut'at" are the same the letter H being replaced by T if the name of the feature is added. For example "qut'ah" would be used alone, but if a proper name were added it would become Qut'at e.g. Qut'at al-Jadd. Because these terms have been in use for a long time in the local community (fishermen), it is hard to believe that they were aware of the scientific distinction. These features (qut'ah) are shown in the Saudi charts by a serrated line which is internationally used to show a reef, Admiralty Chart No. 3790 also shows these features by serrated line and described them as coral heads as it the case with Qit'at ash-Sharjah. Sometimes names only are shown and the lines are not drawn on the charts, which from the author's point of view may relate to the variety of reefs involved (194 kinds) or to the timing of the survey, which would have

¹. The author has found four different spellings to describe the term Qasr as it is used by the Saudi Ports Authority Charts (see chart No. 20), such as Qassar which used by the Geographer [1970], Qasar which is used by the Admiralty Chart No. 3774 and Kasr which is used by the Admiralty Chart No. 4704. Also, the term Qut'ah as it is used by the Saudi Port Authority and the Geographer, is found to be used in the Admiralty Chart as Qit'ah, which is more accurate.

shown these features at low-tide e.g. Qut'at al-Awwal and Qut'at ath-Thani at latitude 19°50' north and longitude 40°32' east approximately (see Figure 2.21). Because this feature (qut'ah) is indicated in other places by the same line used to draw a shi'b "reef", the author found it difficult to distinguish between them. Coastal features in the Saudi waters need more studies in order to overcome these difficulties. Another example of such difficulties, is the term "sharm" which is used to describe an inlet along the Saudi Red Sea coast (see Figure 2.17), but "sharm" is also used to describe a reef drawn by a serrated line called "Sharm ash-Shi'bah" (see Figure 2.15).

The term "qasr" is used on the Saudi charts only in two places namely "Al-Qasr ash-Shamiyyah" and "Al-Qasr al-Yamaniyyah" (Figure 2.19). These features are also shown in Figure 2.19 by a serrated line which is used to define reefs, while in the Arabian Gulf a smooth line is used to draw Qasar Umm as Sahal [Admiralty Chart No.3774].

The Geographer, [1970] stated:

the term "island", as used in the decree, refers to any elevation not below lowest low water. By this definition "drying rocks" or even "rock awash" qualify as islands which may be utilized for the measurement of the territorial sea or drawing straight baselines.

Article 1(d) of the Saudi 1958 Decree specifically defines the term shoal which

denotes an area covered by shallow water, apart of which is not submerged at lowest low tide.

Two points can be made from this definition. Firstly, the word "an area" could be any of the terms used to define an island. Secondly, the distinction between an island as defined by Article 1(c) in the Saudi decree and shoal is that an island

should dry completely at the lowest low-tide, but a shoal is covered with water, and only part of it no matter how small, stays dry at the lowest low-tide. The Geographer [1970] comments on this

"shoal", basically an underwater area, equates with an "island" if the shoal possesses one drying rock.

The name shoal is found in Figure 2.18. "Eliza Shoals" which is shown by a serrated line cannot fall under the definition of shoal as mentioned above for two reasons; the first reason is that, the type of line used in the Saudi chart No. 19 to indicate the shoal gives it the status of reef; the second is that the Arabic name of Eliza Shoal is "Dhdah Eliza". The word "Dhdah" has been translated as "shoal", which describes a feature defined scientifically to distinguish it from other coastal features. But the word "Dhdah" in the arabic language means " the waters whose bottom is near the surface" [Mostafa, et al, 1960, p. 537]. Dhdah also means "little waters" or "the waters which reach the ankle" or "the waters which reach half the legs" or could be "the waters which a person could not drown in it due to its near bottom" [Al-Bostani, 1882, p. 1235]. According to all these definitions "Dhdah" could be a shoal, reef, or rock which does not dry at lowest low-tide, in other words it is covered by water all the time².

From the author's point of view, the issue here is a technical problem, where the word "Dhdah" has been used in the Arabic language to define the same feature defined by the word "shoal" in the English Language which is not

². This definition matches the Geographer's definition that a "shoal is basically an underwater area" mentioned earlier, where the words "underwater" and "area" fit the same definition described by "Dhadah".

technically the case. Article 1(d) in the Saudi decree fits this definition in its first part i.e. "an area covered by shallow water", but the second part is hard to explain. However, these features, which are not shown by a serrated line in Saudi Ports Charts, are not used by the author in drawing the 1958 Saudi straight baseline and as a result the features used as base points along the straight baseline fall under the terms described in Article 1(c). Also, there are no artificial structures used in this straight baseline due to the numerous islands and reefs existing in the area.

The inter-tidal areas are depicted as reefs along the Saudi mainland coast. Only in the south from Ra's Mas'ud at latitude 17°35', are these features shown as smooth lines on the charts which represent sand or mud (see Figures 2.42 and 2.43). The whole Saudi coastal waters' feature in the Red Sea is shown as a serrated line representing reef features. Other than that, smooth lines show the edge of islands or the mainland.

In 1983 Saudi Arabia published charts to show different interpretations of the terms used in the 1958 decree. The charts reveal a clear distinction between the terms "island" and "low-tide elevation" as defined by the 1982 Convention.

Article 2 of the 1958 decree emphasizes the sovereignty of Saudi Arabia over its territorial sea according to recognised international law. Article 3 defines internal waters which thus include:

- a)- Waters within bays along the Saudi coast.
- b)- Waters above and landward of any shoals not more than 12 nm from the mainland.

c)- Waters between the mainland and Saudi islands not more than 12 nm from the mainland.

d)- Waters between Saudi islands not farther apart than 12 nm.

Article 4 describes the territorial sea of the kingdom that lies seaward of the internal waters for a distance of 12 nm.

The Saudi straight baseline is defined in Article 5, describing seven kinds of straight baseline as follows:

a)- In the case where the mainland or the shore of an island is fully open to the sea, the territorial sea is measured from low-water mark.

b)- In the case of a bay, a line drawn from headland to headland across the mouth of the bay (Figure 2.2).

c)- Where a shoal is situated not more than 12 nm from the mainland or from a Saudi island, lines drawn from the mainland or the island and along the outer edge of the shoal (see Figures 2.3 (a and b)).

d)- Where a port or harbour confronts the open sea, lines drawn along the seaward side of the outermost works of the port or harbour and between such works (Figure 2.4).

e)- Where an island is not more than 12 nm from the mainland, a straight baseline may be drawn from the outer shores of the islands to the mainland (Figure 2.5).

f)- Where there is an island group which can be connected by lines not more than 12 nm long, in which the nearest islands are not more than 12 nm from the mainland, lines may be drawn from the mainland to the outer

shores of all the islands if they form a chain, or lines may be drawn along the outer shores of the outermost islands of the group if the islands do not form a chain (Figures 2.6 and 2.7).

- g)- An island group may be connected by lines not more than 12 nm long, drawn along the shores of all the islands of the group if the islands form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain (Figure 2.8).

Article 6 declared that if the delineation of the territorial sea according to this decree should leave an area of high sea surrounded by territorial sea which does not extend more than 12 nm in any direction, this area shall be part of the territorial sea (Figure 2.9).

Article 7 deals with the possible overlap with neighbouring states; in this case, agreement should be reached with the second party according to equitable principles.

Article 8 asserts the Kingdom's right to control security, navigation and sanitary matters, while Article 9 declares rights over fishing. The most important article in the Saudi Arabia 1958 Decree, is however, Article 5 which defines the straight baseline. At the time, in 1958 when the Kingdom of Saudi Arabia announced its decree, the international community had not yet clearly defined its approach to the status of offshore areas adjacent to islands and islands groups [MacDonald 1980 p.96]. Although, there was acceptance of the fact that each island had its own territorial sea, no standard breadth had been agreed for the territorial sea.

Saudi Arabia apparently based its claim to a straight baseline largely on the 1930 Hague Conference which suggested that

in the case of a group of islands which belong to a single state and at the circumference of the group are not separated from one another by more than twice the breadth of territorial waters, the belt of territorial waters shall be measured from the outermost islands of the group. Waters included within the group shall also be territorial waters. The same rule shall apply as regards islands which lie at a distance from the mainland not greater than twice the breadth of the territorial waters [MacDonald, 1980].

Article 5(d) of the Saudi decree corresponds to Article 11 of the 1982 Convention which states that the outermost works which form part of the harbour system shall be counted as part of the coast. It is the same language as that used in Article 8 of the 1958 Geneva Convention. Thus Article 5(d) of the Saudi decree states that if the port or harbour is open to the sea a line may be drawn along the outermost works of the port or harbour and between such works. The Saudi Article 5(d) does not include mention of roadsteads, whereas Article 12 of the 1982 Convention does:

Roadsteads which are normally used for the loading, unloading and working of ships and which would otherwise be situated wholly or partly outside the outer limit of the territorial sea, are included in the territorial sea.

It is understood from the language of the Saudi decree that, harbour works should be included within the baseline system but there is no mention of roadsteads. Regarding Article 5 (e,f,g) of the Saudi decree, the report of the Second committee at the 1930 Hague Conference, recognized that each island has its own territorial sea. This rule is also recognized in Article 10 of the 1958 Convention, and Article 121 of the 1982 Convention gave islands the same effect.

2.2.2 Application of the 1958 Saudi Decree

Table 2.2 shows two types of illustrations in the accompanying Atlas and their relationship. Firstly, Saudi Ports Authority numbers from 12-27 and the corresponding thesis figures from 2.10 to 2.26. Figure 2.14 is not included in table 2.2. Figures 2.10 to 2.26 are original charts photographed and reduced to A3 size, showing the Saudi 1958 straight baselines.

Table 2.2: The Matching Pairs of Original and Plain Maps Shown in the Accompanying Atlas

Original Maps		Plain Maps Thesis Figures
Ports Authority Numbers	Thesis Figures	
12	2.10	2.28
13	2.11	2.29
14	2.12	2.30
15	2.13	2.31
16	2.15	2.32
17	2.16	2.33
18	2.17	2.34
19	2.18	2.35
20	2.19	2.36
21	2.20	2.37
22	2.21	2.38
23	2.22	2.39
24	2.23	2.40
25	2.24	2.41
26	2.25	2.42
27	2.26	2.43

The second type of figures shown in table 2.2 run from 2.28 to 2.43. These figures are the plain version of the original charts also reduced to A3 size. They show the 1958 Saudi baselines and the theoretical baselines drawn according to the 1982 UN Convention. Figures 2.44 to 2.47 show the theoretical straight baseline according to the 1982 UN Convention of the Arabian Gulf. The figures show the coastline of the mainland and the Saudi islands near by, some important towns and cities and some important reefs.

Coastal irregularities and the existence of large numbers of islands with numerous reefs along the Saudi Red Sea and Arabian Gulf coasts may justify the use of straight baselines. According to the ICJ in the Anglo-Norwegian Case, straight baselines are acceptable under certain conditions. MacDonald [1980, p. 105] defined acceptable use by the ICJ practice in the Anglo-Norwegian Fishery Case Judgment. The Saudi coasts are indented³ along some of its parts and fringed with islands in other parts, Article 7(1) of the 1982 Convention stated:

In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.

The Saudi 1958 straight baseline system has been drawn in figures 2.10 to 2.26. Only the Red Sea has been made as a case study due to the availability of charts. The Red Sea is also most relevant to the 1958 Saudi Decree, because of the reefs and islands which exists in large numbers. The sea is covered by sixteen charts

³. The 1958 Saudi Decree does not mention an indented coast, but refers only to bays.

issued by the Saudi Ports Authority at a scale 1:150,000. This study depends largely upon these charts.

The Saudi straight baseline in the Red Sea starts from Tiran Island joining Sanafir, Shushah, Yubu and Sila islands. These islands form a chain not more than 12 nm from the mainland and from each other (Figure 2.10). It connects six islands leaving an area lying between the mainland and the straight baseline as internal waters. The coast north of Sanafir, Shushah and Baraqan is fringed with islands. The use of such a baseline seems to be reasonable and is justified by the existence of islands which lie closely linked to the mainland. In addition, the baselines do not depart to any appreciable extent from the general direction of the coast. This properly fulfils the requirement of Article 7(4) of the 1982 Convention, and Article 5 of the 1958 Saudi decree. The straight baseline continues to the south of Sila island, along a coast neither fringed with islands nor deeply cut into (Figure 2.11).

Only two true islands can be seen, Na'Man and Nuwayshiziyah, however, the use of a straight baseline here is based on reefs as base points. The Saudi straight baseline thus extends from Na'Man island and continues until it reaches a reef near Nuwayshiziyah Island (see Figure 2.11). The use of such a reef as an island is based on Article 1(c) of the Saudi 1958 decree (see Appendix A).

Figure 2.12 shows the area from Ra's Marjah to Birrim Island as an extension to the previous baseline. The line here runs from Muraykhah island close to the mainland until it reaches Al-Mardunah and Ash-Shaykh Murbat Islands where it changes direction to the South West, passing the low-water line of Ghawwar,

Umm Rumah and finally Birrim Island. The coast is fringed with islands particularly in the south. The islands are not more than 12 nm apart and the nearest to the mainland do not exceed this distance, thus meeting the requirement of Article 5 of the Saudi decree [Ministry of Foreign Affairs, (no date), (KSA)].

Figure 2.13 covers the area from Birrim Island to Ra's Abu Madd. This coast is fringed by islands masking the coastline of the mainland. Prescott [Quoted in US Department of State, 1987, p. 26] identifies that there are essentially two variations on the masking criterion regarding a state's claim due to a coastal fringe of offshore islands:

- 1) Islands that more or less form a unity with the mainland (i.e. those that appear to be part of the mainland whether viewed from air or sea) and 2) masking islands (i.e. those that from the sea but not from the air, appear to form the mainland).

The two types need not be treated separately (see Figure 2.14).

Figure 2.15 covers the area from Ra's Abu Madd to Yanbu Al-Bahr; it reveals that the reef which extends the internal waters lies within the 12 nm limit which the Saudi decree requires. The straight baseline does not depart from the general direction of the coast, being a continuation of the line in the previous figure.

Figure 2.16 represents a unique case where off the coast lie a large number of reefs not more than 12 nm from each other, which pushes the straight baseline away from the coast creating a belt around an economically important part, of the Saudi coast.

Figure 2.17 shows a stretch of the Saudi Red Sea coast which it is difficult to claim as indented coast. Sharm Rabigh, Khaur Al-Karrar and at the

north Marsa Tuwal are all examples of inlets which according to Beazley [US Department of State, 1987, p.7] (and concurred with by Prescott) do not qualify to be enclosed by a straight baseline, in this respect

"Deeply indented and cut into" cannot refer to one or two isolated indentations, however large they may be, because if it did there would be no need for Article 7 (of the territorial sea convention)... or its 24 mile limit on closing lines. It must therefore refer to a coastline in which the number and intricacy of the indentation would make application of Article 7 tedious and largely irrelevant.

These inlets do not fulfil the requirement of Article 7 in drawing baselines but they might be closed locally by lines at the mouth of each of them. There are a number of geographical features along the Saudi coast notably small inlets which are given local names such as Sharm, Khaur and Duhat ("Duhat" is used in the Gulf), but due to their size and width they do not meet the definition of either geographical or juridical bays. In addition, particularly in the Red Sea, these inlets generally dry out at high water, so that the low-water line is unindented and the "bay" is naturally closed.

The straight baseline then extends from Shi'b Nazar to Shi'b Al-Kabir joining reefs not more than 12 nm apart (Figure 2.18). Figure 2.19 similarly reveals much the same features; however, the coast here is cut into and fringed with islets especially along Jeddah and the near by coast. The straight baseline deviates from the general direction of the coast to connect a point on the mainland in order to meet the 12 nm limit stated in Article 5(f) of the 1958 Saudi Decree. But to the South (Figure 2.20), smoothness is the main feature of the coast and the reefs start to extend seawards. The straight baseline also deviates from the general direction of the coast thus creating an odd pocket of internal

water towards the sea. This in fact, goes against the rules established in the 1958 and 1982 Conventions to solve irregularities of the coasts and ease the administration regulations.

An important point can be illustrated here; the distance from the mainland or an island as required by the Saudi Decree Articles 5(f and g), restricts the width of the internal waters. The 1958 Saudi Decree, unlike the 1982 Convention, also put restrictions on the length of straight baselines. Some states have enclosed their internal waters with baselines great distances from the nearest point on the coast e.g Chile (30 nm), South Korea (53 nm) and stretching many miles [Prescott, 1985]. The Saudi Royal Decree of 1958 does not permit enclosing areas lying more than 12 nm from the mainland or from Saudi islands.

Figure 2.21 shows a series of Saudi straight baselines drawn between reefs not more than 12 nm from any Saudi island (see Figure 2.3 for a clear illustration). A series of elevations can be joined by such lines, and as a result, a single line can be drawn as between Shi'b At-Tawaman with another reef near Marmar Island. Following the outermost reefs, the Saudi decree does not restrict distance between the straight baseline and the mainland as long as it connects offshore features not more than 12 nm apart.

Figure 2.22 shows a another definition of internal waters permitted by Article 5(c) of the 1958 Saudi decree. The islands and reefs shown in Figure 2.22 are never more than 12 nm from each other. For example, Dubarah island lies within a 12 nm limit from Jabal As-Sabaya and from the mainland. To the north of it lie two islands within the same distance from Dubarah and from Dhu

Saqiyah, the later, situated within the same distance from Muskah which in turn lies within the distance from Sharbayn, where the straight baseline is drawn along the near by reefs.

Similarly, in Figure 2.23 which covers the area from Jabal As Sabaya to Sumayr (title), where the baseline has been drawn according to Article 5(f) of the Saudi 1958 Decree, large areas have again been included in internal waters as a result. Figure 2.24 shows that only a small area of internal waters can be drawn in this sector according to the Saudi decree, but the internal waters of Farasan Islands give the best example of Article 5(f) of the Saudi decree. Nearly all the islands and the reefs which do not form a chain can be connected by a line along the outermost shores of these features (Figures 2.25, 2.26).

2.3 Straight Baselines in the UN 1982 Convention

2.3.1 The 1982 Convention (Use of Terms)

The 1982 Convention defines the normal straight baseline for the measurement of the territorial sea and the other offshore zones as the low-water mark [Article 5]. This will give the coastal state the widest possible area of sea. However, there are different datums used by different countries by which the size of sea gained may differ from one country to another. The lowest low-water mark as used by the Saudi decree in Article 5(a) gives the lowest measurement, lower than the low-water neaps. The tidal regime of the particular area and the needs of navigation will determine the type of datums required, in this respect, the International Hydrographic Organisation required that

"chart datums shall be a plane so low that the tide will not frequently fall below it" [Quoted in Beazley, 1992].

Articles 9 and 10 describe the use of straight lines to replace the low-water mark. This kind of baseline is called a local straight baseline. It is important to note here the motives which encourage the use of such baselines; firstly, to simplify the administration of offshore areas. Secondly, to increase the area claimed from the sea. Article 9 does not apply to Saudi Arabia due to the absence of rivers.

There are three situations where regional straight baselines can be constructed. The first, if the coast is deeply indented or cut into, [Article 7(1)]. The second, where the coast is fringed with islands, [Article 7(1)]. Finally, straight baseline may be constructed around Archipelagic states [Article 47].

2.3.2 Application of the 1982 Convention

Seven boundary agreements have been reached between Saudi Arabia and its neighbours in the Red Sea and the Arabian Gulf, four of them between opposite states. None of these four agreements appear to have been influenced by straight baselines. For instance, the Saudi-Bahrain agreement used a few arbitrary base points along the coasts [Alexander, 1983]. This method was used again in the Saudi-Qatar Boundary Agreement of 1965, where base points were chosen along the two coasts [Ministry of Foreign Affairs (KSA) 1936-73].

2.3.2.1 The Red Sea and the 1982 Convention

According to the 1982 Convention Article 7, only two sectors of the Saudi Red Sea coast appear to be not entitled to draw straight baselines (Figure 2.27). The first sector runs from Ra's Abu Madd at latitude 24°50' north, south until Yanbu port at latitude 24°05' north (Figure 2.32). The coast is neither fringed with islands nor deeply indented. Straight baselines cannot thus be implemented, despite the presence of reefs. The second sector runs from latitude 22°25' to latitude 23°57' north (see Figures 2.33 and 2.34). The coast is smooth except for a few indentations which are difficult to claim as an indented coast. Beazley [in US Department of State, 1987], pointed out that an indented coast must have multiple indentations and must encompass an area of water nearly equal to a juridical bay having an opening of similarly size.

The rest of the Saudi Red Sea coast is covered by three segments of straight baseline. The first segment runs from Tiran Island to latitude 24°47' north (Figures 2.28, to 2.31). The second along Yanbu Port (Figure 2.33). The third runs from latitude 22°25' north until it reaches the Saudi-Yemen boundary (see Figures 2.35 to 2.43).

Figure 2.27 shows also two regional straight baselines on the western Red Sea coast. The Egyptian 1990 straight baseline lies along the north western coast of the Red Sea and the Ethiopian 1952 straight baseline occupies the southern west coast of the Red Sea⁴. Comparison can be made between these two straight

⁴. The author drew a theoretical straight baseline to show the 1952 Ethiopian straight baseline due to the lack of information available.

baselines and the Saudi theoretical straight baseline on the eastern Red Sea coast in order to evaluate the importance of the later.

The theoretical baseline runs almost along the Saudi Red Sea Coast which extends more than 1000 nm. Farasan Islands are included in this straight baseline. The first segment covers an area extending over 230 nm from Tiran island at the entrance of Khalij Al Aqaba as far as the south of Ra's Abu Madd and north of Yanbu port. The coast in the north is cut into and fringed with islands with close links to the mainland (Figure 2.28). The straight baseline connects 15 turning points joined by 14 legs. The longest leg extends more than 30 nm from Sila Island to Na'Man island. The straight baseline does not depart from the general direction of the coast and the area which lies landward is relatively small. The baseline between latitude $26^{\circ}10'$ and 27° north (Figures 2.28, 2.29, 2.30) fulfils the requirement of Article 7 of the 1982 Convention, where by the coast must be either fringed with islands or cut into (see also Figure 2.31). The above Figures clearly illustrate these features where numerous drying reefs lie along this stretch.

More than fifty big islands along with additional small islands and islets are found in the area. Tiran is the largest, at about eight nm long. Shaybara and Umm Rumah are each nearly six nm long. Birrim, Jabal Libnah and Sanafir are all big islands connected by straight lines. The distance between the mainland and the baseline does not exceed the breadth of the territorial sea.

The second segment which measures 17nm only is the closing line of Yanbu Port (Figure 2.33). The baseline consists of two legs which can be drawn according to Article 11 of the 1982 Convention which stated

For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system are regarded as forming part of the coast. Off-shore installations and artificial islands shall not be considered as permanent harbour works.

The third segment lies between latitude 22°25' north and the Saudi-Yemen boundary (see Figures 2.35 and 2.43), and consists of 31 legs measuring about 432 nm. It covers an area indented and fringed with islands; there are two lighthouses used as base points within this segment namely, Shi'b Al-Kabir and another which lies 5 nm from the mainland and from Jeddah Port. Jeddah is counted as the largest port in Saudi Arabia, where nearly half the Saudi imports are handled. It is an important area which serves nearly half the population of the Kingdom.

From latitude 21°05' north, where there is a base point located on the mainland coast, the straight baseline extends over an area which is not fringed with islands nor deeply indented and measures about 48 nm until it connects with another point at Oad Humays island. This method was used by Egypt on its Red Sea straight baseline between points 42 and 43.

Then the straight baseline runs along a fringed coast where the islands are not more than 24 nm apart. However, the straight baseline connecting the outermost islands lie seaward where the distance between these islands has increased. About 25 base points are used to connect the straight baseline. Starting from Oad Humays Island the straight baseline connects Malathu Island, Al-Jabbarah Island (Figure 2.38) and goes along to Shakir Island seen in Figure 2.39. The straight baseline then continues along Dhu Rish Island, Al-Halah, Ziuqaq

Islands until it reaches Al-Wasaliyyat Island (see Figure 2.40). From Al-Wasaliyyat Island until Al-Baghlah Island, the distance measures about 47 nm due the trend which the line takes along the outer most islands, but the distance is decreased to 38 nm between Sumayr and Matahayn Islands which lie closer to the mainland (see Figure 2.42). The coast in this segment is fringed with islands which lie closely linked to the mainland. According to the US Department of State [1987] proposals, islands which lie within 48 nm of the mainland can be counted as closely linked to the mainland and may be enclosed by a straight baseline. Non of the Saudi Red Sea islands shown in the Saudi charts, were found to exceed this distance.

The US Department of State [1987] suggested five criteria for treatment of fringing islands as follows:

- 1) The turning point should not deviate more than 20° from the mainland.
- 2) Consideration of distance between the baseline and the mainland.
- 3) Islands considered as a fringe should not lie more than 24 nm from each other.
- 4) Such islands should mask 50 per cent of the adjacent mainland.
- 5) No individual straight baseline segment should exceed 48 nm.

In fact, the straight baselines largely meet all the requirements of fringing islands criteria, except points 4 and 5. However, the 1982 Convention puts no limit to any individual segment or the masking criteria which means this baseline is constructed according to the 1982 Convention rules. These objective measures which have been applied still need to be properly defined in the future law of the

sea Conventions.

The southern Saudi coast is fringed with islands situated either close to the mainland, such as Al-Ashiq, Habar, Aminah, Abu Sha'fah, Shura, Ja'Fari and Firan, or at a distance from the coast in the case of the Farasan Islands. The Farasan islands may appear to fall within the definition of an archipelago in Article 46(b). They would not, however, qualify as having the status of an archipelago under Article 46(a). On the other hand, Saudi Arabia is a continental state and the Farasan Islands lie close to its coast. The use of a straight baseline to include these islands would not lead to a considerable departure from the general direction of the coast and the enclosures of these islands by straight baselines would also be acceptable on the bases of the practice of Finland which enclosed islands lying over 40 nm from the mainland [Beazley, 1992, see also Scovazzi and Francalanci, 1989]; this distance is double the distance between the Saudi mainland and the Farasan Islands. The Finland straight baseline drawn along an indented coast conforms to the spirit of the 1982 Convention according to Prescott, [1985]. Another example can be found along the Ethiopian coast, where the Duhalk Islands were enclosed with the mainland [Peazley, 1992, see Prescott, 1985]. This practice can be followed to connect the Saudi Farasan Islands to the mainland.

The Farasan Islands lie between latitudes 16°22' and 17°10' north and longitudes 14°23' and 24°30' east. The distance between Jizan and Farasan is nearly 21 nm. The archipelago consists of 80 islands [Al Munhal, 1989]. The population in the past was said to be 40,000 persons [Hassan, 1958], but there are

now only 4,600 inhabitants [Al Munahl, 1989]. The main activities in the islands are trade and fishing. More than 600 fishermen work there [Sayadi, 1990]. Pearl fishing was the main occupation. Farasan Al-Kabir is the largest island (666 sq.km, or about 360 sq nm), its width extending to about 30 nm. [Al Munahl, 1989]. There are several other big islands such as Sajid, Disan, Sarad, Dha Al-Fayf, Qummah and Dumsug. The islands are now one of the most attractive areas for winter tourism in Saudi Arabia. The archipelago lies opposite to the Dahlak Archipelago (Eritrea) which consists of approximately 100 islands. Dahlak lies nearly 40 km. from Musawa and 35 km. from Asab on the West Red Sea Coast [Munahl, 1980, see also, Ibrahim 1989]. In September 1952 the Ethiopian government drew a baseline (see Figure 2.27) which according to Prescott [1985] can be connected to the mainland. Prescott stated:

If the baselines simply tie the archipelago to the Eritrean coast there is no difficulty. However, if it surrounds the archipelago then it may be in breach of the new convention [Prescott, 1985, p. 166].

One conclusion can be reached here; drawing straight baselines around a group of islands which does not have the status of archipelagic waters may be in violation to the spirit of the 1982 Convention, but enclosing them by straight baselines connected to the mainland might be considered acceptable on the basis of states practice.

Comparing the 1958 Saudi straight baseline and the 1982 straight baseline drawn along the Saudi coast in the Red Sea, it can be concluded that; There are negative aspects which reduce the effect of the 1958 Saudi baseline on maritime zones. These can be seen in the 12 nm limit required by Article 5(c,e,f,g) of the

Saudi decree, which led to several results: Firstly, sharp deviation from the general direction of the coast (see Figures 2.34, 2.36 and 2.37). Secondly, the reduction in the size of the territorial sea and internal waters (see Figures 2.41, 2.42 and 2.43). Thirdly, a reef lying more than 12 nm from the mainland is used as a base point connecting a straight baseline system e.g. Figures 2.39, and 2.40. These negative aspects have been overcome by the 1982 UNCLOS straight baseline employed by the author.

The positive aspects lie in the fact that in many cases, the Saudi 1958 straight baseline coincides closely with the 1982 UNCLOS straight baseline, (see Figures 2.28, 2.29, 2.30, and 2.31) which is particularly evident in the territorial sea limits. Also, the 1958 Saudi Decree's use of reefs as base points allowed the system of straight baselines to be extended from Tiran island to the Saudi-Yemen boundary. Only in three cases does the baseline use the mainland as a base point (see Figures 2.32, 2.41 and 2.42).

It is clear from the two types of straight baselines that, the definition of islands, drying rocks, reefs, and low-tide elevations as used in the 1982 Convention differs from the 1958 Saudi Decree definition. While these terms are defined clearly in the 1982 Convention, the Saudi 1958 decree does not clearly distinguish them. The reason may lie in the fact that the Saudi baseline was claimed at a time when no clear definition had been agreed upon. These terms have been developed and adapted in 1958, 1960 and 1982. The lack of information and the absence of detailed surveys may also contribute to these difficulties.

2.2.3.2 The Arabian Gulf

The Saudi coast in the Arabian Gulf is not as long as in the Red Sea. Some Red Sea features are not found on a large scale in the Arabian Gulf. As a result, the 1958 Saudi straight baseline will not be used here. Only the 1982 UNCLOS straight baseline will be employed. The coast, is covered by 5 admiralty charts scale 1:150,000.

This baseline can be drawn between latitude 26° and 28° north for two reasons; the first, being the existence of bays (see Figures 2.44, 2.45 and 2.46). In this respect Prescott [1985, p. 171] stated:

There are few bays which satisfy the tests for closing lines, those which exist are found mainly on the coast of Saudi Arabia between parallels 26° and 28° north.

The second reason for which the straight baseline can be constructed along the Saudi coast in the Arabian Gulf is the indented coast and the coast being fringed with islands. For example, the coast from Ra's Al-Ghar to Dawhat Abu Ail possesses at least 9 islands, three of which are large inhabited islands, Abu Ail, Al-Batinah and Tarut (Figures 2.44 and 2.45). North of this section, the coast is indented (see Figure 2.44).

In the south opposite to the Bahraini Umm Na'San island and South of King Fahad Causeway, a small bay can justifiably be closed, but the rest of the coast is smooth (see Figure 2.46). The whole area from Kuwait to Qatar is occupied by several oil fields including As Saffaniyah, which is the biggest submerged oil field in the world [Offshore 1992], and this clearly increases the importance of these coastal areas.

The baseline in the Arabian Gulf consists of two segments and five legs. It runs for approximately 109 nm. The first segment lies between latitudes 26°50' and 28° north. It is based on three legs extending from Ra's As-Saffaniyah to latitude 27°30' north, 27°30' north to Abu Ali island, and from Abu Ali to Ra's Al Ju'aymah. (Figures 2.44, 2.45).

The second segment extends between Ra's Tannurah and latitude 26°20' north. It consists of two legs measuring 8 and 8.5 nm respectively. The first closing line is at Tarut Bay, from Tannurah to Mina Al Malik Abd Al Aziz and the second extends from the port to an unnamed island close to the mainland (Figure 2.46).

There are two areas situated north and south of this baseline. The former lies between Ra's As Saffaniyah and the Saudi-Kuwait boundary (Figure 2.47). This coast is not indented or cut into or fringed with islands. As a result, a straight baseline in these circumstances cannot satisfy the tests of a closing line. The second area which cannot be connected by a straight baseline lies between the end of the straight baseline and south of the closing bay. The coast here can be closed by a local straight baseline along the mouth of the closing bay which exists there (Figure 2.46).

2.4 Evaluation of Straight Baselines

This study dealing with straight baselines in Saudi Arabia's maritime waters, reveals important aspects that may determine Saudis future straight baselines. The following points may have to be taken into account in a future study:

- 1) The need for updating the Saudi 1958 straight baseline is urgent, after three conventions on the law of the sea which have all included new rules for straight baselines. Saudi Arabia was the leading state in the Middle East in respect of the law of the sea and in particular straight baselines, and it must establish new straight baselines taking into account new developments. The Kingdom signed the 1982 Convention in 1984 and may ratify it in the future. The 1990 Egyptian straight baseline may also encourage the Kingdom in this.
- 2) The increased importance of the Red Sea resources particularly in the southern part imply the need for a new straight baseline to define the Kingdom's territory and its policy towards maritime zones.
- 3) The existing technical database related to the Red Sea and the Arabian Gulf (charts, resources study and oceanography) will make such new straight baselines more easy to apply to Saudi maritime waters and to the 1982 Convention.
- 4) In many parts of the straight baselines used in this study, the differences between the two methods are not large.
- 5) The law of the sea is still unable to solve all maritime problems and the

use of some terms in the 1958 Saudi baseline could be adapted in future conventions in order to solve excessive national maritime claims practised by many states worldwide.

- 6) International law has sought justice in all the law of the sea conventions which have taken place throughout the last 45 years. The rights of each individual state to claim its adjacent maritime waters have been established in these conventions, but equity and justice should not be restricted by the type of coast. The aims of establishing straight baselines should go beyond administrative convenience and navigation purposes to seek greater equity for all mankind in order to share sea resources. If this principle could be established in the future, reefs such as those used by Saudi Arabia in the 1958 straight baseline may be used in a system of straight baseline where smooth coasts are found. That may give coastal states a more equitable basis of coastal waters.

2.5 Internal waters

The internal waters have the same status as land in which the state has absolute right, where alien vessels cannot practice innocent passage or navigation without permission from the state; Article 8(1) of the 1982 Convention stated:

Except as provided in Part IV, waters on the landward side of the baseline of the territorial sea form part of the internal waters of the state.

However, internal waters could be subjected to innocent passage if the use of a straight baseline enclosed these water as internal waters which have this status

only by using a straight baseline system. This restricted right applies over waters created by straight baselines Article 8(2) or Archipelagic straight baselines [Article 52(1)]. In this respect Article 8(2) of the 1982 Convention stated:

Where the establishment of a straight baseline in accordance with the method set forth in Article 7 has the effect of enclosing as internal waters areas which had not previously been considered as such, a right of innocent passage as provided in this Convention shall exist in those waters.

2.5.1 Internal Waters in the Red Sea

The Red Sea has coasts which are sometimes interrupted by indentations where the coast is fringed with islands or cut into. The widespread occurrence of low-tide elevations is another factor which has affected the characteristics of the sea. Small bays and inlets can also be found along the coastline. As a result, the waters which lie landward from these elevations and islands, form the internal waters along the Eastern Red Sea coast. The internal waters in the Red Sea were not included in the measurements which were carried out in the Arabian Gulf.

2.5.2 Internal waters in the Arabian Gulf

These waters lie between latitude 26° and 28° north. They are only 2° of latitude long, about 140 nm, making these waters small in size compared with the Red Sea waters. The researcher found only 6,404 sq. km. or about 3,458 sq. nm of internal Saudi waters in the Gulf according to the UNCLOS 1982 straight baseline. Small bays were ignored and are not included in this result. However, their area is less than 10 sq.nm.

Several comments can be made. Firstly, internal waters represent only a small area in the Gulf. The figure of 6,404 sq. km (3,458 sq. nm) includes the Duwayhin⁵ waters which became Saudi waters after the 1974 Saudi-UAE Agreement. The Saudi side of this bay covers nearly 712 sq. nm.

Another question which arises from this result is why Saudi Arabia ignored its straight baseline in all its agreements with its neighbours concerning its continental shelf?. In this respect El-Hakim (1979) wondered about the apparent neglect of certain islands which lie within the straight baseline claimed by the Saudis. This is merely a result of the marginal effect which these waters would give to such continental shelf considerations. However, this small area has an influential affect on the equitable share of the continental shelf resources.

2.6 Conclusion

To conclude, the significance of straight baselines lie in their functions which define not only internal waters, but also the points from which the territorial sea and others maritime zones are measured. Straight baselines thus separate two types of sovereignty. The first, the status of internal waters where a state has absolute rights as on land. The second, the territorial sea where a state enjoys the same rights but innocent passage is guaranteed for foreign vessels.

There is a need for defining the coastal features along the Saudi Arabian coasts and naming them to meet the international terms used in such cases.

⁵. This part of Saudi Arabian coast will be dealt with under the 1974 Saudi-UAE Agreement in chapter 3.

Particular importance should be paid to the term shoal, because the distinction between coastal features in the Saudi 1958 Decree is not precisely defined.

The term Dhdah used in the Arabic language is not equivalent to the term shoal scientifically.

Despite the fact that three sub-Articles specifically dealt with the term Dhadah or "shoal", none of the base points are used in this term, to draw the 1958 Saudi straight baseline in the Red Sea due to the numerous reefs and islands found along the coast. However, the term shoal could be more relevant in the Arabian Gulf where the topography and the physical geography of both seas are different.

The problem of language in the 1958 Saudi Decree as mentioned by the Geographer, is related also to the fact that, the 1958 Saudi Decree was issued to cover two different areas, the Red Sea and the Arabian Gulf, separated by land extent of more than 1,400 km, where two different communities live and contributed to the names used in the decree. This means that two different names could be used to describe a feature or could be spelt differently.

Saudi Arabia would gain more area of internal waters and territorial sea if a straight baseline based on the 1982 principle were to be employed.

The Saudi coasts in the Red Sea and in the Arabian Gulf are found to be either fringed with islands or indented and cut into. Finally, straight baselines, by whatever method they are drawn, are the starting point from which offshore zones are measured. Particularly important to Saudi Arabia is the territorial sea (chapter 3), the EEZ (chapter 4) and the continental shelf (chapter 5).

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Chapter Three

THE TERRITORIAL SEA AND CONTIGUOUS ZONES

3.1 Introduction

The territorial sea is the zone which gives the state absolute sovereignty comparable to that on land except that the right of innocent passage to ships of other states is guaranteed by international law. It plays an important role in state security, resource conservation and coastal management. States may wish to extend their territorial sea for a variety of reasons usually connected with the protection of fishery resources, and with national security. Saudi Arabia was most concerned with the need to protect the country from illegal immigration and from drug dealing and smugglers. In practice such activities are generally inhibited by territorial water status. But important also was the perceived need to protect Saudi coasts from the activities of unfriendly powers, Israel in the Red Sea, and Iran in the Gulf. Again, in reality the territorial sea is unable to afford much protection in an era of long range artillery and missiles.

This chapter deals with the history of Saudi Arabia's territorial sea and the story of its increase in breadth in two semi-enclosed seas. Semi-enclosed seas have been found to greatly effect Saudi maritime zones to the degree that more light has to be focused on such seas. The Red Sea and the Arabian Gulf are among five semi-enclosed seas surrounding the Arabian Peninsula and both largely effect the Saudi maritime zones. This will be dealt with in more detail in section 3.2.

The chapter will include two examples of territorial sea boundaries, one each with opposite and adjacent states: the opposite boundary with Egypt in the Gulf of Aqaba and the adjacent boundary with the UAE in the southern part of the Arabian Gulf coast. The right of innocent passage especially through the Tiran Strait and the legal status of the Gulf of Aqaba will be discussed in the light of the UN Conventions on the law of the sea and the Israeli right of access through the Tiran Strait. Finally, the chapter will include a brief study dealing with the contiguous zone in the light of the 1982 Convention and the Saudi 1958 claim. The chapter will concluded by summarising the main points dealt with.

3.2 Enclosed and Semi-Enclosed Seas

The Red Sea and the Arabian Gulf lie within the definition of the semi-enclosed sea, stated in Article 122 of the 1982 Convention which said:

For the purposes of this Convention, "enclosed or semi-enclosed sea" means a gulf, basin, or sea surrounded by two or more states and connected to another sea or the ocean by a narrow outlet or consisting entirely or primarily of the territorial seas and exclusive economic zones of two or more states.

According to Juda [1988], such definition is imprecise, which led Alexander [1974] to his attempt of a more precise conceptualization of the term semi-enclosed sea defining it as a body of water which has:

an area of at least 50,000 square nautical miles and [is] a 'primary' sea, rather than an arm of a larger semi-enclosed water body. At least 50 percent of its circumference should be occupied by land and the width of the connector between the sea and the open ocean must not represent more than 20 percent of the sea's total circumference.

The statistical requirements should not be taken as inflexible limits, after a

modification by Alexander in a recent study [Juda, 1988].

There are 24 semi-enclosed seas shown in table 3.1 according to Alexander [1977]. Five of them surrounding the Arabian Peninsula. The Red Sea from the west, Gulf of Aden from the south west, the Arabian Sea from the south, Gulf of Oman from the south east and the Arabian Gulf from the east.

The Red Sea and the Arabian Gulf are semi-enclosed seas [see also Amin, 1980]. They fall into this category due to their restricted outlet and the volume of their waters. The Red Sea lies between latitude 30° and 12°30' north. Its length reaches 1932 km and its width about 280 km, the greatest breadth reaching 306 km. The sea includes the Gulf of Suez which is 250 km long and on average 32 km wide and the Gulf of Aqaba which measures 150 km in length and 27 km in width.

Table 3.1
Semi-Enclosed Seas

Gulf of Aden	Bering Sea	Sea of Japan	Arabian Gulf
Arabian Sea	Black Sea	Mediterranean Sea	Red Sea
Andaman Sea	Caribbean Sea	Gulf of Mexico	Solomon Sea
Baffin Bay-Davis Strait	Celebres Sea	North Sea	South China Sea
Baltic Sea	East China-Yellow Sea	Sea of Okhotsk	Sulu Sea
Bay of Bengal	Gulf of Guinea	Gulf of Oman	Timor-Arafura Sea

Source: Alexander, 1977.

The Red Sea covers an area of about 0.45 million sq.km and contains 0.25 million cubic km of water, with average water depth reaching 490 m [MEPA, 1989]. There are 8 countries bordering the Red Sea; Yemen, Saudi Arabia, Jordan, Israel, Egypt, Sudan, Eritrea (in the 24 May 1993 the world witnessed the gaining of independence by this state) and Djibouti.

The Arabian Gulf lies between Shatt al-Arab and the Strait of Hormuz. The sea covers an area of about 239,000 sq.km containing 8630 cubic km of water. The Gulf length measures 990 km from the two points mentioned above, with average water depth reaching 30 m. There are 8 countries bordering the Arabian Gulf, divided into two different positions with respect to the legal status of the Gulf, Iran and Oman strategically placed at the entrance of the sea, advocated a territorial appropriation of the entire waters of the Gulf. Some Iranians have even declared the Gulf a "closed or inland sea" or analogous to one [Amin, 1980]. On the other hand, all the other Gulf States favour the traditional status of the Gulf as a high sea, beyond the territorial sea. This difference of opinion is clearly seen in the Iraqi draft articles submitted to the third UNCLOS (see A/CONF. 62/C.2/L.72, August 21, 1974 for Iran and A/CONF. 62/C2/L.71, August 21, 1974 for Iraq).

Article 123 of the Third UN Convention dealt with co-operation between the states situated on these seas; in this respect the article stated that:

States bordering an enclosed or semi-enclosed sea should co-operate with each other in the exercise of their rights and in the performance of their duties under this Convention. To this end they shall endeavour, directly or through an appropriate regional organization:

a) to co-ordinate the management, conservation, exploration and

- exploitation of the living resources of the sea;
- b) to co-ordinate the implementation of their rights and duties with respect to the protection and preservation of the marine environment;
- c) to co-ordinate scientific research policies and undertake where appropriate joint programmes of scientific research in the area;
- d) to invite, as appropriate, other interested states or international organizations to co-operate with them in furtherance of the provisions of this article.

Two words used in this article are notable: "should" and "shall", where the first enforces the co-operation between the states, the second is less emphasised due to the objection from some delegations. Arab countries for instance, rejected the idea of a semi-enclosed sea as including the territorial sea within these waters [Madani, 1977].

In the spirit of Article 123, the Kingdom took the initiative through four steps: Firstly, inviting the Red Sea states to a conference held in Jeddah in 1972 in order to carry out the terms used in the article, and participating in the 1978 Kuwaiti agreement for the Protection and Development of the Marine Environment and the Coastal Areas. Secondly, Saudi Arabia and Sudan entered into a joint agreement counted as a model in the co-operation between states bordering semi-enclosed sea (see Chapter 7 for more details of this agreement). Thirdly, the Kingdom issued the 1975 Anti-Pollution Port Regulations Decree in order to protect and preserve the Saudi marine environment. Fourthly, the Kingdom established a department dealing with the environment and the natural marine reserve of Saudi waters.

3.3 Brief History

The importance of the territorial sea can be seen in the variety of claims issued by different states, and the long-running debates over its breadth. Three major international conferences addressed the topic at the Hague (1930), at the UN Convention in Geneva (1958), and at the 1973/1982 UN Convention.

The definition of the territorial sea is stated in Articles 2, 3 and 4 in the 1982 Convention. Article 2(1) defines the legal status of the territorial sea, and of its bed and subsoil. In this respect the Article states:

The sovereignty of a coastal state extends, beyond its land territory and internal waters, in the case of an archipelagic state, its archipelagic waters, to an adjacent belt of sea, described as the territorial sea.

Article 2(2) deals with the coastal state's rights over the airspace as well as the sea and its subsoil.

This sovereignty extends to the air space over the territorial sea as well as to its bed and subsoil.

Article 2(3) puts some restriction on territorial sea rights by the state's obligation to permit the innocent passage of ships [Brown, 1983]. The Article stated:

The sovereignty over the territorial sea is exercised subject to this Convention and to other rules of international law.

Article 3 solved one of the long standing problems of this zone by proposing a breadth of 12 nm measured from the low-water line or from straight baselines. In this respect the Article stated:

Every State has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles, measured from baselines determined in accordance with this Convention.

Article 4 defines the outer limit of the territorial sea which is:

The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.

3.4 The Breadth of the Territorial Sea

The breadth of the territorial sea of Saudi Arabia was first established at 4 nm by the 22 July 1932 Fishing and Sea Shells Regulations [Umm al Qura, 1932]. The breadth of these waters increased to 6 nm by decree on 28, May 1949 Decree [Al-Fara, 1989]. Later, in February 1958, with Decree No. 33 Article 4, the Kingdom extended its territorial sea to 12 nm. Article 4 states that the territorial sea of the Kingdom of Saudi Arabia lies adjacent to the internal waters of the Kingdom and extends seawards to 12 nm. This wording is consistent with Article 1 of the 1958 Convention and Article 3 of the 1982 Convention. The Saudi 1958 decree (Article 6) also included any "pronounced pocket of the high sea" wholly surrounded by territorial sea not more than 12 nm in length. The existence of large numbers of islands less than 24 nm distance from each other or from the mainland, can result in the inclusion of a much wider area as territorial sea. For example the coast of Saudi Arabia in the Arabian Gulf, where the islands of Jana, al-Jurayd, Kurayn, Karan, Harqus and al-Arabiya are so located that their territorial belts merge to form a continuous expanse of territorial sea reaching from the mainland more than 60 nm out to the centre of the Gulf [Young, 1973, p. 234].

The expansion of the breadth of the Saudi territorial seas occurred at a

period of important offshore oil and gas exploration in the Middle East. The awareness of the significance of seabed resources, along with the need for national security prompted the development of Saudi territorial sea claims in three stages. These are discussed below.

3.4.1 The Four Nautical Miles Limits

According to Article 4 of the 22 July 1932 Fishing and Sea Shells Regulations, the Kingdom formally established a 4 nm territorial sea, at a time when 3 nm was commonly accepted [Madani, 1977]. In 1949, the appearance of Israeli vessels in the Red Sea, and the increasing importance of offshore oil in the Arabian Gulf, prompted the Kingdom to extend its territorial sea to 6 nm, while most Middle East states remained content with 3 nm.

3.4.2 The Six Nautical Miles Limits

In Royal decree No. 6/4/5/3711 Article 5 announced on 28 May 1949, the Kingdom extended its territorial sea to 6 nm. Saudi Arabia was the first Arab Gulf State to extend its waters to this breadth. According to this decree, the Kingdom defined its baseline and stated its position should there be an overlapping claim with another party. In this event an equitable boundary settlement would be sought [Young, 1949]. The decree claimed not only the waters but also the airspace above and the subsoil beneath the sea to be under the sovereignty of the Kingdom [Bakhashap, 1987]. Furthermore, in Article 9 it claims the right to exercise maritime surveillance relating to security, navigation, and fiscal matters

in a contiguous zone extending six miles beyond the territorial waters [Bakhashap, 1987]. This is further discussed later in the chapter.

3.4.3 The Twelve Nautical Miles Limits

The increasing trend of maritime states in favour of 12 nm territorial sea limits was stimulated by discussions at the UN Convention on the law of the sea between 1973 and 1982 which finally decided on 12 nm as a standard breadth.

Article 4 of the Saudi decree of 16 February 1958 extended the breadth of the territorial sea of the Kingdom to 12 nm. Al-Sayf [1990] suggests that the extension gave the Saudis political and economic gains. The former were achieved by the inclusion of Tiran Strait under Saudi sovereignty, while the latter put large areas rich with oil deposits under Saudi control. This is hardly the case, however, because hydrocarbon resources were already available to coastal states by continental shelf rights. The significance of the claim to 12 nm can be seen in areas with many islands such as those in the southern Red Sea, where a large area has been joined to Saudi territorial waters.

3.5 Innocent Passage

According to Article 24 of the 1982 Convention, the coastal state does not have the right to impose restrictions on shipping which may have the effect of denying or impairing the right of innocent passage. The Kingdom's policy in relation to the right of passage through the territorial sea is that passage is innocent unless it is prejudicial to the security of the coastal state. Such passage

is not innocent when it is contrary to the present rules or to other rules of international law [Ayubi, 1984, p. 130]. Concerning limitations on sovereignty in the territorial sea, Saudi Arabia's initial recognition of the innocent passage of vessels of other nations through the territorial sea was according to the 1949 Decree. According to MacDonald [1980, p. 91] the claim of Saudi Arabia relating to the juridical status of the territorial sea was in accord, in principle, with previously proposed principles which generally followed the trends of the 1930 Hague Conference and the 1958 Convention on the territorial sea and contiguous zone.

The 1958 Saudi Royal Decree dealing with the territorial sea stated the Kingdom's commitment in its waters to be subject to the established rules of international law. However, the decree allowed no special provision for warships due partly to the failure of the 1958 Convention to reach an agreement dealing with the innocent passage for warships in the territorial sea. There was division between the parties who supported such a right e.g. Australia, Denmark, Netherlands, the UK and the USA, and those who were against such rights, among them USSR, Romanian, Hungary, Czechoslovakia and Colombia. Even after the 1982 Convention there is still no general agreement about such rights [Lowe, 1986, p. 173]. In practice, the state asserting a right of innocent passage for warships generally has to give low-level notification of intended passage. The second issue in relation to innocent passage of warships is when and whether such passage is prejudicial to the peace, good order or security of the coastal state. Such passage would not be meeting the test of innocent passage and the coastal state would

have the right to reject it [Article 19(1-2) 1982 Convention and Lowe, 1986, p. 174].

3.6 The Gulf of Aqaba and Tiran Strait

3.6.1 Physical Geography

The Gulf of Aqaba is a deep basin with narrow shelves. The depth of the main trough, which occupies the whole length of the Gulf descends abruptly from 500 m to 1,000 m. The basin consists of two depressions separated by a submarine sill. The northern depression is 1,100 m deep, and the southern 1,420 m deep. The maximum depth discovered by Mabahiss in 1935 is 1,829 m near the East coast [Morcos, 1970]. This depth approaches the greatest depths of the Red Sea: 2,500 m [Guennoc and Nawab and Thisse, 1983]. The shores of the Gulf of Aqaba are extremely steep, the mountains rising sheer from the water. A sill of 256-311 m separates the Gulf from the Red Sea depths of over 1,300 m immediately outside, with 900 m to 1,000 m further south. The width of the Gulf of Aqaba varies between 14.6 nm at its widest point to 3 nm at the narrowest point [Saudi port Authority, "map", No. 11]

3.6.2 The Legal status of Tiran Strait

The Tiran Strait is a body of water joining one part of the high seas and the territorial sea of Saudi Arabia, Egypt, Jordan and Israel. It does not therefore strictly come under the definition of international straits, and is not governed by its rules. International straits should join the high seas or an EEZ with another

part of the high seas or EEZ (Article 37 of the 1982 Convention). Straits such as Gibraltar or Bab Al-Mandab are subject to Article 37 of the 1982 Convention. Here the right of passage is permitted by the right of Transit Passage in which the freedom of navigation and overflight are guaranteed for all ships and aircraft of all nations. In this respect Article 38 of the 1982 Convention stated:

In straits referred to in article 37, all ships and aircraft enjoy the right of transit passage, which shall not be impeded; except that, if the strait is formed by an island of a state bordering the strait and its mainland, transit passage shall not apply if there exists seaward of the island a route through the high seas or through an exclusive economic zone of similar convenience with respect to navigational and hydrographical characteristics.

The Saudi definition of the term straits used for international navigation means

any strait connecting two parts of the high seas and customarily used for international navigation [Document A/CONF.62/C.2/L.45/-Rev.1, 1974, p. 221].

Israeli policy can be seen in these words, when its delegate to the UN Mr. Najjar reaffirmed its position that

All Straits without exception, both those which joined two parts of the high seas and those which linked the high seas to the territorial sea of a given state, should remain open to free navigation and overflight [UNCLOS, Official Record, 1974, Vol. 1, p. 151].

Tiran Strait however, is governed by Article 45 of the last convention in which innocent passage is permitted. The passage here can be stopped, as a result of the passage through the territorial waters of another state which may be suspended by the sovereign state in certain circumstances. (Shihab, 1985, p.218). For example, the riparian states can suspend the right of navigation and overflight in the time of war [Selak, 1958, p.717].

The author's assertion is that, a state of war between Israel and the Arab states exists not only with those states bordering Israel, but also with all the Arab countries apart from Egypt as far as Tunisia or even Morocco. The Israeli aircraft which destroyed the Iraqi experimental Generators "Osirak" in the early Eighties and the strike which destroyed the PLO Headquarters in Tunis are evidence of the state of war between the Arabs and Israel. Salans (1968) pointed out that:

One has to consider, at the outset, the effect of the UN Charter on traditional international law concepts of belligerency. Since the coming into force of the charter, belligerent right are available only to a state engaged in a use of armed force that is lawful under the charter. It is lawful, for example for one state to use force against another state pursuant to a UN Security Council decision.

Submarines should appear above the water and show their flag when they practice innocent passage. However, military aircraft may need permission before flying over these straits (Shihab, 1985, p.218).

On the other hand after the 1982 LOS Convention the 12 nm limit of the territorial sea became a customary rule of international law. This rule has been adopted by Egypt and Saudi Arabia which thus put the entire water of the gulf under the territorial sea of the two countries. So, the Gulf of Aqaba can no longer be said to comprise international waters [El-Hakim, 1979].

Moreover, The Kingdom of Saudi Arabia which owns the two islands Tiran and Sanafir which control the strait, is not party to any agreement recognizing the Gulf of Aqaba as an international waterway or guaranteeing the freedom of the passage to Israeli ships. On March 17, 1957, the Mecca daily paper "Al-Bilad al-Saudiyah" printed an official Saudi Arabian Government statement which asserted that:

the Gulf of Aqaba is not an international waterway, but rather a "closed Arab Gulf" and that its waters constitute "Arab territorial waters".

the statement further asserted that

the Saudi Arabian Government will never allow the establishment of any right of Israel in the Gulf of Aqaba [Selak, 1958].

Egypt also considers the Gulf as territorial sea despite the 1988 peace treaty with Israel in which the parties recognized the strait of Tiran as an international waterway. In this respect El-Baradei [1982] pointed out that a careful reading of this treaty and its appendices reveals that the parties considered the waters in the Tiran Strait and the Gulf of Aqaba as Egyptian territorial sea.

Aamer¹ [1983] has emphasised this view by explaining the parties recognition of the strait as an international waterway Article 5(2) of the Egyptian-Israeli Peace Treaty stated

The parties consider the Strait of Tiran and the Gulf of Aqaba to be international waterways open to all nations for unimpeded and non suspendible freedom of navigation and overflight.

In this respect he said, the goal of this Article of the peace treaty with Israel is their wish that passage through these waters should be beyond the innocent passage which Article 16 (4) of the 1958 Geneva Convention on the continental shelf agreed on for the territorial sea and the contiguous zone. Aamer goes on to say that if the parties have described the passage through the Gulf as an international waterway open to all nations without any interruption to navigation or overflight, this meaning is precisely synonymous with the meaning of the

¹. Aamer is a distinguished Egyptian scholar, honoured with the state prize for his book "the New Law of the Sea", published in 1983.

principle of transit passage in Article 38 (1,2) of the 1982 Convention which stated:

- 1- Transit passage should not be interrupted.
- 2- Transit passage should be continuous.

Transit passage cannot be interrupted, so will pertain if a strait has an island in which the area navigable lies between this island and the high seas. Transit passage gives freedom of navigation and overflight. In respect to these two sub-articles, Aamer concluded that the passage through the Strait of Tiran and the Aqaba Gulf is governed by Article 5(2) of the Egyptian-Israeli Treaty which means passage without interruption, which is the same meaning as transit passage.

Aamer also argues that the Egyptian-Israeli Treaty in Article 5(2) does not give any special system by which the passage through the strait can be organized according to the meaning of Article 35(c) of the 1982 Convention which stated that:

The legal regime in straits in which passage is regulated in whole or in part by long standing international conventions in force specifically relating to such straits.

The absence of such a system does not put Tiran Strait under Article 35(c) of the Convention, so, Article 5(2) creates the principle of the relation between the parties in respect of Tiran Strait and the Gulf of Aqaba. This is because there are two other states, Saudi Arabia and Jordan, which share the waters and should be included in any agreement which may decide the future of the strait.

Aamer concluded his argument with a third point; this concerns the absence of rules for ships and aircrafts by which the passage is organized.

From the author's point of view, if the Egyptian-Israeli Treaty guarantees freedom of passage to Israel, this freedom will never be internationally guaranteed unless the question of Palestine is settled or similar agreement reached with Saudi Arabia. Saudi Arabia on the other hand has no obligations under the Egyptian--Israeli Treaty. In this respect Prince Fahad bin Saud² in 1990 declared that Saudi Arabia rejected Al-Sadat mission from the beginning and not only over the Gulf of Aqaba, but also the agreement as a whole.

3.7 The Delimitation of the Territorial

Sea in Small or Narrow Seas

Small seas such as the Gulf of Aqaba create problems of demarcation and definition of the territorial sea boundary between opposite states, where the width of the sea is less than 24 nm. International law has long been seeking an acceptable solution to this problem. As a result, the law of the sea developed through different methods, starting with different points of view which became customary international law, and at the latest stage reaching the 1982 Convention.

Awad [1974] pointed out four methods which may be used in order to define an overlapping boundary. The first, was introduced in 1922 by Storni to the International Law Union. This method suggested that where the boundary lies in a small area and between more than one state, the boundary shall be defined

². In the examination of his M A degree held in the Department of Geography in King Saud University. He was replying to a question asked by Professor Al-Jammal who wondered why Saudi Arabia did not protest against the Egyptian-Israeli Treaty in which President Sadat had placed himself as representative of the Arab States over the question of the Gulf of Aqaba.

by agreement. The second method proposed a common zone between the opposite states in the overlapped area where the outer limit of the territorial sea of the two states meets. Bluntschli is one of the sponsors of this view, in Article 303 of his project of 1868 where he put the legislation to International Law. Thirdly, the thalweg is commonly used in rivers as a way to draw the boundary between the opposite states. Finally, the median or mid-line principle which was used by some states was later refined to become the equidistant line method of boundary definition as stated in Article 15 of the 1982 Convention.

The 1930 Hague Conference suggested the use of the median line where the width of the sea would not permit the 12 nm limit for each individual state. This was modified in the 1958 Geneva Convention, Article 13 and later in the LOS of 1982 Article 3 which stated that:

Every state has the right to establish the breadth of its territorial sea up to a limit not exceeding 12 nautical miles.

Article 15 of the 1982 Convention stated:

Where the coasts of two states are opposite or adjacent to each other, neither of the two states is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of the two states is measured. The above provision does not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two states in a way which is at variance therewith.

3.7.1 The Delimitation in the Gulf of Aqaba

The special status of the Gulf makes the boundary delimitation more difficult than it would be in a narrow sea. The four riparian states share a small area consisting of 238.5 nm of coastline divided as table 3.2 shows. The area is divided as follows; Egypt 125 nm, Saudi Arabia 96 nm, Jordan 13.5 nm and Israel 4 nm. The delimitation has to be between opposite states such as Egypt and Saudi Arabia or adjacent states e.g. Jordan-Saudi Arabia or Egypt-Israel and Jordan-Israel. According to the 1982 Convention, the boundary should be a median line, unless otherwise agreed, or unless another line is justified by historical title or special circumstances [Article 15, 1982].

The boundaries of the bordering states have been defined on land along the meeting points on the Gulf of Aqaba coast. For instance, Jordan-Saudi Arabia and Egypt-Israel, but maritime boundaries are still to be defined. The most important border is the Egypt-Saudi boundary which fronts over 92 per cent of the total length of the coastline, divided between them as 52.4 per cent and 40.2 per cent respectively. The rest of the coastline is shared between Israel and Jordan: 1.7 per cent and 5.7 per cent respectively (table 3.2).

The equidistant line in a small area such as the Gulf gives a very good chance of equity because of the small width of the area concerned. On the other hand, the greater the seaward extension of a national maritime boundary, the greater will be the chance of a real inequity resulting from the drawing of the boundary line [Hodgson and Cooper, 1976]. The Gulf is nearly free of islands and the coastline is almost regular, which will result in a reasonable boundary in

which the median line may turn at a point and will reveal the same features of both coastlines. Reefs on the other hand in the Gulf are not as common as in the Red Sea. The depth of the main trough which occupies the whole length of the Gulf is from 500 m to more than 1,000 m. The depth in the north is about 1,100 m deep and in the south nearly 1,420 m with maximum depth reaching 1,829 m [Morcos, 1970].

*Table: 3.2
The Coastal Length of the Gulf of Aqaba States*

States	Coast Length (nm)	% of Total Coastline
Egypt	125	52.4
Saudi Arabia	96	40.2
Jordan	13.5	5.7
Israel	4	1.7
Total	238.5	100

Source: Adapted from 1) Al-Arafaj, 1979. 2) El-Hakim, 1979.

The width of the Gulf varies between 14.6 nm at its widest point and 3 nm at the narrowest point. The widest area lies between a point north of Sharm al-Kasurah on the Saudi coastline and at another point on the opposite side in the Sinai peninsula parallel to the north of Dhaba Town on the Saudi side. The narrowest area lies between the Jordan-Israeli coastline, and is found also in the south between Ra's al-Jamish on Tiran coast and at a point on the Egyptian coast north of Ra's an-Nasrayn. The narrowest point in the south lies between the Saudi-Egyptian coast measuring 6.5 nm between Ra's as-Shaykh Humayd on the

Arabian coast and an opposite point on the Sinai Peninsula [Saudi Port Authority, map No.11].

3.7.1.1 The Equidistant Line

Both the Saudi decree of 16 November 1958 and the Egyptian decree of 17 November 1958 stated the method by which the overlapped area might be settled. The Saudi method was based on agreement between the parties in accordance with equitable principles [Article 7 of the 1958 Decree]. The Egyptian approach referred to International Law in such circumstances [El-Hakim, 1979]. Egypt signed the 1982 Convention, the rules of which should apply to such a situation.

Unfortunately, the Gulf of Aqaba is a very deep body of water and potential resources seem to be unpromising. However, there are different sites in the Red Sea between the two states which offer potential for future exploitation. As a result the Gulf of Aqaba is not regarded as a priority for delimitation. If any study in the near future found minerals worthy of commercial exploitation, the parties may adopt a common zone similar to that established between Sudan and Saudi Arabia in 1974 (see Chapter 7 for more details). The common zone idea would be suitable in the Gulf of Aqaba.

According to the 1982 Convention on the Law of the Sea, the equidistant line could be used between the opposite states if agreement cannot be reached or if justified by other circumstances. Awad [1974] pointed out two factors which may cause modification of the median line:

1) The Geographical circumstances which consist of:

(a)- the special shape of the coastline which according to Awad should be used if the coastline is not straight in order to achieve an equitable line. In the author's opinion, the proportionality should be considered in the interests of equity, if the lengths of the coasts of the two countries differs sharply such as the Libya-Malta coasts, but in the Gulf there is no need for such considerations because the two coasts are similar in length.

(b)- The existence of islands which we mentioned above. The Gulf here is nearly free of islands and has a smooth coast.

2) Mineral Deposits as we described previously.

The method used here to determine the equidistant line between Saudi Arabia and Egypt was described by Hodgson and Cooper [1976] where a computer program called MEDIN was designed to draw a median line between opposite states as well as adjacent states. However, the author employed a manual template which gives nearly the same measurements. The circles shown in Figure 3.1³ are similar to the computer results, although the pencil allowance may effect the outer edge of these circles, though not the central points which are the points on which the equidistant line is based. This is due to the fact that the central points are chosen directly from the measurements of the template, independently and at the same time as the drawing of the circle. The regularity of the coast and its smoothness can be seen from the small differences between the sizes of these circles (see the right side of Figure 3.1). Where islands are found on the coast is

³. See the accompanying Atlas for all the Figures

irregular, the size of the circles range between small and large.

Figure 3.2 shows the Saudi-Egypt median line⁴ in the Gulf of Aqaba drawn from a point at the middle of the waters opposite to the Saudi-Jordan land boundary. The line then runs to the south with some turning points which reflect the irregular coastal shape until it reaches the south west of Tiran Island. The smoothness of the two coasts can be seen in the median line by the gentle move which the line takes for both coasts. The line measures 87 nm approximately along the Saudi-Egypt median line boundary. The width of the Gulf allows only 7.3 nm to each state at its widest point. Where the Gulf is narrow the line becomes complicated e.g. the southern part near Tiran Island.

3.7.1.2 The Saudi-Egyptian Causeway

Relations between the two states are reflected in the importance of their policy towards boundary settlement particularly in the Gulf of Aqaba. The two islands, Tiran and Sanafir, offer the best example of the good standing relations and the common goals which the parties seek in the area. The new project of a Saudi-Egyptian Causeway between the two continents over the Gulf waters may indicate increasingly warm relations. Egypt supported Saudi policy in the Gulf War by sending troops. This is the latest example of the alliance between the two states. The 1990 invasion of Kuwait by Iraq may therefore accelerate the Causeway project. The project is already being studied. For the first time the Arabian Peninsula will be connected with the African Continent across the Gulf of Aqaba.

⁴. The term median line and equidistant line in this study described one method.

Technical Saudi-Egyptian Committees was planning to meet to put the final touches to the studies for the proposed causeway and bridge between the Kingdom and Egypt. At the sixth session of the Arab Transport Ministers meeting held in Egypt in the first week of November, 1990 Minister Hussein Mansouri said:

finance for the causeway represents no problem but we are now putting the final touches to the technical studies for this causeway [Saudi Economic Survey, 1990].

There are two potential routes for this road according to two studies carried out by an Egyptian team. The first would link the east coast from Ra's Qasbah on the main coast north east of Tiran Island passing through a shallow area of sea until it reached the northern part of Tiran, where part of the road would run to the west coast of the island. The route would then travel through the area of separated reefs to the north-west and to the south-west and finally in a western direction until hitting the Egyptian coast. The length would be about 14.5 km [Al-Iktissad Walnaft, 1989]. This proposed route is longer than the second, but reduces the cost by using the reefs and Tiran Island (Figure 3.3).

The second proposed route, surveyed by the Ministry of Transportation in Egypt, is less than half the length of the first, at only 6.5 nm. However, it would pass through deeper waters which may increase the cost and thus negate the capital benefit of its shortness [Al-Iktissad Walnaft, 1989]. The route would start from a point on the Saudi main coast at Ra's ash-Shaykh Humayd, and travel directly to an opposite point on the Sinai coast. The route is a good choice due to the nature of the sea floor at this area the depth of which is shallower than the rest of the main body, varying between 50 and 900 m. Only over a 2 nm length

are the waters found to be deeper, where the depth reaches 1,300 m [Saudi Port Authority "map", 1983, No.11].

The significance of this project is that it would not only affect the movement of passengers between the two states, but also will increase the trade, not just between the two countries, but with Egypt and the Arabian Gulf States, the Arabian Peninsula countries as a whole and via Egypt to the rest of the Arab states in Africa. The recent Gulf crisis of 1990/1991 may accelerated the Causeway project, because of the decline in Saudi-Jordan relations.

3.7.2 The Delimitation in the Arabian Gulf

3.7.2.1 Geographical Description of the Area

The Saudi coast on the southern shore of the Arabian Gulf, between Qatar and UAE, measures approximately 59.4 nm according to the 1974 agreement between the two states, which is 178 nm shorter than that proposed by Saudi Arabia in 1949 [Al-Sayf, 1990]. The Duwhat Duwayhin name describes an open area of the Gulf which lies south of Khuwr Al-Udayd [Khaur al-Adid]. The original name was first used to indicate onshore wells near the coast. The name was then used in the Saudi official papers to include the bay between Khuwr Al-Udayd and the mountains on the Arabian Gulf coast. [Government of Saudi Arabia "memorial", 1955]. The difference between the two is that the submerged area is called Duwhat, whilst that on land is called Khuwr.

The boundary between the two states starts at a point where the boundary meets the coast to the south-east of Khuwr Duwayhin approximately at latitude

24°14' north and longitude 51°35' east. To the north, the new boundary between Saudi Arabia and Qatar starts at a point mid-distant on Khuwr Al-Udayd on the Gulf coast. This puts the area of Ra's Al-Qumayyis, Khuwr Duwayhin, Sabkhat Matti and Jazirt Al-Huwaisat under Saudi sovereignty.

Dawhat Duwayhin is known for its pearls and a scattering of small islands. The water between Qatar and Sabkhat Matti is relatively deeper, but along the southern coast from Sabkhat Matti eastward the waters are shallow. The shallow waters cover a large area, and extend far from the Saudi coast. They contain many shoals and islands [Government of Saudi Arabia, "Memorial", 1955].

Khuwr Al-Udayd is a narrow long khuwr extending inland towards the south-east until it meets with another dawhat north of this site and south of Qatar. The khuwr is not deep, so it is not used for ships, but small vessels and sailing boat use it as a port [Government of Saudi Arabia, "memorial", 1955].

Sabkhat Matti is an area which lies west of Dawhat Duwayhin and extends west towards the Empty Quarter to nearly 27 nm. It is a low salt plain, difficult to traverse in the rainy season, the waters turning it into a marsh with quicksand. The area was ceded to Saudi Arabia in the 1974 agreement [Hamadi,1981].

Al-Huwysat is a small island situated nearly at the middle of the entrance of Dawhat Duwayhin. The island lies to the West of Ghaghah island, granted to the UAE. Huwysat is the only island put under the Saudi sovereignty in the agreement.

Liwa Oasis was ceded to the UAE in the 1974 agreement, but Ash-Shai-

bah-Zarrara oil field, which is situated in the border area, is under Saudi sovereignty. The hydrocarbons found there are Saudi-owned and Saudis alone have the right to exploit them. Hamadi [1980] pointed out that Zarrara oil field is jointly exploited between the two states. This is not the case, because the agreement emphasises the Kingdom's sole rights over the oil field.

3.7.2.2 The 1969 Qatar-Abu Dhabi Boundary Agreement

The 1974 Saudi-UAE Boundary Agreement cannot be understood without considering the 1969 boundary agreement between Qatar and Abu Dhabi. The dispute between the two sheikhdoms over Khuwr Al-Udayd and the islands in the Gulf heightened after the discovery of oil near Halul Island. The parties agreed to resolve the dispute, which was finally accepted before unity on 20 March 1969 [Abu Dhabi-Qatar Continental Shelf Agreement]. According to this agreement "Al-Ashat" [Lasahat] and "Sharaiwah" islands were granted to Qatar, due to their close proximity (10 miles) to the Qatar coast, and being only a mile from each other. Dinayh island was ceded to Abu Dhabi [Al-Ashal, 1978]. Al-Bunduq oil field lies 20 miles west of Dass Island on the boundary line and was also a matter of dispute between Qatar and Abu Dhabi. This disputed site was put under Abu Dhabi Marine Areas (ADMA) operations, who were given the responsibility to exploit the oil, but to divided the revenue equally between the two parties, [Al-Ashal,1978]. The oil field covers an area of 50 square kilometres and contains 27 wells [Dairat Al-Petrul, 1985]. Table 3.3 shows the production of this

field for ten years only⁵.

Table 3.3
Al-Bunduq Oil Field Production (b/a)

Years	Productions	Years	Productions
1975	167,297	1980	17,022
1976	3,734,438	1981	21,382
1977	3,458,178	1982	-
1978	1,099,164	1983	139,794
1979	645,823	1984	1,477,672
Total	9,104,900	Total	1,655,870

Source: Dairat Al-Petrol UAE.

The boundary line between the two countries measures 115 nm. The line is based on four points (A,B,C,D). The starting point (A) lies an equidistant of the maritime boundary of the three states Iran, Qatar and Abu Dhabi (UAE). Points A and D are equidistant from the coast of Qatar and Abu Dhabi (UAE), while point C is simply the intersection of the lines from points B and D, [El-Hakim,1979]. Point D lies at the mouth of Khuwr Al-Udayd about 2 nm from the mainland, its geographical location is latitude 24°38'20" north and longitude 51°28'05" east [The Geographer, 1970] (see Figure 3.4).

⁵. These figures represent 50 per cent of the production of the Al-Bunduq oil field, the other half being owned by the Qatar Government.

3.7.2.3 Saudi Arabia-UAE 1974 Boundary Agreement

This agreement is the first of its kind although the parties have refused to reveal its contents or publish any part of it, despite the 19 years since its announcement. The agreement was signed by King Faisal the King of the Kingdom of Saudi Arabia at that time and Sheik Zaid the ruler of the UAE in 1974. This study reveals new information and more precise points not published before. The strict equidistant line drawn between the parties is based on the Articles of the 1974 Saudi-UAE Agreement.

The limited access and its sensitive issue make it difficult to set down the provisions of this agreement. The most important aspect for the purposes of this thesis is the demarcation of sea boundaries between the two states.

According to the 1974 agreement the oil field of "Shaybah"⁶ is wholly under Saudi jurisdiction, and no rights were granted to the UAE over this oilfield which lies to the north of the line. However, any operations shall be by agreement between the parties in respect to the way of conducting exploitation.

Again the agreement solved one of the common problems of oilfields which extend beyond one state. But this time the method used here is the prohibition on exploring and exploiting in the area which may lie under it an oil field that mainly its hydrocarbon situated in the area of the second parties.

⁶ Shaybah is a giant field in the Eastern al-Rub al-Kali, 40 km long and located immediately south of the Abu Dhabi (UAE) border before the agreement, discovered in 1968. The reservoir is in the Shaybah reef and contains carbonates with 40-42 degrees API oil and 0.7 per cent Sulphur. The discovery well tested 9900 b/d and initial recoverable oil reserves are estimated at 2.8 B/b. [Beydoun, 1988, p.215].

Al-Huwysat is the only Saudi island in the waters which lie off the Saudi Gulf coast. The rest of the islands are owned by the UAE. However, the Kingdom enjoys the right to establish any installations on Al-Gafay and Makasib Islands. The use of a median line will not give the island a complete 12 nm territorial sea because the distance that separates the island from the UAE islands is too small to fulfil the 12 nm limits, and the area joining them with the high seas will be shared between the parties in respect to the freedom of navigation.

3.7.2.4 The Equidistant Line

The area divided between the parties according to the agreement has ceded about 712 square nm under the Saudi sovereignty according to the measurements conducted by the author. This includes all the area surrounded by the median line according to the 1974 Saudi-UAE Agreement. The importance of this 59.4 nm long Saudi coast is not based on the size or the ownership of small islands lying within its waters, but, on the political settlement of the longest standing boundary dispute between the two states, which goes back more than 150 years. It is in fact, the longest Saudi boundary dispute with its neighbours. The significance of this agreement lies also in the settlement of the oil dispute, land frontiers and tribal rights. The following is an adjacent line to the 1974 agreement.

The median line measures about 32 nm from the Saudi-UAE new boundary to where the line meets with the Qatar boundary at the Gulf. The line starts at a point on the coast of Dawhat As-Sumayrah, which is situated at latitude 24°14' north and longitude 51°35' east. As a result of the general direction of the

Saudi-UAE coast, the line immediately changes its direction from south-north to the north-west where the equidistant point lies between the two shorelines.

Figure 3.5 shows the complicated turning points, and the equidistant line which joins them. This is due to the narrowness of these waters with islands lying close to each other. At a distance of about 3 nm from the land boundary the line changes direction to north-north-east, until it reaches a point mid-distant between the "Jabal Ghumaghin" coast on the UAE coast and Jazirat Al-Huwysat (Saudi Arabia). This point is nearly 3 nm from both coasts. At this point, the line turns to the north-east towards the second turning point which lies between Al-Huwysat Island and Jazirat Umm al-Ghumaghin (UAE). Only one equidistant line joins this island and the Saudi island. The line at this point takes a northerly direction. The complexity of the equidistant line resulted in the close link between the two islands. The length of the line between the islands is only approximately 3 nm, then the line changes direction to the north-west, where the equidistant point lies this time between Al-Huwysat Island and Qasar Khu'yain (UAE). The median line is more complicated here because of the small size of the area it traverses.

The turning points may reflect the size of the area and its line complexity. Eight turning points can be seen here, seven in the previous line and fifteen in Dawhat Sumayrah where the larger number represents the larger size. The width of the latter reaches 5 nm, and narrows to 1.5 nm between Ghaghah and Al-Huwysat Islands and to one nm between Al-Huwysat isles and Qasar Khu'yain, the line then turns 90° to the east. This sharp turn is caused by the influence of the Saudi main coast which the equidistant line follows and by Qasar Island. Only

two equidistant lines link the Saudi coast with the UAE island. Then, a Saudi island, Hadhbah, close to the mainland is linked with Qasar island by three turning points, forcing the line to take first an easterly direction then a north-easterly direction. This trend may be clearer where the second Saudi Island "Ra's Seyad" plays its role by joining the mid-points with Khardal Island.

The fourth line links Khardal island with the Ra's Qumayyis coast on the main Saudi shore. This is connected with the island by only two points, due to the intercepting of another equidistant line from the nearest site of Jazirt Muhayyimat, and only two lines connect with Ra's Qumayyis. The median line between Muhayyimat and Ra's Qumayyis changes its direction to north where the area divided is between Al-Gaffay island and Ra's Qumayyis. Running straight, the equidistant line finally reaches the 1969 Abu Dhabi-Qatar boundary near Khawr Al-Udid.

The importance of this study carried out by the author, is that it is the first of its kind to describe the boundary between the two states based on the unpublished 1974 Agreement. A second important feature is the comparison which the researcher has made with the territorial waters in the Gulf of Aqaba, reflecting the importance of even a small area of sea, not only for stability between the parties involved but also for co-operation between neighbouring states. The area in the Arabian Gulf is smaller and more fully populated with islands, and has a smooth coast whereas the Gulf of Aqaba, although its coast is smooth, is nearly empty of islands and is longer. The main differences between the two cases are the islands. Nearly 10 islands affect the equidistant line in Dawhat Duwayhin

between Saudi Arabia and the UAE. All except three of these islands are owned by the UAE.

The result of drawing such a line, which can be seen clearly in Figure 3.6, is more favourable to the UAE than the Kingdom. This is due to the number of islands owned by the former. However, the size of the area may reduce this negative result. The shape of this coastline, which in fact matches the test of the semi-circle of a closing bay may not lead to an equitable result, due to its curve. Most of the main coast belongs to the Saudi government, and such an effect may not lie in favour of the UAE. However, whatever this effect may be, it is too small to be recognised.

The 1974 Agreement reflect the good relations between the two countries as well as their wishes to solve this long standing conflict in the region. Part of the conflict has been aggravated by a third party which does not share the common goal of the two states. An-Nahar Magazine [1974] pointed out:

It would be more accurate to say that the Buraimi settlement is the result of Saudi Arabia's decision to recognize the UAE than the other way round.

The peaceful methods used by the Kingdom to lay down its long and strong claims over the area demonstrate the importance of this state to the stability of the area. It is one of several previous examples of agreements which include Bahrain, Qatar, Iran, Jordan, Kuwait and Sudan. The latest agreement with Oman is another example of the Kingdom's policy towards its neighbours. The only boundaries with the Kingdom which remain to be settled in the Red Sea are with Yemen, an adjacent boundary in the south, and with Eriteria (which

announced its autonomy in the 24 May 1993) and Egypt, where there are opposite maritime boundaries.

The Saudi-Yemen boundary is the next move on the agenda for the government of Saudi Arabia. A representative went from Saudi Arabia to Yemen to discuss the matter in 1990 and further talks were held in 1992 and 1993. The toppling of the Communist regime by rebels in May 1991 will draw a new map in Ethiopia and created a new Eritrean state which may start efforts towards defining its maritime boundaries as a step towards international recognition. The boundary with Egypt on the other hand may be drawn sooner, especially considering the Saudi-Egypt Causeway Project over the Gulf of Aqaba. The Egyptian attitude towards the Gulf Crisis and its contribution to the multinational military force in the Kingdom was another indication of the warm relations between the two states.

3.8 Contiguous Zone

A contiguous zone is an area seaward of the territorial sea in which the coastal state may exercise the control necessary to prevent or punish infringement of its customs, fiscal, immigration, and sanitary laws and regulations that occur within its territory or territorial sea [US Department of State, 1992].

The origin of this zone goes back as early as the eighteenth century, where different practices were used beginning with the "Hovering Act", enacted by Great Britain against foreign smuggling ships hovering within distances of up to eight leagues (about 24 miles). This method was used from 1736 until it was

replaced by a "Customs Consolidation Act" in 1876. Other states adapted different approaches where the territorial sea breadth was not settled and a variety of jurisdictional zones were claimed. This was practised mostly in Europe for instance by France, and Belgium. Cuba and Turkey were also among those states which adopted this method. The third group adopted an approach closer to the concept of the contiguous zone, where a one-league belt was claimed as public property followed by a further three leagues in which the state enjoyed the right of policing for customs and security purposes only, e.g. the "1855 Chilean Civil Code". This method was used by some Latin American States and also Egypt, Latvia and Norway [Churchill and Lowe, 1991].

The idea of establishing a contiguous zone beyond the belt of the territorial sea had been put forward during the discussion of the neutrality zones by the Institute of International Law in 1894. Later, in the 1958 Geneva Conference a contiguous zone was established which permitted the coastal state to exercise the control necessary to prevent and punish infringement of its customs, fiscal, immigration or sanitary regulations within its territory or territorial sea according to Article 24. The 1982 Convention established this right in Article 33(2), where the breadth of this zone is stated as being such that:

The contiguous zone may not extend beyond 24 nautical miles from the baselines from which the breadth of the territorial sea is measured.

Saudi Arabia established its contiguous zone by Article 8 of the 1958 Saudi Decree (see Appendix A) which stated that:

To assure compliance with the laws of the Kingdom relating to security, navigation, fiscal and sanitary matters, maritime surveil-

lance covers a contiguous zone outside the territorial sea, extending for a distance of six nautical miles in addition to the twelve nautical miles measured from the baselines of the territorial sea, in accordance with Article 5 of this decree.

The Kingdom included in its decree two new aspects not mentioned in the 1982 Convention or the 1958 Geneva Convention; that is security and navigation. Iran also included navigation interests in its contiguous zone claim [MacDonald, 1980]. In fact, the six nm zone claimed by the Kingdom was directed toward a general Saudi interest in security according to MacDonald [1980]. However, it was also the result of legal advice rather than a response to a specific security concern. Saudi Arabia's claim to the contiguous zone had been established before it was adopted in the international community [MacDonald, 1980]. Iran, Egypt, Yemen and Sudan are among the Red Sea and the Arabian Gulf states who claimed this right. The importance of this zone can be seen in the goal of Article 33 of the 1982 Convention which is to create a prevention zone which gives the state more protection of its national interests. For the Saudis it is a security zone as well as a prevention zone. So, Saudi Arabia has to claim the full breadth allowed in the 1982 Convention.

3.9 Conclusion

Throughout the history of the expansion of the Saudi Arabian territorial sea, the Kingdom has always taken the maximum breadth. However, in two cases and two different places, Saudi Arabia would not be able to claim the maximum 12 nm limits of territorial sea established by the 1982 Convention. The first instance is in the Gulf of Aqaba where Saudi Arabia's territorial sea overlaps

with Egypt. The boundary here lies between opposite states and the maximum breadth of the sea does not exceed 14.6 nm. Both countries claim 12 nm as the limit of their territorial sea.

The second, case lies in Dawhat Duwyhn in the Arabian Gulf between Saudi Arabia and the UAE. The boundary is an adjacent boundary, but the land boundary terminal effects a relatively small area, then the boundary changes from being adjacent to being opposite and this opposite boundary changes from the two mainlands to islands. The overlapped area is so narrow that the territorial sea of their islands was ignored in the 1974 Saudi-UAE Agreement.

The 1974 Saudi-UAE Agreement reveals new methods of boundary delimitation which could be used elsewhere to solve one of the common problems of oilfields which beyond one state. The first method was the prohibiting by the parties of any exploring and exploitation in an area under which may lie an oil field where its hydrocarbon is mainly situated in the area of the second party. The second method the compromise by the two parties where a portion of sea was exchanged for land, the two being far away from each other. The third method was complete Saudi sovereignty over Shaybah oil field. The fourth method was the use of an island by one of the parties whilst the sovereignty of the island remained unchanged.

The 1974 agreement also shows a good example of the co-operation between two coastal states as established by Article 123 of the 1982 Convention.

The islands lying in small waters such as the Gulf of Aqaba and Dawhat Duwayhin are so important that they were claimed by more than one state. Egypt

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for example claimed Tiran Island which controls Tiran Strait, and so did Saudi Arabia. On the other hand, Saudi Arabia claimed 440 km but gained only 110 km by the 1974 agreement. The important factor being the value of the Tiran Strait and the economic importance of the oil found in the area. In the Saudi view, Tiran strait is not an international waterway.

National security is one of the main factors behind the expansion of Saudi Arabia's territorial sea e.g. the existence of Israel in the Gulf of Aqaba.

Territorial seas and contiguous zones are limited areas where their width does not exceed the 24 nm defined by the 1982 Convention. This does not fulfil all the requirements of the Saudi national interests which should include fishing rights, scientific research control, and exploring and exploiting resources found in large areas covered under the EEZ and EFZ which will be dealt with in the next chapter.

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Chapter Four

THE EXCLUSIVE ECONOMIC AND FISHING ZONES

4.1 Introduction

The marine resources and the marine environment of the Kingdom of Saudi Arabia are both valuable and vulnerable. Their value lies in the fact that they contain unique species an example of which is the Red Sea coral reefs, consisting of 194 kinds from 74 species [MEPA, 1989]. Also the Arabian Gulf was until recently the world's richest marine area from which pearls were obtained, before the rise of artificial pearls from Japan. The living resources in the area could also make a major contribution to solve the problem of food shortages from which the region is suffering, although fishing resources have not yet yielded sufficiently, especially in the Red Sea. However, these valuable resources are facing a threat of two kinds; the first is competition between the bordering states and external maritime powers. The Arabian Gulf for instance, witnessed two major wars in this decade between Iran and Iraq and Iraq and Kuwait supported by the UN. The region is also facing increased disputes over maritime boundaries, the latest being between Bahrain and Qatar and Iran and the UAE. These disputes and conflicts also contribute to the second threat which is pollution. The oil leakage from offshore oil wells has seriously affected marine life in the Arabian Gulf. Another source of pollution is the oil tankers and commercial vessels which due to the increase in their numbers and activities have become a threat to this sensitive environment. The Arabian Gulf is most affected because the hydrocarbon resources within Saudi waters are the richest.

The 1982 Convention developed a new concept in the law of the sea, that is the 200 nm Exclusive Economic Zone (EEZ). In fact, no other proposal created so much debate from its origin to its acceptance in the 1982 Convention as this concept did. The unique legal status distinguishes it from other maritime zones.

Only about a third of the countries in the world have claimed an EEZ. there will be few further beneficiaries of the EEZ claims. Saudi Arabia has not yet claimed an EEZ, partly due to its prior claim to the Exclusive Fishing Zone (EFZ) in 1974 and also due to the limited area which lies in semi-enclosed seas namely the Red Sea and the Arabian Gulf. The areas would not give the state the complete 200 nm zone. The significance of the claim of an EEZ by Saudi Arabia will be discussed in this chapter, especially in relation to the existing Saudi Fishing Zone Claim. The living resources in the area and the potential surplus and fishing yield that can be obtained from both the Red Sea and the Arabian Gulf will have to be examined. (All Figures in the accompanying Atlas).

4.2 Saudi Marine Resources

4.2.1 The Marine Environment

The Red Sea plummets to approximately 2500 m at its deepest. It is this which distinguish it from the Arabian Gulf. The continental shelf is very small in the Gulf of Aqaba, less than half a nautical mile, and not more than 54 nm (100 km) at its widest in the South around Farasan Archipelago [MEPA, 1989]. The distribution of marine life reflects the natural zones of the area. The length of the coastline is also another factor which affects the distribution and the variety of

the marine life. The length of Saudi Arabia's coast in the Red Sea spans 13° of latitude whereas the Saudi coast in the Arabian Gulf, spans only 2°. Both measure 1316 nm long [Couper, 1983, p. 227]. The variation in the degrees of latitude will effect the climate and other geographical phenomena, which in turn plays an influential role in determining the fauna and flora of the area. In stark contrast with the Red Sea, the Arabian Gulf is much shallower, with an average depth of 35 m and maximum depth about 100 m near Hormuz Strait [Sayf, 1988].

The slow exchange of water between the Gulf and the Indian Ocean due to the narrow breadth of Hormuz Strait increases salinity to as much as 36.9-41.3 per thousand in the water [Morcos, 1970, p. 102]. The salinity affects the type and location of marine life in the area. The current risk of pollution is said to be the main threat to Gulf species. The Saudi coastline in the Gulf is highly complex with extensive systems of shallow bays affecting the amount of fresh water flowing into these bays. The bays contain large areas of intertidal flats, which are protected from wave action. These lead to mud deposits and frequently also to beach-rock formation [Basson, et al, 1977, p. 31]. In the event of oil pollution in such places, the effect on life is serious. In addition to this the depth and the variation in water temperature between 14°C and 32° C, will define the limit of such a threat [MEPA, 1989].

Natural marine areas are important to fishing because it is these areas on which the fish depend for feeding. Plants and different types of fish as well as birds and turtles may all be found in these areas. Hundreds of species live in ecological balance, the life cycles of each interlocking with the other. Any

interruption to one of these cycles may lead to a catastrophe for others, and therefore seriously affect all species in the area. For example the plankton that drift in or float on the water of the oceans, lakes and rivers play an important role in the ecological system of the sea [Hornby, 1978]. Zooplankton and Phytoplankton both grow quickly and are the main source of food to small species which in their turn are eaten by larger animals [Ba Najah and Rifa'at, 1986]. Not surprisingly, therefore, plankton are one of the biological life forms which, along offshore coastal areas, maritime states are eager to claim. Chile, Ecuador and Peru (CEP) used the plankton to support their claims over the 200 nm EFZ in their 1952 Joint Declaration [Scovazzi, 1985]. They based their claim on the fact that:

The human population of the coast formed part of the biological chain of adjoining seas up to the 200-mile limit; this chain extended from the microscopic vegetable and animal life (phytoplankton and zooplankton) to the higher mammals, among which man was included [Scovazzi, 1985].

Natural marine life in Saudi coastal areas can be divided into three types, determined by their preferred environment:

- 1) Coastal plants are an important feature of the areas found along the Saudi coast of the Red Sea and the Arabian Gulf. They include *Avicennia marina*¹ and *Rhizophmucronata* [MEPA, 1989]. *Avicennia Marina* Plants are found along the Saudi Red Sea Coast in particular the southern zone where fresh rain waters flow from the mountains in the west, causing these plants to flourish.

¹. In Arabic called Ash-Shora or Al-Garm.

- (2) The drift area which lies between the low-tide water and the high water line. Plants include those which grow in sand and clay surfaces. This area has particular importance due to its surplus of organic matter. The organic compounds have an important effect on the biological, geochemical and physical processes in the sea e.g. primary productivity is influenced by the presence of dissolved organic carbon and organic carbon may be an important source of energy for organisms in the deep sea [El-Sayed, 1985].
- (3) The area below the tide line where life is richer and covers a larger variety of species than those found in the first two zones. Water Moss is the most common life form of this community. Coral reefs and solid Water Moss are attractive places for living species to find food and shelter. Tiran Island to Al-Wajh and north Yanbu, north Jeddah and around the outer part of Farasan Archipelago represent the best examples of these area.

4.2.2 Living Resources

The Red Sea and the Arabian Gulf eco-systems are not only important as sources of nutrition but also for scientific research. In order to maintain ecological balance, environmental problems need to be managed, utilising the best methods possible. These seas are still important for their coral reef and their unique mix of species. The fauna of the region can be divided into four categories:

- (1) Resident and migrant birds, are numerous. According to the ITN Gulf

Report News [1991], there are an estimated four million birds. In the Arabian Gulf alone around 125 species overwinter, whilst 113 other species are seasonal migrants [MEPA, 1989].

- (2) There are four species of Turtles in the Red Sea and the Arabian Gulf. Being an endangered species they enjoy special protection from Saudi authorities. The Hawksbill Turtle along with the Dugong and various species of Water Snake are said to be severely affected by pollution in the Arabian Gulf. Less affected is the Green Turtle [Burchard and McCain, 1982]. Figure 4.1 indicates their distribution in the Red Sea.
- (3) Mammals such as dolphins and whales need a more protected location.
- (4) Fish constitute a significant source of food. The majority of the coastal residents depend for their livelihood on fishing for food and commercial production. Fishing remains an important activity.

4.2.3 Fishing Communities

As can be seen from Figure 4.2, the Saudi Red Sea coast is a highly populated area compared with the internal part of the Kingdom. Ten cities are found along the coastline along with fourteen towns and villages including those on the islands. The number of fishing camps is however, the largest with 46 camps located along the coast of the mainland and the islands, and fishing is the main activity in these coastal waters.

The figure shows that Jeddah area has the highest concentration of these camps, which are attracted to the cities which provide fishermen with their needs.

The Cities of Gunfidhah and Umm Lajj also attract more camps due to the highly surplus of fish found in the shallow waters surrounding the large number of islands. The area between Gunfidhah and Gizan (Jizan) is less density populated, as the number of islands which provide fishermen with a place for rest is less. This is also true in the north between Umm Lajj and Haql. The northern part of the Red Sea is more salted than in the south which may also contribute to less fishing.

Another important factor affecting the distribution of fishing communities along the Saudi Red Sea coast is the distance between the markets and the camps, since fish is a perishable commodity. Jeddah, Mecca and Taif are all big cities which are close to each other and this is where many of the camps lie. The consumption in these cities is also high as a result of the large populations. It is true that refrigeration now days solves many of the problems but at the time of establishing these camps, this kind of storage was not available.

The MFRDC [1987] (table 4.1) estimated the number of workers in primary employment in the fisheries sector in the Kingdom in 1987 to be 2398 in

*Table 4.1
Employment in the Primary Fisheries Sector in the Kingdom in 1987*

Type of worker	The Red Sea	The Arabian Gulf	Total
Fishermen	1,166	1,763	2,929
Fishing Labour	3,321	635	3,956
Total	4,487	2,398	6,885

Source: MFRDC (KSA), 1987

the Gulf and 4487 in the Red Sea, while the secondary sector reached 471 workers in the Red Sea and 145 in the Arabian Gulf making a total work force of 7501 employees in the Kingdom in 1987. MEPA [1989] pointed out that along the Saudi Gulf coast there are nearly 1,000 fishermen, excluding the Saudi fishing company employees. Several fishing communities can be found there such as Ra's Al-Khafji, Ra's Mish'ab, Ra's As-Saffaniyah and Minifah.

4.3 Fishing Yield

The Middle Eastern States as a whole produce only 2 per cent of the total world production in fishing. The Arabian Gulf states and the Red Sea riparian produce less than the rest of the Middle Eastern states [Drysdale and Blake, 1985, p. 114]. Only Yemen, Morocco and Turkey achieve a high level of fish production. The estimated amount of fish resources in the Red Sea and the Arabian Gulf differs from one source to another. This reflects the lack of studies carried out in the area and the need for more investigation. According to a study carried out by Behairy et al, [1982], the annual potential catch that may be found in the Red Sea is between 250,000 tons and 1.5 Million tons. Only 80,000 Tons is exploited annually by all the Red Sea countries. Al-Saleh [1987] estimated that the potential output of the sea was 160,000 tons. The annual catch of fish in the Red Sea however, could be as large as 1.5 million tons according to MEPA [1989]. The Saudian production alone could possibly reach as much as 40,000-45,000 tons a year [MEPA, 1989]. If such catches were achieved, the estimated value could be

worth 480 million Saudi Riyals (SR), nearly \$128 million². Table 4.2 shows the size of catches of some species in 1987 in the Red Sea and the Arabian Gulf [FAO, 1987]. Commercial fishing can be conducted in the southern Red Sea due to the regularities of the sea floor with 5-8 nm (10-15 km) width. But, out of this zone coral reefs covered large area creating difficulties for such fishing in particular when Monofilament Net of 4.5 inches used. Figure 4.3 shows fishing in the Red Sea and the potential commercial fishing area.

*Table 4.2
Total Fish Catches in Saudi Arabian Coasts in 1987 (tons)*

Species Items	The Red Sea	The Gulf	Total
Groupers	3,384	2,561	5,945
Snappers	1,982	678	2,660
Emperors	3,613	3,023	6,636
Garangids	3,461	1,614	5,075
Mullets	451	00	451
Kingfish	7,755	1,129	8,884
Tunas	210	4	214
Sharks	513	00	513
Shrimps	725	6,264	6,989
Miscellaneous	7,347	3,012	10,359
Grand Total	29,441	18,285	47,726

Source: FAO 1987

². This amount is based on the price of 12 SR per kilogram and at 1986 prices.

In the Arabian Gulf the estimated potential for fish production from all the Gulf states is 1.1 million tons according to Al-Abdul-Razzak [1984]. But this figure is less than that given by Sayf [1988] where he estimated that 1.5 million tons could be produced by the GCC alone. Al-Nasr, [1987] basing his figure on FAO statistics suggested 720,000 tons for the production of all Gulf countries. Tarut Bay alone produced 1.3 million kilogram of shrimps worth about \$8 million [MEPA, 1989].

As shown in tables 4.3 and 4.4, four states in the Arabian Gulf dominated the share of fishing catches in the seven years between 1984 and 1990. Iran has had the largest share since 1986. It came top of all 8 Gulf countries with an average share of 36 per cent. The large population of Iran and the longer coast

Table 4.3
Fishing Catches by Countries in the Arabian Gulf (Tons)

States	1984	1985	1986	1987	1988	1989	1990	Total
Bahrain	5599	7763	8057	7842	6736	9204	8287	53488
Iran	93164	96364	121771	169664	188515	210180	200000	1079658
Iraq	5000	5500	5000	5000	5000	5000	3500	34000
Kuwait	9639	10118	7633	7704	10796	7653	4500	58043
Oman	105000	101180	96354	136149	165576	117703	120239	842201
Qatar	3173	2484	1980	2678	3086	4374	5702	23477
Saudi	40000	43696	45517	47767	46803	52190	45000	320973
UAE	72716	72260	79321	85247	89500	91160	95129	585333
Total	334,291	339,365	365,633	462,051	516,012	497,464	482,357	2,997,173

Source: FAO, 1993

(all the eastern coast) on the Gulf contribute to these large catches of fish. Oman

which also has a long coast on the Arabian Sea comes in second place. Its average share reaches 28 per cent of the total. The UAE which has numerous islands in the Gulf and which also has a coast on the Arabian Sea occupies the third place with 20 per cent as an average share. Saudi Arabia which also has a coast in the Red Sea comes in fourth place with a smaller average share of 11 per cent. Fishing catches in Saudi Arabia still need to be developed. Figure 4.3 shows the potential catches in the Red Sea are large and the Kingdom's share could be increased.

Table 4.4
Fishing Catches by Countries in the Arabian Gulf (%)

States	1984	1985	1986	1987	1988	1989	1990	Average
Bahrain	2	2	2	2	1	2	2	2
Iran	28	28	33	37	37	42	41	36
Iraq	1	2	1	1	1	1	1	1
Kuwait	3	3	2	2	2	2	1	2
Oman	31	30	26	29	32	24	25	28
Qatar	1	1	1	1	1	1	1	1
Saudi	12	13	12	10	9	10	9	11
UAE	22	21	22	18	17	18	20	20
Total	100	100	100	100	100	100	100	100

Sources: Based on Table 4.3

In the Red Sea, (table 4.5) only three states dominate the share of catches. Yemen which has a long coast on the Arabian Sea account for half the output,

while Saudi Arabia comes in second place with 31 per cent and Egypt comes in third place with 18 per cent of the total. All three countries have second coast-lines, with Egypt having a long coast on the Mediterranean Sea.

Table 4.5
Fishing Catches by Countries in the Red Sea (Tons)

States	1984	1985	1986	1987	1988	1989	1990	Total
Egypt	11343	21256	19708	23300	28450	43580	39924	187561
Ethio.	600	500	600	500	723	1557	2000	6480
Jordan	2	2	2	2	2	2	2	14
Saudi	40000	43696	45517	47767	46803	52190	45000	320973
Sudan	1328	409	1190	1200	1200	1200	1127	7654
Yemen	65710	71310	72747	72418	73156	72866	89149	517356
Total	118,983	137,173	139,764	145,187	150,334	171,395	177,202	1,040,036

Source: FAO, 1993

4.4 Exclusive Fishing Zone

4.4.1 Provision

In 1974 Saudi Arabia proclaimed its maritime policy in declaration number 2/7650/46/200 (Appendix B). The decree shows the Saudis awareness of the importance of adjacent waters to the Kingdom in the Red Sea and the Arabian Gulf. The announcement was issued by the Ministry of Foreign Affairs in respect to fishing areas. The declaration stressed the importance of exclusive fishing resources to the population of Saudi Arabia as the main source of food and a substantial element in the growth of its social and economic development. According to the declaration, the protection of such resources and their exploitation required

the proclamation of sovereignty over them. Therefore, the Kingdom of Saudi Arabia declared its absolute right over fishing in the Arabian Gulf and Red Sea adjacent to its coast, and its islands coasts.

Article 1 stated that all adjacent zones to the Kingdom's coasts and its islands shall be an absolute fishing area to the Kingdom of Saudi Arabia, from the coastal sea of the Kingdom which measured from the straight baselines referred to in Article 5 of the Royal Decree related to the territorial sea towards the high sea, but adjacent to its coast. In the case of overlapping between the fishing zone of Saudi Arabia and an exclusive zone of another coastal state, the boundary shall be defined by the median line every point of which measured equidistant from the baseline of the territorial sea.

Article 2 excluded non Saudis from conducting any action considered as part of fishing in all the Exclusive Fishing Zone, unless obtaining previous permission from the Government of the Kingdom of Saudi Arabia.

Article 3 granted the freedom of the high sea to other states according to international law. The Saudi decree in Article 3 corresponds to Article 87 of the 1982 Convention which defines the freedom of the high sea which is open to all states to enjoy the right of navigation, overflight, laying submarine cable, and pipelines and to other rights which are subject to conditions laid on other parts of the 1982 LOS Convention (e.g. freedom of fishing is subject to section 2 part 7 of Article 87).

The outer limits of all fishing zones related to the Kingdom in Article 4 are defined by methods laid down in Article 74 of the 1982 Convention, where

delimitation of the outer limits zone shall be with agreement with the opposite or adjacent states on the basis of international law. If no agreement is reached, the method then will be the procedures provided for in part 15. If an agreement exists between the parties, such agreement shall be with the condition of this settlement [Article 74].

The declaration of this decree followed a similar statement issued by Oman and Iran in 1972 and 1973 respectively [El-Hakim, 1979]. In the same year that the Saudi decree was announced, Qatar issued its notice claiming an EFZ. Later, in 1980 the United Arab Emirates published its decree over an Exclusive Economic Zone and in 1981 Oman established the EEZ [Juda, 1988]. It is clear from the Saudi decree that no fixed limit was stated to its EFZ, since the Red Sea and the Arabian Gulf are semi-enclosed sea which do not allow the 200 nm limits to opposite states.

The change in the 1974 decree from the 1932 Fishing and Shells Regulation can be found in Article 4 of the 1932 announcement. According to this Article the fishing belt as well as the territorial waters (territorial sea) was within 4 nm. Also, the 1974 decree granted the Saudi islands a fishing zone, which is not mentioned in the 1932 declaration. [Al-Sayf, 1990].

The effect of this claim over fishing in the area and the development of domestic consumption as well as the production may be noted in Table 4.6. In 1975-76 the harvest of the other Gulf states, was higher than in later years, except for 1987 and 1988. It is interesting to consider what caused this decrease. In fact, the decrees announced by the Gulf States (Oman 1972, Saudi Arabia in 1977 and

Qatar 1974) which related to their sovereignty over the EFZ and EEZ prohibited

Table: 4.6
Fish Production in the Gulf
"After the Establishment of the EFZ" (tons)³

Years	Saudi Arabia	Other Arab Gulf States⁴
1975	23,000	277,381
1976	23,300	297,371
1977	23,400	170,322
1978	26,550	176,463
1979	26,160	175,325
1980	26,425	180,209
1981	29,000	192,399
1982	33,000	204,873
1983	36,000	228,897
1984	40,000	231,455
1985	43,696	232,737
1986	45,498	238,279
1987	47,726	265,061
1988	46,773	273,087
Total	470,526	3,141,929

Source: Adapted from 1) FAO, 1987, Vol.64.
 2) FAO, 1988, Vol.66. 3) Al-Jasir, 1989.

³. Catches by metric ton.

⁴. Iraq not included

fishing in the area by alien vessels. On the other hand, some of the Gulf states had entered into a joint agreement with other states such as the Oman-USA Agreement which was affected by decrees. Oman, UAE and Kuwait had invested heavily in fishing. They also conducted fishing in the territory of the neighbouring states where more fish were to be found. This may reflect the large amount of output which they produce over the rest of the Gulf states. Their production would therefore decline as a result of these decrees claimed by their neighbours unless their vessels conducted fishing in the high seas.

The Gulf states catches have generally increased slowly since 1977. In some years there were reductions for some states, unlike the Saudi output. The effect of the EFZ claim on fishing activities can be noted in the relation between exports and imports. From 1977 import increased rapidly until it peaked in 1982. The weight of fish production imported amounted to 49,643 tons. Since then the total amount has decreased, probably due to the increase in fishing production. Meanwhile, the decline in export also points to a rise in local consumption. Several factors may contribute to this result, among them the increase in living standards in the Kingdom due to the oil revenues and the increase in the size of the workforce.

The Minister of Agriculture and Water Resources Dr. Abul Rahman Al-Sheikh, approved licences in August 1990 for establishing two fishing projects in the Arabian Gulf at a combined cost of SR 26.1 million and with an annual capacity of 13,000 tons. [Saudi Economic Survey, 1990, p. 4]. The increase in the number of fishing vessels owned by Saudi Arabia is another indication of the

development of Saudi fishing.

In general, fishing yield in the Red Sea and the Arabian Gulf is very low, compared to other countries. The Arabian Gulf catches are higher than those in the Red Sea, but caution should be exercised on this particular point due to the fact that Iran, Oman, UAE and Saudi Arabia all have another coasts.

4.5 Exclusive Economic Zone

The idea of the Exclusive Economic Zone was first mooted by three Latin America States (Chile, Peru and Ecuador) which claimed 200 nm as territorial sea in 1952. [Sinjela, 1989]. But, the representative of Kenya in the Asian-African Legal Consultative Committee (AALCC) held in Colombo in January 1971 was the first to propose the idea of such a zone in which the state would have the right to give licences for fishing in exchange for technology [Aamer, 1983]. At the second meeting held in Lagos in January 1972 Kenya proposed the sovereignty of the coastal state upon the biological life and mineral resources in the EEZ [Aamer, 1983].

4.5.1 The Status of the EEZ

It is clear that there are three kinds of sea, after the 1982 LOS Convention: national sovereignty where the state has absolute sovereign rights, the high sea and international seabed which represents the freedom of other states, and the EEZ. The legal status of the territorial sea is defined in Article 2 part 2 which states:

The sovereignty of a coastal state extends beyond its land territory and internal waters ... to an adjacent belt of sea described as the territorial sea.

Rights to the international seabed are defined by Article 137 which states:

No state shall claim or exercise sovereignty or sovereign right over any part of the area or its resources, nor shall any state or natural or juridical person appropriate any part thereof.

The third area is the EEZ which was a key feature of the 1982 Convention. It differs from the high seas as well as the territorial sea. Shihab [1986] argued that the full implications of the legal status of this zone remains to be defined by its future use by coastal states, and by arguments that may be raised by scholars. In this respect Shihab argued that if the duties and responsibilities of the legal status of this zone can be clearly defined alone, then it is our duty to adapt its law. The 200 nm EEZ embraces about 36 per cent of the total area of the sea [Churchill and Lowe, 1991, p. 134]. This portion of world Oceans contains more than 90 per cent of all commercially exploitable fish stocks, 87 per cent of manganese nodules and almost all the offshore reserves of gas and oil [Churchill and Lowe, 1991, p. 148].

Some state rights have been shifted from continental shelf rights to the EEZ such as exploring, exploiting and conserving living and nonliving resources. Molodtsov, [1986] pointed out that the legal status of living resources has been changed by giving the coastal state absolute right over its resources and this has brought about a change in the legal regime. The 1982 Convention gave the state more rights e.g. using artificial islands, installation and structures in the EEZ according to Article 60.

The rights and duties of other states in respect of the freedom of the high sea is also guaranteed in the EEZ according to Article 58. The freedom of the sea is stated in Article 87 and in Articles 88-115 by which the international law is applied to the EEZ e.g. navigation, laying submarine cable, nationality of ships, status of ships, immunity of warships and their right of visit.

The EEZ is clearly a distinctive zone with a unique status which brings together the rights and jurisdiction of a coastal state and the freedom of other states, governed by the relevant provisions of this convention. According to Scovazzi [1985, p. 120] the 200 nm EEZ has now acquired the status of Customary International Law. The legal status of the EEZ, is clearly defined in Article 55.

This zone emerged from a long-standing debate in the Third UN Convention on the Law of the Sea over two kinds of status advocated by state delegations. Large numbers of delegations represented the disadvantaged and developing continental countries e.g. Iraq, Jordan and UAE. Full sea power states such as USSR, the USA and several EEC (now EC) countries all maintained that the EEZ should retain the legal status of the high seas. Others including Mexico, Canada and Mauritius, wanted to allow priority for navigation and overflight, and opposed application of the freedom of the high sea to the EEZ. To date, the 1982 Convention has not yet entered into force, and will only do so after ratification by 60 states. By 24 October 1991 only 51 states had deposited their ratification with the secretary-General [Law of the Sea Bulletin, 1992]. Thus the operation of the EEZ could still be open to differences in practice.

4.5.2 The Role of the EEZ to Saudi Arabia

The Red Sea and the Arabian Gulf are both counted as semi-enclosed seas (see chapter 3) [El-Hakim, 1979]. The maximum width of the former is about 306 km. and the latter, nearly 280 km. This means that the bordering states cannot claim a complete 200 nm EEZ [Juda, 1988]. Among the Middle Eastern States only Oman and Yemen can claim a 200 nm zone. Morocco, Somalia and Mauritania form among the Arab countries can also claim the full 200 EEZ. The rest of the Arab countries are considered to be disadvantaged or lie on semi-enclosed seas. Iraq, Jordan, Sudan, Kuwait are examples of the disadvantaged states. Saudi Arabia, with an EEZ of about 186,200 sq.km [Couper, 1983, pp. 227] and Egypt are an example of those states lying on semi-enclosed seas.

In the Arabian Gulf only 3 states have claimed an EEZ: Qatar, United Arab Emirates and Oman in 1974, 1980 and 1981 respectively [Juda, 1988]. Only Oman can claim a 200 nm zone. But Qatar on the other hand does not enjoy the location of an open sea. However, the claim of an EEZ gives Qatar a greater advantage than the EFZ which the Saudi's claimed in the same year.

The importance of the EEZ is that this zone provides the state exclusive rights to exploit living and non-living resources. It also gives the coastal state authority over scientific research and environmental protection. The 1982 Convention also declared in Article 246 that the coastal state has the right to control scientific research in the EEZ (and the continental shelf). No state has the right of conducting research before it has consulted the coastal state. Article 246(2) states that:

Marine scientific research in the exclusive economic zone and on the continental shelf shall be conducted with the consent of the coastal state.

According to Mustafa [1986], the former Soviet Union has ignored such consent and violated the 1982 agreement by conducting scientific research in the Red Sea in the Saudi-Sudan Common Zone without permission from the parties, despite the fact that the Soviet Supreme Council Decree dated 6th February 1968 forbids any individual, persons or any legal organization from conducting exploring or exploiting any activities in the Soviet continental shelf unless permission has been obtained, or other arrangement made between the Soviet Union and the foreign state [Awad, 1974]. Egypt for instance seems to be in favour of an EEZ. The US Department of State [1985] pointed out that, Egypt has claimed an EEZ. Unlike Egypt, Saudi Arabia has not ratified the 1982 Convention. Saudi policy was however stated by its delegation that

The Kingdom believed that every coastal state was entitled to extend its exclusive economic zone up to 200 miles on the basis of the freedom of navigation and overflight in that area. [UN, Official Record, 1974, Vol. 1 p. 144].

If this is the case, the Kingdom would have rights over living resources in the area. Juda [1988, p. 432] argues that the coastal state's practice of their rights over the 1982 Convention do not necessarily depend upon the UNCLOS. Juda cites the 1982 Tunisia-Libya Case as an example which was observed by the ICJ.

In this respect Juda stated:

The opinion of the International Court of Justice observe that the EEZ has been accepted as part of the modern International Law [Juda, 1988, p. 432].

According to Juda [1988] Attard support this view by noting that:

a number of judges explicitly recognized that the EEZ concept "had crystallized into customary law". Failure by a coastal states to create such a zone must then find its explanation in considerations other than lack of support for or signature to the 1982 Law of the Sea Convention [in Juda, 1988, p. 436].

Al-Dib [1990] pointed out that the international practice had accepted this type of right nearly a decade ago. He argued that about 20 countries issued laws and pronouncements in respect to Exclusive Economic Zones before the 1982 Convention, but similar to the meaning of Article 56 (1-a). Mexico, Kenya, and Spain for example all claimed exclusive rights over the EEZ resources.

Moreover, state claims over fishing zones before the 1982 Convention were similar to Article 56, such as the Soviet Unions' 1976 claim over living resources in the EEZ. Many countries also claimed territorial sea beyond 12 nm, such as Somalia, Syria, Brazil and Argentina [Juda, 1988]. Several states established EEZs despite the fact that they are not signatories to the 1982 Convention: Kiribati, Tonga, Turkey, United States and Venezuela [Juda, 1988, p. 436].

The notion of exclusive rights over living resources was thus accepted and agreed upon before the 1982 Convention, chiefly between 1975 and 1983. As a result, the UN Convention formalised states practice as can be seen in the similarities with Article 56 (1-a).

Because the role of the EEZ and the absolute right over living resources in particular was accepted by international customary law, such resources are to be the traditional right of all countries, including none signatory states to the Convention.

Thus, the Kingdom of Saudi Arabia has the right over its living resources as in the 1982 Convention. This right was established by the traditional rights which the Kingdom has enjoyed since 1932. The 1974 Saudi Decree in which the Kingdom initiated its Exclusive Fishing Zone, is the latest legislation concerning such resources. The decree emphasises the Kingdom's rights described in Article 2 as exclusive to the Saudis.

In the Red Sea the only state to have defined its boundary with the Kingdom is Sudan. Egypt, Eritrea, Jordan and Yemen have yet to enter into agreement with Saudi Arabia. But the Kingdom has not yet formally claimed an EEZ. Such a claim would give the country more sovereignty and control over resources. There are in fact, two reasons why the Saudis have not claimed an EEZ. The first is a practical one related to geographical location on a semi-enclosed sea where the offshore area is limited, and the second is the EFZ which the Kingdom has already claimed. But, the need for a claim based on an EEZ granted by the international law, seems to be more necessary. Such a claim would give the Kingdom equality in any future agreement with its neighbours and reduce the potential disputes that may arise at that time. The EEZ provides the coastal state with jurisdiction and sovereignty over non-living resources extending beyond those granted by the EFZ, together with certain other rights [Juda, 1988, p. 436].

4.5.3 Scientific Research

Saudi Arabia should claim an EEZ due to its role in controlling and safeguarding rights over its waters. The Saudis are conducting extensive studies carried out by a variety of institutions and establishments, in some cases jointly with other states. These investigations include research into geological data, fishing, mapping, environmental studies, pollution control, mining, feeding and breeding as well as physical studies. Scientific research is an example of activities conducted successfully by Saudi Arabia. The following paragraphs summarise some of scientific research institutions and some of the studies carried out by Saudi Arabia and Sudan, which is the most active partner in this field.

It is worth while to give a brief history of the research carried out in the Red Sea, because it reflects the importance of this body of water as a waterway and as a source of food and minerals. The first scientific studies in the Red Sea were started by Forskal [1761-1767] then academic surveys followed e.g. the Italian voyages between 1923/24 and the Egyptian voyage in 1934/35. These were the beginnings of the earliest fish studies [Behairy, et al, 1982, p. 15]. But studies related to the mineral exploration and other physical studies started at the end of the Eighteenth century. For instance the Russian vessel Vitvaz in 1881-1883 made the first temperature measurements at the bottom of the sea. Early in the 20th century more attention was paid to the Red Sea; the important event was the discovery of temperature and salinity anomalies at Latitude 21° north by the Swedish vessel Albatross. After 1948 vessels from different nationalities participated, from Austria, Germany, USA, UK, USSR, Saudi Arabia (Nereus) in 1970.

The latest was the French vessel (Marion) in 1981. In fact, more than 30 vessels have conducted research in the Red Sea. But how much scientific research was exercised by the regional states especially Sudan and Saudi Arabia ? In fact, the two states started their activities only in recent years especially Saudi Arabia in the 70s.

4.5.3.1 Saudi Arabia

Before, we describe these operations, it is important to indicate the institutions which carry out these activities. They are:

- 1) Water Resources Research Centre, Jeddah.
- 2) Ports Authority, Riyadh.
- 3) Faculty of Marine Science (FMS), King Abdul Aziz University, Jeddah.
- 4) Fish Research Centre (FRC), Ministry of Agriculture, Riyadh.
- 5) Meteorology and Environmental Protection Administration (MEPA), Jeddah.
- 6) Red Sea Commission, Jeddah.
- 7) Research Centre, King Fahad University, Hafuf.
- 8) Military Survey Department (Marine Survey Unit) Ministry of Defence, Riyadh.
- 9) Ministry of Petroleum, Riyadh - Jeddah.

All these centres and institutions are supported by the Government of Saudi Arabia and are not private sector. The number of these institutions has increased in a short period, reflecting the growing importance of the sea to the

Saudis.

There are two kinds of research carried out by Saudi Arabia: the first, is shared with other states and the second is confined to Saudi Arabia alone. An example of the former is between the Ministry of Agriculture (KSA) and the White Fish Authority (England) to study Saudi coastal fishing. The result was published in more than 20 reports [Neve et al, 1972, Peacock, 1979 in Behairy [1982, p. 15]. Another program was designed to renew fishing activities within 5 years to make the sea a more important source of protein [Behairy, 1982]. A further example is an agreement between Saudi Arabia and Taiwan to establish fish farms in salt and sweet water, the aims of this project are to breed local fish and increase fish resources of specific types which are already known and upgrading them in special basins (pools) in order to meet demands of local consumption [Blkhur, 1988, p. 92].

In 1979 a Saudi decree announced the agreement with the Arab League to establish an Arab Fishing Company shared between 14 Arab counties, the Saudi share being about \$19m. However, this company would conduct its activities on the high seas around the world. Another study was started in 1981 to cover all the Saudi coastal fishing.

The Faculty of Marine Science is the most active among all these institutions [Andjani, 1989, p. 14]. The following list shows work conducted by this college since it was founded in 1979

- 1) Feeding places and sedimentary operation by some of the sea Urchin (Porcupine Fish) and others types.

- 2) Temperature Balance in the coastal water near Jeddah.
- 3) Fish in the East Red Sea.
- 4) Reef Disease in the Red Sea Coral
- 5) Polluted areas between Jeddah and Yunbo; this program is continuing as we mentioned earlier and will develop to cover all the Red Sea. FMS and FRC are running this project.
- 6) The effect of Vitamin C on the production and growth of Sparidae Fish and breeding of Siganidae Fish in the laboratory and the environment of fish communities in marsh places.
- 7) Studying fish in order to discover their needs for food, vitamins and protein and their adaption in the environment.
- 8) Experimental studies on shrimp farms in the Red Sea, and entering new types to discover their ability to the new environment. For this purpose two kinds of shrimp have been imported from Taiwan.

It is clearly important to improve the knowledge about the Saudi marine environment, because Saudi Arabia has a long coast on the Red Sea and needs more investigation, especially between latitude 21° and 25° north which is the part most affected by human activity.

Another project by the Faculty of Marine Science (FMS) in cooperation with the National Oceanic and Atmospheric Administration, is being conducted along the Saudi coast between latitude 21°-24° north. There is also an ecological survey of coral reefs being conducted by FMS in association with King Abdul Aziz University and the University of Nice France [Behairy 1982].

In 1986 the FMS and the Ministry of Agriculture (KSA) undertook an 18 month project called "Ebn Majid" to survey Red Sea water south of Jeddah and as far as Jizan coast (about 700 km). The aim of this project was to study marine resources, geological starts and physical structures, concentrating on the fishing area between Jeddah and Farasan island. Dr. Al-Banaa the project director and a lecturer in King Abdul Aziz University said: "this area is 50 sq.km in width and the depth does not exceed 100 m" He added, "this project is concerned with the potential resources for fishing , fish types, production and the methods which they should use in fishing" [balkhur 1988].

4.5.3.2 Sudan

While the marine research units in Sudan are relatively weak due to the paucity of facilities and equipment, the need for research towards marine environmental conservation has been clearly recognised. The following is a list of the leading departments and institutions [Schroeder, 1982, p. 61]:

- 1) The Institute of Oceanography of the National Council for research in Port Sudan (Mainly provides basic scientific data, physical and chemical, biological and geological).
- 2) The Fisheries Research Centre of the Agriculture Research Corporation in Port Sudan (Mainly concerned with reviving the Oyster cultures of Dongonab, it is also in charge of research pertaining directly to fishing and marine culture).
- 3) Suakin Marine Biological Laboratory of the University of Khartoum

(Mainly involved in teaching, a small project of culturing fish in lagoons and reefs in conjunction with fish processing is in progress).

- 4) Suggestions for Faculty of Marine Science and Fisheries was planned to be established with the University of the Eastern Region.
- 5) Saudi-Sudanese Commission.
- 6) Geological and Mineral Resources Department.
- 7) Environmental Studies Institute of the University of Khartoum.
- 8) Ports Corporation.

Scientific research in Sudan can be divided into two types: marine resources and non-living resources. The former, subdivides into two categories: co-operation with others states and Sudanese research alone. The British ODA scientific project in 1985 is an example of a project in which more than one state is involved. The aims of this project are to give fisherman better catches and supply the market with more fish, and also to give technical assistance to local boat builders. The UN has a project to train fishermen in fishing and young men in carpentry. The Fisheries Research Centre of the Agricultural Research Corporation conducted this project which organised by the government of Sudan. The project used different culturing methods in different sites within Dongonab Bay.

Non-living resources on the other hand, became more important after the establishment of the Red Sea Commission. This authority increased the cooperation between Saudi Arabia and Sudan and between the Department of Geology and Faculties of Marine Science in particular in both states. Surveys and investigations have been conducted by this commission especially on coral reefs,

resources, currents, depths and marine life and the marine environment. The Geological and Mineral Resources Department is concerned with mineral deposits, and sponsoring an exploration-project on the heavy minerals near Trinkitat [Schroeder, 1982, p. 62]. The Environmental Studies Institute of the University of Khartoum has conceived a multi-disciplinary project in the coastal zone. A Sudanese-French team is working on this project in which the coastal morphology and archaeology of old ports are being studied [Schroeder, 1982, p. 62]. A marine national park is being established in Sanganedb Reef, and another north of Port Sudan, covering the areas to the north and south of Port Sudan. [Schroeder, 1982, p. 59].

4.6 Conclusion

It can be concluded that, the distribution of fishing camps along the Saudi Red Sea coast is affected mainly by the distance between the market, in large cities such as Mecca and Jeddah and the location of the camps. In large cities, consumption is high and services are available to provide fishermen with their needs and also fish is a perishable commodity. Islands also play a major role in the distribution of some of these camps as they are a place where fishermen can rest and spend some time while at sea. Islands are also attractive places for fish due to the shallower waters found around them.

Saudi Arabia rights over its EEZ is granted by the traditional use since 1932 Fishing and Shells Regulation and more recently by the 1974 EFZ claim, but, claiming an EEZ will give the Kingdom more and wider control over this

rights.

The Kingdom's rights over its resources can be safeguarded more thoroughly by claiming an EEZ. By claiming the 200 nautical mile EEZ, Saudi Arabia will protect its rights over economic resources such as the production of energy from waters, currents and winds. The Kingdom will also gain more by the rights of construction of artificial islands and installations stated in Article 60. More power is given to the coastal state over scientific research in the EEZ due to the fact that, this wider control includes not only the seabed but also the superjacent column of water. Control over pollution is given to the coastal state according to Article 56, where the state has the right of enforcing competence in its EEZ to deal with dumping waste [Articles 210(5) and 216, and other forms of pollution from vessels stated in Articles 211(5-6), 220 and 234), and any pollution from seabed activities defined in Articles 208 and 214. The 1982 Convention also gives the coastal states more rights over fishing, sanitary, navigation, scientific research, laying cables and environmental issues. The Kingdom by its decree of 1974 can conserve its resources. However, this right may fall shorter than the requirement of the Kingdom in order to control other matters stated above.

The EEZ is a distinctive zone with unique status bring together the rights and jurisdiction of the coastal state along with the freedom of the other states. This zone defined clearly in Article 55.

The EEZ of Saudi Arabia which the Kingdom is entitled to claim subsequent to its signature of the 1982 Convention in 7/12/1984, may be counted as one of the richest in the world, despite its limited fishing resources and its limited

area. Its significance lies also in the hydrocarbon and gas as well as the mineral deposits, that are found in the Arabian Gulf and the Red Sea. The effect of such a claim on the Red Sea continental shelf in which the Kingdom has the largest share, and in the Arabian Gulf, which is counted wholly as continental shelf, will be examined in the next chapter.

Whilst the territorial sea was traditionally associated with coastal security and the protection of inshore fisheries, in more recent times state jurisdiction has been extended to the sea bed beyond. The Exclusive economic zone is important in offering coastal states control of seabed and water column resources. However, the coastal state still enjoys its rights and control over the continental shelf which traditionally dealt with seabed resources. Chapter 5 deals with the importance of this zone and the Saudi contribution to the law of the sea in this respect.

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Chapter Five

THE CONTINENTAL SHELF

5.1 Introduction

The growing world population will increase the need for more space not only for human activities but more importantly for food. The world's continental shelves are therefore becoming more significant as a source of food and other resources. The oceans, however, are already suffering from over-fishing. Moreover, the health of the oceans and the creatures that live in it, is being deleteriously affected by human and industrial pollution on a massive scale. Gradually but inexorably, the sea is following the land in being plundered of its resources. Nearly two thirds of the earth's surface is covered by water and it can only be hoped that the shortfall in food and resources from which the land now suffers, will be in part made up in supply from the sea, of which the continental shelf represents the focus of the richest and most valuable resources.

Saudi Arabia clearly recognised the importance of sea resources to their nation by making in 1949, historically one of the earliest continental shelf claims, and then again in 1968 (see Appendixes C and I). The discovery of oil was the economic dream come true for the people of the Arabian peninsula. People whose arid land with poor vegetation is surrounded by the sea. The hope of finding large hydrocarbon deposits in the sea bed implied the need to secure sovereignty over even a small portion of that sea. The words "natural resources" used in the 1949 Royal Decree was an indication of the importance attached to encouraging more explorations [MacDonald, 1980].

In this chapter the main focus will be on the definition of the term continental shelf. A geographical description of the Red Sea and the Arabian Gulf is given in order to explain the extent and the breadth of the continental shelf. The importance of the Saudi 1949 decree will be dealt with from the viewpoint of exploitation and the contiguity concept as one of the most important Saudi contributions to the development of the law of the sea. Methods of demarcations of the limit of the continental shelf boundary with opposite and adjacent states are set out in the 1982 Convention. This chapter will investigate this point in the light of the Saudi Continental shelf, along with the other Gulf and Red Sea states. Different approaches to delimitation will be discussed here in relation to Saudi's Continental Shelf agreements with neighbouring states. Resources and the military use of the continental shelf are also discussed in this chapter. (see all the Figures in the accompanying Atlas).

5.2 Definition of the Continental Shelf

A definition of the continental shelf has been adopted in the 1958 Convention. This was transferred to the 1982 Convention with one change regarding definitions of the outer limit of this zone. The third UN Convention extended the outer limit of the continental shelf to the end of the margin. The Exclusive Economic Zone (EEZ) which was the most important innovation in the law of the sea in the 1982 Convention covered two sets of rights the continental shelf and the EEZ, extending to 200 nautical miles. While the EEZ covers the water column, seabed, and subsoil, continental shelf rights cover the seabed and subsoil beneath

only.

The relation between the EEZ and the continental shelf can be seen in the rights defined by reference to the regime laid down for the continental shelf. In this respect, the ICJ [1986, p. 506] continental shelf judgment between Libya and Malta stated:

the principles and rules underlying the regime of the exclusive economic zone cannot be left out of consideration in the present case, which relates to the delimitation of the continental shelf. The two institutions are linked together in modern law, and one of the relevant circumstances to be taken into account for the delimitation of the continental shelf of a State is the legally permissible extent of the exclusive economic zone appertaining to that same State. The institution of the exclusive economic zone, with its rule on entitlement by reason of distance, is shown by the practice of States to have become a part of customary law; and although the institutions of the continental shelf and the exclusive economic zone are different and distinct, the rights which the exclusive economic zone entails over the sea-bed of the zone are defined by reference to the regime laid down for the continental shelf. Although there can be a continental shelf where there is no exclusive economic zone, there cannot be an exclusive economic zone without a corresponding continental shelf. It follows that, for juridical and practical reasons, the distance criterion must now apply to the continental shelf as well as to the exclusive economic zone; and this quite apart from the provision as to distance in Article 76 of the 1982 Convention.

Worldwide the estimated area of sea bed is made up of about 27 million sq.km of continental shelf, 28 million sq.km of continental slope and 19 million sq.km of continental rise (see table 5.1). The average depth of the water for each of the above mentioned categories is 132 m, 2925 m and between 1500 to 5,000 m respectively [Leng, 1981, p. 32]. These three areas form what is known as the continental margin in which the 1982 Convention granted the coastal state the right to claim up to a maximum distance of 350 nm. According

to Churchill and Lowe [1991, p. 120] the continental margin constitutes about 21 per cent of the sea floor. It also represents the equivalent of 50 per cent of the land surface. The remaining 79 per cent of the seabed forms the abyssal floor with depths between 2,000 to 6,000 m [Leng, 1981, p. 32].

Table 5.1
Seabed Floor of the Continental Margin

Seabed Floor		Area (Sq.Km)	Depth (m)
The Continental Margin	Continental Shelf	27,000,000	132
	Continental Slope	28,000,000	2,925
	Continental Rise	19,000,000	1,500-5,000

Source: Leng, 1981

Table 5.2 shows eight Middle Eastern states which have large continental shelves. Saudi Arabia ranks the third after Yemen and Libya. The Kingdom has a continental shelf larger than Egypt, Iran, Oman, Sudan and Kuwait. The continental shelf of Saudi Arabia measure 54,000 sq.nm. In the Red Sea the continental shelf is mostly narrow except in the south, particularly around Farasan Archipelago off the eastern coast and on the western side of the sea around Dhahlak Archipelago. The depth of this shelf is between 100 and 500 m. Beyond this area lies the main trough of sea bed which falls rapidly to depths of 600 to 1,000 m, and deeper in some places. In the centre of this trough is a deeper area which has a width of 20 km and more than 2,000 m deep. It is in this area where Atlantis II and Discovery Deeps are found, and joint exploitation has taken place by the

Saudi-Sudan Red Sea Commission [Bemert and Ormond, 1981, p. 12].

Table 5.2
The Continental Shelf In Some Middle Eastern States

Country	Area of Continental Shelf (sq. nm.)
Yemen	100,000
Libya	60,100
Saudi Arabia	54,000
Iran	45,400
Oman	44,500
Egypt	28,900
Sudan	26,500
Kuwait	3,500

Source: The Geographer, 1972.

The Red Sea continental margin is narrow. According to Article 76 of the definition of the continental shelf, the Red Sea would be wholly divided on the EEZ basis between the coastal states, due to its breadth which at its maximum extent reaches only 164 nm (306 km). This width will not allow the full 200 nm limit which the coastal state has the right to claim under the EEZ (see Figure 5.1).

The Arabian Gulf on the other hand differs from the Red Sea.

Physically it is akin to an inland sea, occupying a large depression, so it is not strictly continental shelf, but its shallow waters gives it this status according to international law. [Blake, 1982, p. 4].

(see Chapters 1 and 4 for more details on the physical study of the Arabian Gulf).

5.3 The Breadth of Saudi Arabian Continental Shelf

5.3.1 The Red Sea

Table 5.3 shows the length of the Saudi Red Sea Coast. According to the table the area can be divided into three main zones: the Northern zone, the Central zone and the Southern zone.

The Northern Zone extends from Haql near the Saudi-Jordan boundary to the north of Rabigh, lying approximately between latitudes 22°44' and 29°18' north. Its continental shelf in general is narrow especially at the Gulf of Aqaba. But to the south the width increases to nearly 32 nm (62 km) at latitude 28° north. However, this is not the general trend, only one degree south of this point the shelf decrease to 18 nm (33 km). The average width in this area is 22 nm about (41 km) [Al-Jasr, 1989]. The continental shelf breadth here is of importance to its fisheries which are relatively rich due to the shallow depth of the waters. The increase in water depth leads to a decrease in numbers of fish resulting from the fact that, shallow waters encourage plants to grow by allowing Sunlight to reach the sea bed. Such plants provide food for many varieties of fish.

The Central Zone covers the area from Rabigh to Al-Lith between latitudes 20°09' north and 22°44' north. It measures 187 nm (346 km) approximately. Its continental shelf is generally narrower than in the northern zone, and stretches on average 5.4 nm (10 km). However at Al-Lith the continental shelf broadens to 33 nm, and the water is deeper.

Table 5.3
The Saudi Red Sea Coast Length¹

Regions	Zones	Length (nm)	Length (km)
North	1	174.4	323
	2	77.8	144
	3	96.7	179
	4	82	152
	5	95	176
Total	North	525.90	974
Central	1	77.7	144
	2	109	202
Total	Centre	186.70	346
Southern	1	81	150
	2	106.4	197
	3	58.9	109
	4	36	67
	5	95	176
Total	South	377.30	699
Total	12	1,089.9	2,019

Source: Adapted from Al-Jasr, 1989

¹. The number of zones represent the areas:

Northern Region:

- 1) The coast from Jordan to Diba
- 2) Diba to Al-Wajh
- 3) Al-Wajh to Umlj
- 4) Umlj to Yanbu
- 5) Yanbu to Rabigh

Central Region:

- 1) From South Rabigh to North Jeddah
- 2) South Jeddah to Al-Lith

Southern Region:

- 1) From Al-Lith to Al-Gonfidah
- 2) South Al-Gonfidah to Ash-Shagig
- 3) Ash-Shagig to North Jizan
- 4) Jizan to the South Islands
- 5) Farasan Archipelago

The Southern Zone is the most important zone along the Red Sea coast. The area extends from Al-Lith to the Saudi-Yemen boundary between latitude 16°48' north and 20°09' north, a distance of approximately 377 nm (699 km). This figure does not include the length of the coastline of the Farasan Archipelago [Al-Jasr, 1989].

The importance of this zone is derived from the width of its shelf, which is the largest along the Saudi coast. It extends to about 60 nm (120 km) opposite the Jizan Coast. MEPA [1989] put the figure to 54 nm (100 km) only. The average depth is 50 m. This depth increase to between 200 and 250 m near the Farasan Archipelago. Beyond this area towards the high sea is an area similar to that adjacent to Jizan with a smooth floor but with a greater depth, suitable for commercial fishing using Bottom Net. [Al-Jasr, 1989].

5.3.2 The Arabian Gulf

Geologically the Gulf is entirely continental shelf. The Saudi coast can be divided into two parts: The northern sector which stretches from Ra's Al-Khafji to Al-Jubayl, situated approximately between Latitudes 26°25' and 27°01' north: a total length of 147 nm (272 km).

The Southern sector lies between latitudes 24°45' and 26°25' north from Al-Jubayl to Dawhat Salwa an approximate coastline length of 178 nm (329 km) (see table 5.4 for more details).

Table 5.4
The Saudi Arabian's Gulf Coast Length²

Regions	Areas	Length (nm)	Length (km)
The Northern	1	9.7	18
	2	6.5	12
	3	50	93
	4	80.4	149
Total	4	146.60	272
The Southern	1	41	76
	2	38.9	72
	3	40.5	75
	4	57	106
Total	4	177.40	329
Total	8	324	601

Source: Adapted from Al-Jasr, 1989.

². The number represents the areas included in the two regions.

Northern region:

- 1- From Ra's Al-Khafji to Ra's Mish'ab
- 2- South Ra's Mish'ab to Ra's As-Saffaniyah
- 3- Ra's As-Saffaniya to Manifah
- 4- Manifah to Al-Jubayl

Southern region:

- 1- South Al-Jubayl to North Al-Gatif
- 2- South Al-Gatif to Dawhat Daloom
- 3- Al-Agir till Salwa
- 4- Salwa

5.4 The 1949 Saudi Seabed Proclamation

There was a time when the land was not under complete sovereignty of man, but almost every inch of land has now been claimed except for the Antarctica. Until the twentieth century scarcely any sea was under national sovereignty, and few maritime claims were established before the 1940s which witnessed the beginnings of national claims. The 1945 Truman Proclamation on the continental shelf began a series of claims which began to focus serious attention on the economic and strategic significance of offshore areas.

The 1949 Royal Decree proclamation (see Appendix C) includes the Saudian sea bed and subsoil in the Arabian Gulf. The decree stated:

The subsoil and sea bed of those areas of the Persian Gulf seaward from the coastal sea of Saudi Arabia but contiguous to its coasts, are declared to appertain to the Kingdom of Saudi Arabia and to be subject to its jurisdiction and control.

By its claims the Kingdom of Saudi Arabia was the first Arab country to recognise the importance of these zones, thus contributing to the development of the law of the sea.

Young [1949], Hudson [in MacDoniand, 1980] and MacDonald [1980] have all accepted the importance of the Saudi decree and the contribution it made to the development of the law of the sea particularly in relation to the continental shelf and submerged areas. Young [1949] pointed out:

An interesting recent development in the law relating to territorial waters and to submarine areas beneath the high seas is to be found in the action taken by Saudi Arabia on May 28, 1949.

Comparing with the Truman proclamation Young [1949] stated that

The instrument is obviously inspired by the Truman Proclamation

of September 28, 1945 regarding the continental shelf of the United States, but it is noteworthy that the claim is not limited, as was the Truman Proclamation, to the natural resources of the subsoil and sea bed... the pronouncement relies upon a concept of contiguity which is not precisely defined.

It is clear that Young, writing in the same year in which the Saudi claim was issued recognised the Saudi contribution to the development of the law. MacDonald [1980] noted that the Saudi decree emphasised the concept of "contiguity" instead of "continental shelf".

The fact that Saudi Arabia emphasized the concept of "contiguity" instead of "continental shelf" did not represent a contravention of international standard but rather affected the actual community approach toward the continental shelf concept.

MacDonald [1980] summarised the Saudi contribution to the development of the law of the sea. First, it significantly contributed to the development of the continental shelf concept. In this respect he pointed out that if the Saudi offshore claim was not responsible for the use of the exploitation criteria by which the outer limit of the continental shelf is measured, it was responsible for its emergence. Secondly, the practice of Iran and Saudi Arabia contributed to the findings of the court in the North Sea Continental Shelf Cases. In this respect MacDonald [1980, p. 203] stated:

The practice of Iran and Saudi Arabia preceded, and probably contributed to, the findings of the court in the North Sea Continental Shelf Cases and the cases involving the delimitation of the continental shelf between Britain and France.

The concept of equitable principles as included by the recommendation of the International Law Commission and as included in the 1958 Convention came to be equated with the principle of equidistance and the use of the median line. It

was not until the judgment of the International Court of Justice in the North Sea Continental Shelf 1969 Cases that the importance of all relevant circumstances was acknowledged by the international community [MacDonlad, 1978]. The broader application of "equitable principles" is clearly more conducive to agreement than a rigid application of the principles of equidistance, in this respect:

Thus, it is not inconceivable that other offshore disputes, such as the dispute between Greece and Turkey over offshore petroleum resources, could be resolved in the same manner as these in the Persian Gulf [MacDonald, 1980, p.9].

Hudson [in MacDonland, 1980] supports the view that the Saudi approach was based on the contiguity, not on the geological formation of the continental shelf. In this respect he pointed out that the continental shelf was not a legal or juridical concept but rather an economic and social notion. According to him, it is the practical problems of the Arabian Gulf which the Saudis have successfully brought out in the 1949 decree and which the International Law Commission used as the criterion of "exploitation" to deal with such a cases stated in the Saudi decree.

5.5 Continental Shelf Resources

The continental shelf is one of the richest maritime zones due to its hydrocarbon deposits and concentration of living resources. The offshore oil and gas production represent one quarter of the total world production [Churchill and Lowe, 1991, p. 120]. Leng [1981, p. 33] found that 20 per cent of world crude oil and 15 per cent of its natural gas production are produced from the continental shelf. Mineral deposit also lie on the surface of the shelf in unconsolidated

deposits, including phosphorite nodules. According to Churchill and Lowe [1991, p. 120], the continental shelf contains more than 90 per cent of the total value of minerals taken from the sea bed. Unlike petroleum and gas which lie deeper below the surface, mineral resources may be found on the surface of the deep sea bed or the continental shelf. Sedentary species such as Oysters and Clams represent an additional contribution to the economics of the littoral states and come within the legal definition of the continental shelf resources [Churchill and Lowe, 1991, p. 121]. The richest fishing grounds of the world are on continental shelves e.g. western Europe, Iceland, Newfoundland and off the seas of Okhotsk, Japan and the shallow seas in Southeast Asia [Leng, 1981, p. 33].

In the Middle East as a whole nearly 25 per cent of oil produced from the Arabian Gulf and about 10 per cent of the world's proven reserves are said to lie offshore [Swearingen, 1981, p. 315]. Blake [1982, p. 6] noted that one third of the Arabian Peninsula oil production was from offshore wells. By the end of 1989 offshore production had increased compared with 1986, but fallen since the peak of 1987 due to the decline in the world demand for oil (table 5.5). Dropping prices have forced the closure of oil wells in some regions such as the USA because the cost of production is too high relative to the price of the Middle East. By contrast, Middle East offshore production can compete at almost any price level because of its low cost of production and production levels have remained buoyant. Saudi Arabia is easily the largest offshore producer; its production is further increased by adding half the Neutral Zone production which it shares with Kuwait. The Saudi share markedly increased from 34 per cent in 1986 to 45

per cent in 1990.

Table 5.5
Middle East Offshore Oil Production (Average '000 b/d)

States	1986	%	1987	%	1988	%	1989	%	1990	%
Egypt	59860	18	60214	17	59132	18	53102	16	54070	17
Iran	50500	16	51551	14	32300	10	33800	11	34130	11
Neutral Zone	26600	8	25198	7	19200	6	18800	6	00	00
Qatar	15800	5	19131	5	15320	4	19100	6	18400	6
Saudi Arabia	110700	34	151027	41	148129	44	138108	42	148010	45
UAE	61528	19	59165	16	59083	18	62542	19	70088	21
Total	324988	100	366286	100	333164	100	325452	100	324698	100

Offshore, June 1990.

Saudi gas production from the continental shelf of the Arabian Gulf is also important (Table 5.6). The Kingdom accounts for more than a third of the total output of the five major states, and about 37 per cent of gas production in the years 1988/1990. For Saudi Arabia, economic interest was the main cause for the rush to maritime claims in the Arabian Gulf, led by the Kingdom [MacDonald, 1980, p. 105]. The 1949 Royal Decree concerning the seabed and subsoil was not a result of the needs of national security, but rather due to economic motivation, concerning the Arabian Gulf resources. The fear over Saudi security was not centred so much in the Gulf, but rather in the Red Sea especially around the Gulf of Aqaba where air and sea clashes with the Israeli forces were reported. This concern lay behind the decision to increase the limit of Saudi Arabia territorial

sea to 12 nm:

The Saudi extension of its territorial sea to twelve miles in 1958 represented the use of law as a tool to support Saudi interests in response to the presence of Israel in the Gulf of Aqaba [Mac-Donlad, 1978, p. 9].

However, national security and economic interest are sometimes difficult to distinguish from each other as a result of the strategic importance of certain resources.

*Table 5.6
Middle East Offshore Gas Production (MMcfd)*

States	1986	%	1987	%	1988	%	1989	%	1990	%
Egypt	1100	1	12089	8	11500	8	12630	8	13100	8
Iran	0	0	0	0	0	0	0	0	3430	2
Qatar	9400	7	9631	6	9844	7	11350	8	11100	7
Saudi Arabia	50100	39	53192	36	52674	37	55523	37	58000	37
UAE	69633	53	73501	50	70122	48	69810	47	72000	46
Total	130233	100	148413	100	144140	100	149313	100	157630	100

Source: Offshore, June 1990.

In spite of its limited geographical extent, the continental shelf resources of the Kingdom are among the richest in the world, according to the Saudi Press Agency [Saudi Economic Survey, 1990. p. 3]. The Saudi crude oil reserves are the largest in the world and represent 25 per cent of the international reserves. Okaz Daily, [1993], put the Saudi oil reserve to about 35,210 million tons, representing 18.6 per cent of the worlds total oil reserves and 32 per cent of OPEC reserves.

According to table 5.5 Saudi offshore oil production in 1990 represented

45 per cent of the total offshore production of Egypt, Qatar, UAE, Iran and the former Neutral Zone. This figure is likely to increase due to the recent discoveries in both offshore and inland concession areas which cover about one million sq.km [Saudi Arabian Embassy, Bullpen, September, 1990]. The sea bed resources of the Kingdom may be divided into five types: petroleum, gas, minerals, pearls and living organisms the latter are confined to sedentary species which at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the seabed or the subsoil.

5.5.1 Petroleum and Gas

The gas reserves in Saudi Arabia are estimated to be 180 trillion cubic feet [Saudi Arabia Bulletin, September, 1990], while the oil reserves are said to be 257 billion barrels [Offshore, 1992]. The Saudi crude oil reserves represent 48 per cent, almost half the reserves of Bahrain, Egypt, Iran, Oman, Qatar and the UAE, while the Saudi gas comes in second place with about 22 per cent [Offshore, 1990].

Table 5.7 shows the number of wells drilled in Middle Eastern Countries, from 1987 to 1990, showing a steady increase in the number of wells. The UAE is the only country shown in the table with more wells than Saudi Arabia.

There are 18 Saudi offshore oil fields in the Arabian Gulf, as shown in Figure 5.2. As-Saffaniyah is the largest offshore oil field in the world. Table 5.8 shows offshore oil fields belonging to Saudi Arabia and their year of discovery. The table and the Figure give some indications of the importance of the offshore

*Table 5.7
Middle East Offshore Wells Drilled*

Countries	1987	1988	1989	1990
Egypt	88	79	74	78
Iran	0	0	1	1
Israel	0	1	-	-
Neutral Zone	0	1	1	0
Oman	2	1	1	1
Qatar	1	2	2	3
Saudi Arabia	30	32	25	20
UAE	41	32	30	36
Yemen	0	0	1	1

Source: Offshore, June 1990.

*Table 5.8
Offshore Oil Fields in Saudi Arabia*

Fields	Discovery	Fields	Discovery
As-Saffaniyah	1951	Marjan	1973
Manifa	1957	Kurayn	1974
Abu Safah	1963	Lawhah	1975
Hout	1963	Ribjan	1975
Berri	1964	Karan	-
Suluf	1965	Hasbah	1976
Jana	1967	Mahrah	-
Jurayd	1968	Lulu	-
Khafji	1969	Harqus	-

Source: Adapted from: (1) Beydoun, 1988.
(2) Bindagji, 1981. (3) Offshore, 1992.

area to the Kingdom, due to the large number of oilfields and their large sizes which reflects the quantities of production which this area contributes.

5.5.2 Minerals

While oil and gas are concentrated in the Arabian Gulf, the Red Sea is rich in mineral deposits which are located in 28 different Deeps whose metalliferous mud are rich mainly in iron, manganese, zinc and copper along with other metals such as gold, silver, nickel, cobalt, cadmium, molybdenum, leads and silica. The Atlantis II Deep is one of the most important with about 10 kinds of sediments. It lies between Sudan and Saudi Arabia [Guennoc, et al, 1983].

The future of the Red Sea's metalliferous sediments is promising in the long term due to the large quantities of its minerals which may reduce the cost of exploitation. The fall of mineral prices at the beginning of the 1980s has affected the Red Sea project conducted by the Red Sea Commission. If the operation had not been postponed, the commercial production of the seabed would probably be now going ahead. More details of these deeps appear in Chapter 7.

5.5.3 Sedentary Species

Sedentary animal species are described in Article 77(4) as:

...organisms which, at the harvestable stage, either are immobile on or under the sea-bed or are unable to move except in constant physical contact with the sea-bed or the subsoil.

Such species can be found in the Arabian Gulf and the Red Sea. The disastrous discharge of crude oil into the Gulf in January 1991 affected all life forms in the

Gulf area, including the coastal inhabitants whose livelihood depends on fishing.

The appearance on the world market in the 1920s of Japanese pearls decimated pearling in the Gulf. The lifestyle of the coastal inhabitants was changed, first by the abandonment of pearling, then by the discovery of oil, and most recently by the pollution which threatens to destroy the balance of life in the entire area and therefore eliminate any importance which such resources in the area may have had.

5.6 Delimitation of the Continental Shelf

Delimitation of the continental shelf boundary with adjacent or opposite states³ follows much the same process as other maritime boundaries particularly in semi-enclosed seas such as the Red Sea and the Arabian Gulf. Three steps have to be determined before concluding any successful agreement. First, in the case of adjacent maritime boundaries the land boundary between the parties must be settled in order to define maritime boundary, because if land boundary terminus is not agreed, the hope for reaching agreement in respect of maritime boundary is minimal. Drysdale and Blake [1985, p. 128] see no chance of delimiting an offshore boundary, if the land boundary "from which the sea boundary is extended" is in dispute. They illustrated the point by citing the Egypt-Sudan boundary as an example of such difficulties (see Figure 5.3). Where a boundary is to be determined between adjacent states the position of the land terminal is vital if the whole boundary is to be defined. But often, and particular-

³. For more details on opposite states see chapter 6.

ly where the nature of the coastal relationship of the two states changes from one of adjacency to one of oppositeness as the case in Dawhat Salwa, the position of the land terminal may affect only a relatively small section of the whole boundary [Beazley, 1992].

Each of Saudi Arabia's five land boundaries have been agreed in the Gulf and in the Red Sea. The Saudi-Yemen Red Sea boundary was the first to be agreed in 1934. In 1965 the Saudi-Jordan boundary was defined in the Gulf of Aqaba, followed in the same year by the Saudi-Qatar boundary on Khalij Sallwa and in 1966 the Saudi-Kuwait Neutral Zone boundary was agreed in which the Neutral Zone was divided equally between the parties⁴. Finally, in 1974 the Saudi Arabia-UAE boundary was agreed.

The second step is the baseline from which the territorial sea is measured either by using the straight baseline system or the low-water line. The latter rarely raises any objection from the second party, but the straight baseline system may create an inequitable result, especially if one of the two parties abuses the interpretation of the 1982 Convention in order to gain large areas of internal waters. If this is the case the two parties may need to negotiate in order to reach an equitable baseline for both parties. This method was used by the United States and Mexico in delimiting their common boundaries in the Gulf of Mexico in 1978. The need for such an agreed baseline may not be required in every boundary, but it depends on the method used to define the boundary e.g. the

⁴. The maritime boundary of the Neutral Zone still has to be defined, but the demarcation of the land boundary at the coast is agreed.

common zone between Saudi Arabia and Sudan was not based on the baseline, but on a common area defined by a limited area with specific depth. Iran for instance called for ignoring the islands at the beginning of the delimitation of its continental shelf boundary with its neighbours in the Gulf, due to the disadvantage which such islands would cause on the Iranian side compared with the opposite Arab states, where the number of islands are very large. Also the coastal waters of the Arabian Gulf on the Iranian side is far deeper and relatively island free, unlike the Arabian coastal waters which quite shallow with numerous small islands and low-tide elevations, sand banks and coral reefs [Drysdale and Blake, 1985, p. 125]. However, it may be argued that Iran has gained in the continental shelf boundary agreement despite the disadvantage of its coastline and fewer islands. For example in the Saudi-Iran continental shelf boundary agreement, points 8 to 14 which are based on partial effect being given to Kharj island resulted in the extension of the median line westward in favour of Iran. So, different methods are required in order to reach an equitable result in defining the continental shelf.

The third step is the type of method the parties use in order to define their boundary. Article 83(1) states:

The delimitation of the continental shelf between states with opposite or adjacent coasts shall be effected by agreement on the basis of international law, as referred to in Article 38 of the statute of International Court of Justice, in order to achieve an equitable solution.

This method may use the equidistant⁵ line which may be either the strict equidistant line or the modified equidistant line. A strict equidistant line has the advantages of objectively dividing the area into two equal parts and this would give the same result if carried out by two cartographers. A modified equidistant line, on the other hand is subjective because there are many ways of achieving the modification, and two different cartographers may choose different principles and achieve different results. There are no principles laid down as there are for the strict equidistant line. Alexander [1989, p. 6] saw the Saudi-Iran 1968 agreement as an example of a modified equidistant line because of the fact that, apart from the enclaving of the Iranian Farsi island and the Saudi island of Al-Arabiyyah in the centre, and the modified effect given in the north to Kharj island, the line is equidistant. The other advantage of equidistance is that the maritime space will be divided into approximately equal parts. The simplified equidistant line is however often more acceptable to most states e.g. the Ireland-United Kingdom agreement (1988) in which Ireland stated that

Because of the very varying geographical, geological and geomorphological differences around the world, it was recognised that such a simplistic rule as that of a median line would not always provide a satisfactory outcome. [Symmons, 1989, p. 392].

According to Amin [1981, p.144], the equidistant lines used by Gulf states have been modified by three factors; islands, (as in Kharj Island) determination of base lines, and the desirability of preserving the unity of hydrocarbon deposits. For example, the unity of the Fashat bu Safah (bu Sa'afah) oil deposit was

⁵. Equidistant line or equidistance line as it is used by different sources are used in this thesis to describe the median line.

maintained in 1958 by giving the Saudis complete sovereignty over the area, but sharing revenues with Bahrain.

Joint agreements may provide a solution to difficult disputes over seabed sovereignty. Saudi Arabia and Bahrain (1958) and Saudi Arabia-Sudan (1974) are examples of such agreements. Japan and South Korea also used this method in the same year. In 1978 Columbia and the Dominican Republic reached a similar agreement, followed by Iceland-Norway in 1982 [Blake, 1987, p. 133]. The latest joint development agreement was signed between Malaysia and Thailand in 1990 [Ong, 1990].⁶ According to Drysdale and Blake [1985, p. 130], joint agreements may be more secure than the one line method. According to Blake [1991], there are now 15 joint zones worldwide. The method employed by Iceland and Norway concerning the Jan Mayen Island gave Iceland a complete 200 nm EEZ, while Jan Mayen island was given less than half effect due to its size and political status [Briscoe, 1988, p. 36]. But the parties share in a joint zone in which Jan Mayen has the larger part⁷.

Although several continental shelf agreements have been concluded in the Arabian Gulf and in the Red Sea, no precise definition in respect to the outer limit of the continental shelf⁸ has been given in the decrees and legislative acts adapted by the Gulf states [Amin, 1981, p. 141]. For example the concept of equitable principles expressed by Gulf states does not give any single defined

⁶. For more details about the joint agreements see chapter 6.

⁷. More details about this agreement can be found in Conforti, et al 1987.

⁸. The Gulf as a whole is a continental shelf.

method, for reaching agreement. Both Amin [1980, p.142] and Drysdale and Blake [1985, p. 122] have expressed the fear of potential conflicts which could arise even from agreed boundaries. Amin cited the Iran-Iraq war which broke out between the two countries despite the 1975 Algiers agreement. Two causes have been given by Amin for such disputes; resources and strategic gain. Drysdale and Blake gave one cause of potential future conflict as the unsettled continental shelf boundary system in the Gulf, which may take 15 to 20 years to complete. The boundary problem and resources are the main reasons behind such potential for conflict [Drysdale and Blake, 1985, p. 130]. Two elements of future dispute which may occur in relation to the Saudi-Sudan 1974 Red Sea agreement are political and environmental. The former, refer to a future Sudanese regime that may wish to exercise complete control over mineral resources in the Sudanese waters. Blake [1982, p. 9] described this point in more detail.

Three legal bases by which the Red Sea resources can be claimed are: physical continental shelf, adjacency to the coast and under the Exclusive Economic Zone regime. Blake however, based his point on a simplified equidistant line which would put the rich mineral deposits on the Sudanese side of the line. There are precedents in the region for a state to reject a boundary agreement already entered into e.g. rejection of the 1975 Algiers agreement by Iran in 1990, which in the author's opinion was an illegal action. The successful agreements between Saudi Arabia and its neighbours in the Arabian Gulf and the Red Sea are evidence of the multi-method approach used to define the maritime boundaries between the parties. Saudi Arabian use of equitable principles with its

neighbours does not exclude a median line, but does offer the possibility for other considerations in order to reach political accommodation [MacDonald, 1980, p. 99]. Since The acceptance of equitable principles in the 1949 Decree, the Saudi policy has changed to meet new practices in the development of the law of the sea, as indicated in the 1974 Saudi Decree of the ownership of the Red Sea resources. The sharing with neighbouring states of such resources in a common zone, represents Saudi understanding of the local need which has been precisely defined in the 1949 Decree. The Saudi Government joined with Sudan in order to exploit the Red Sea resources by creating a common zone as a new concept of co-operation between the two parties [Article 3 of the 1974 Saudi Decree].

The Saudi-Bahrain and Saudi-Iran continental shelf agreements used the modified equidistant line method in some parts of the line between the two parties. These methods exercised by the Kingdom are the key to the Saudi success in its agreement with its neighbours. In the 1974 boundary agreement with UAE, the Kingdom compromised by exchanging areas in which the government dropped long standing claims over large parts of onshore as well as offshore areas.

Table 5.9 shows thirty one maritime boundaries in the Red Sea and the Arabian Gulf as of March 1993⁹. Among the seventeen boundaries in the Gulf, seven are adjacent and ten opposite, while in the Red Sea there are seven adjacent and seven opposite. Only three of the seven adjacent boundaries found in the

⁹. There has been no change in the status of the boundaries in the Red Sea and the Arabian Gulf up until May 1993.

Arabian Gulf are delimited and agreed upon while four have not yet been agreed, which include Oman-UAE, Kuwait-Iraq¹⁰ and Saudi-Qatar boundary. In the Red Sea all the seven adjacent boundaries are not yet agreed upon, but one of the opposite seven is formally agreed between Saudi Arabia and Sudan in 1974.

Table 5.9
*Maritime Boundaries*¹¹

Seas	Adjacent Boundaries		Opposite Boundaries		Total
	Type A	Type B	Type A	Type B	
The Arabian Gulf	4	3	3	7	17
The Red Sea	7	0	6	1	14
Total	11	3	9	8	31

Source: 1) Drysdale and Blake, 1985.
2) US Department of State, 1990

Key: A= No formal agreement; B= Agreed and delimited.

5.7 The Military Use of the Continental Shelf

Two geographical features can be found in the Red Sea and the Arabian Gulf which have strategic importance. The first is the coral reefs especially in the Red Sea. Such reefs are very well distributed along the sea coasts and they create

¹⁰. Kuwait-Iraq adjacent boundary counted as unagreed boundary due to the refusal of the Iraqi Government to accept the UN arbitration.

¹¹. This table is also derived from figures used in this thesis. The UAE counted as one state. Saudi Arabia-Qatar boundary counted as adjacent and opposite. The Saudi (Neutral Zone)-Iran boundary is not included and is counted as defined by the 1968 Saudi Arabia-Iran Agreement.

a natural barricade along the Saudi coast. This affects navigation and the use of submarines especially due to the abrupt reefs and the lagoons that may be created. A second feature of the Arabian Gulf is that it is shallow, with average depths of only 40 m. Such depths would not allow the effective use of submarines in these waters [Al-Hajarr, 1989].

The breadth of the Red Sea and the Arabian Gulf may also affect naval use, because of the limited area where ships can enjoy the right of navigation without the need to enter state territory, particularly as the system of straight baselines is used to include more territory in areas occupied by large numbers of islands and reefs. One can cite the limited use of navy in the allied attack on the Iraqi Army (1990-1991). The limited area of water made it possible for Iraq to pose a serious threat to shipping by discharging mines in the area. Technology, however, marches on, and it may be possible to benefit militarily from the small and limited area as well as from the shallowness of waters. The claim of sovereignty over the continental shelf may allow the coastal state to protect more thoroughly their rights over the area and secure more completely their national interests, by establishing electronic listening devices and tracking stations on such shallow shelves as are found in the Gulf which can be targeted against surface ships [Leng, 1981, p. 33].

Article 81 of the 1982 Convention prohibited any drilling within the continental shelf of another state in order to fix an acoustic detection array system in the continental shelf. Some states like Burma, Pakistan and Sri Lanka have prohibited such drilling in their legislation [Shyam, 1985, p. 166]. Iran is the only

Gulf state among 38 countries to have stated their policy towards the military use in the continental shelf in this respect:

No state shall be entitled to construct, maintain, deploy or operate on or over the continental shelf of another state any military installations or devices or any other installations for whatever purposes without the consent of the coastal state [UN 1974, Document A/ CONF.62/ C.2/ L.42/ Rev.1].

Iran recognizes the right of innocent passage in the Iranian territorial waters for foreign vessels of war, including submarines navigating on the surface, unless they belong to countries in a state of war, in which case other regulations pertaining to neutrality would come into effect [MacDonald, 1980. p. 86].

5.8 Conclusion

Finally it can be said that Saudi Arabia's policy is based on the peaceful use of the continental shelf and the peaceful settlement of its disputes. These principle were adopted by the Saudi Government in the early stages of the development of the law of the sea after the 1930 Hague Conference. The Kingdom is against any military use of the continental shelf, which implies the need to cooperate with the international community and resolve any dispute. The Saudi Government thus voted with the Indian statement which calls for non-military uses of the continental shelf [Second UN, 1960].

The Kingdom of Saudi Arabia ranks 28th in the world with respect of the length of its coastline, which measures 1316 nm. The ratio of the coastline to the land is 0,00182, which is one of the lowest in the world. This clearly shows that Saudi Arabia is one of the 63 disadvantaged states in the

world. Despite that, Saudi Arabia has one of the richest continental shelves in the world. The resources of this continental shelf not only led to a successful continental shelf agreement, but also contributed to the development of international law by the methods employed by Saudi Arabia in all its continental shelf agreements. The concept of contiguity and equitable principle are examples of such contributions. The shared zone, buffer zone, partition zone, common zone, half effect given to islands and ignored islands are all different methods contributing to the resolutions of maritime boundary agreements concluded with its neighbours. These will be considered in Chapters 6 and 7.

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Chapter Six

MARITIME BOUNDARY AGREEMENTS

6.1 Introduction

Saudi Arabia's continental shelf agreements with its neighbours particularly those in the Arabian Gulf were among the world's first peaceful maritime boundary agreements. The Kingdom's successful agreements with Iran, Bahrain, Qatar, Jordan, and partially with Kuwait reflect a deliberate Saudi policy of reaching peaceful boundary agreements. The purpose of this chapter is to investigate and analyze the variety of methods used in Saudi boundary agreements and their influence on other international boundary agreements worldwide. Attention will be given to the effect of oil resources in boundary delimitation and their possible future importance. The discussion will cover background aspects such as the history of the dispute and its economic importance, and it will focus also on the legal side of the agreements in the light of the 1982 United Nations Convention and the International Court of Justice Case Judgments.

6.2 Saudi-Bahrain 1958 Agreement

This agreement was the first both in the Arabian Gulf and the Middle East¹, and the third continental shelf boundary agreement in the world, after the 26 February 1942 Paria Treaty between the United Kingdom, on behalf of Trinidad Tobago and Venezuela (ratified in 1945), and the 17 March 1957 Norway-Soviet

¹. The agreement is regarded as the leading precedent for offshore boundary agreements in the Gulf region.

Union Continental Shelf agreement signed in November 29, 1957 [Conforti and Francalanci, 1979, p. 3]. According to the US Department of State [1990, p. 28], the only agreements that took place prior to 1960 are those shown in table 6.1 which shows the two continental shelf agreements before the 1958 Saudi-Bahrain agreement (see Appendix D).

*Table 6.1
The World's First Seven Maritime Boundary Agreements*

The Parties Involved	Signed	Type	Ratification
Malaysia-Singapore	3/8/1928	TS	3/8/1928
Denmark-Sweden	30/6/1932	TS	30/6/1932
United Kingdom (Trinidad & Tobago) Venezuela	26/2/1945	CS (Gulf of Paria)	22/9/1945
Chile-Peru	18/8/1952	-	23/9/1954
Ecuador-Peru	18/8/1952	-	7/2/1955 (Ecuador) 6/5/1955 (Peru)
Norway-USSR	17/3/1957	CS	24/4/1957
Saudi-Bahrain	22/2/1958	CS/TS	26/2/1958

Source: United States Department of State, 1990.

The 1958 Saudi-Bahrain agreement applied to both the territorial waters and the continental shelf (see Appendix D). The territorial waters between the Kingdom of Saudi Arabia and Bahrain overlapped in certain places where opposite coasts overlooked narrow seas [Ministry of Foreign Affairs (KSA), 1936-1973, p. 131]. In fact, the territorial seas overlapped between Umm Nassan

and Ras AlKureya at point 7 where the distance between the two coasts is about 8 nm, and over 12.5 nm between the two main coasts north of point 8 (see Figure 6.1). All the remaining area lies within the limits of the territorial sea and as a result, this agreement is in effect a territorial sea agreement with a continental shelf beyond the limit of the territorial sea. According to this, it is a continental shelf agreement and the territorial waters which were stated in the introduction of the agreement may be at the root of the idea of the 12 nm limit to the territorial sea which was claimed in the same year by the Saudi Government and recognised by the rest of the world as the maximum breadth of the territorial sea according to the 1982 Convention.

The importance of the 1958 Saudi-Bahrain agreement also lies in the fact that it was the first to be settled in the Gulf. Due to the decline in Bahrain's oil production which had been producing since the beginning of the 1930s, the country was badly in need of fresh oil revenues especially of cheap oil. The Saudis preferred sovereignty, because the discovered oil in the Kingdom will continue producing for years to come. The parties' willingness to reach this stage of understanding may also have been a result of the good political relations between them and their co-operation in different aspects of inter-state affairs [Al-Ash'al, 1978, p.40].

6.2.1 Historic Background

Prior to agreement, the Saudi-Bahraini boundary had been in dispute. This was started by a concession given by the Government of Bahrain to the Bahrain

Petroleum Company Limited in 1941 in the Abu Safa area. This action brought a protest from the Saudi Government which led to abandoning all exploration in the hope that the two governments would settle the issue. Indeed, the first round of talks took place in London in 1951 at which the British representative on behalf Bahrain suggested the acceptance of Saudi sovereignty over Abu Sa'afa and Rennie shoal and Bahrain sovereignty over the Lubainah Islands. But, the Saudis rejected this offer. In 1954 the ruler of Bahrain suggested that Lubainah al-Kabirah should be under Saudi sovereignty and the Abu Safa (Abu Sa'afa) area divided equally between the parties. This initially seems to have been accepted by the Saudis but the technical problem of how the line should separate the two parts, led to failure of the 1954 negotiation. There were differences over where the separating line should run. Britain, on behalf of Bahrain, considered that the line should run through the middle of Lubainah Al-Kabirah Island. The idea was rejected by the Saudis who believed the method should be a true median line between the two states as one and a half miles west of Lubainah Al-saghirah Island (belong to Bahrain) and one and a half miles east of Lubainah Al-Kabirah Island (belong to Saudi Arabia) [Schofield, 1990, p. 226]. As a result the Dam-mam agreement which followed the London negotiations, failed to solve the dispute which remained unsolved until the 1958 agreement put Lubainah al-Kabirah and the Abu Sa'afa area under Saudi sovereignty after the acceptance by Bahrain of full Saudi control over Abu Sa'afa [Al-Ash'al, 1978, p. 40-41].

6.2.2 Boundary Delimitation

The line divided an area of shallow water where the average depth measures 6.93 fathoms and the maximum depth reaches 27 fathoms. The minimum depth is found on a reef and lies between points 8 and 9 [The Geographer, No.12, 1970, p.3]². The line consists of 14 turning points and measures 98.5 nm. The longest distance between any two points is 25.25 nm and the minimum distance is only 1.5 nm, with an average distance of 7.57 nm.

The agreement uses several methods in order to reach an equitable result as stated in Saudi Arabia 1949 and Bahrain 1949 Decrees. These methods include: shared zone, equidistant line, ignoring islands, no territorial belt around these islands. Equidistance was established by finding a midpoint of a line connecting two points on the two shores. This method is one of techniques often used in the delimitation of Gulfs, lakes and narrow seas. The median line is:

- a) a portion of an ordinary boundary (as in Lake Erie); b) the seaward terminus of a lateral jurisdictional boundary agreed to by contiguous states, extending from the land boundary out to the median line in a gulf, lake or sea; or c) the lateral jurisdictional boundary between adjacent states, for specific purposes, e.g. from the coastal terminus of a land boundary out to, or toward, the edge of the "continental shelf" [Boggs, 1951, p. 256].

Islands are also used as marks to which the line is divided in two parts e.g. Lubainah al-Saghirah and Lubainah al-Kabirah. Some islands were used at the end point on either side of the boundary, while others have been ignored such as Jeddah Island. Khaur and Fasht are also used along with the islands. Latitude and

². For more details about the geographical description of the agreement see the Geographer, 1970 Saudi-Bahrain Continental Shelf Agreement series No. 12.

Longitude lines were employed, between points 11, 12 and 13 to define the joint zone of Fasht bu Sa'afa. Finally, an area was established as a joint zone owned and managed by Saudi Arabia but the revenue from the oil production shared equally [The Geographer, No.12, 1970, p. 1-3]. In 1975 the Saudi production reached 121,479 b/d, as the 20th top offshore oil field in the world [Offshore, 1975, p. 90]. The field contains 22 wells with an average depth of 6600 feet [Ministry of Petroleum and Mineral Resources (KSA), 1983].

In general, the Saudi-Bahrain Continental Shelf Boundary line is an equidistant line modified by various methods in order to reach an equitable result. According to Beazley [1992], points 1 to 7 and 10 and 11 are all points lying midway between arbitrarily chosen basepoints. The true equidistant line basepoints to be used are determined solely by the geometry of the line. Points 5 and 6 may be true equidistant points between the mainland. Point 10 is equidistant between the nearest drying reefs not the mainland. The Geographer [1970, No. 12] defined point 11 as an equidistant point, although it is not equidistant according to Beazley, [1992]. Ignoring small islands is also a modification of the equidistant line e.g. points 2-4 and 7 [The Geographer, No.12, 1970, p. 5]. Such important deviations took place on the boundary line found between points 1-4 and 7. This delimitation has been recognised by the International Court of Justice in the 1969 case [El-Hakim, 1979, p. 90]. Between points 12 and 14 deviation lines are based on geographical coordinates, irrespective of the equidistance principle, in order to maintain the unity of the Fasht bu Sa'afa oil deposit. This principle was followed by the ICJ in the North Sea Continental Shelf Cases of 1969

which saw the natural resources as a factor to be taken into account in the course of negotiations for delimitation [El-Hakim, 1979, p. 91].

6.2.3 The Joint Zone

Fasht bu Safa Hexagon is an area of proven petroleum resources. Oil was discovered in 1965. In the same year ARAMCO started production at over 30,000 barrels per day. Half the profits go to the company, and the other half is divided equally between Saudi Arabia and Bahrain [Al-Ash'al, 1978, p. 41]. The oil field is about 20 km long, and its average production in 1979 after only five years in operation was 139,000 barrels a day. In 1984 a shallower reservoir was explored [Beydoun, 1988, p. 207]. The area is approximately double the size of Bahrain [El-Hakim, 1979, p. 86]. The first claim over this area was by Bahrain, along with its claim to the two Lubainah islands [Al-Baharna, 1974, p. 308]. Blake [1989, p.6] does not see a clear basis for Bahrain's claim over Fasht bu Sa'afa.

The joint zone established by Saudi Arabia and Bahrain in the 1958 agreement was the first joint maritime zone in the world that employed the unique method of given one state (Saudi Arabia) complete sovereignty over the common zone and the other (Bahrain) shares in the net revenue. Blake [1989, p. 12] pointed out that

The Saudi Arabia-Bahrain and Saudi Arabia-Iran agreements demonstrate potentially useful approaches to maritime boundary delimitations.

According to Article 2 of the 1958 agreement, the joint zone shared between the

parties is restricted only to hydrocarbon. The agreement was said to be an economic solution to sovereign dispute as Awad [1974, p. 506] stated. But, Al-Sayf [1990, p. 179] in the discussion related to the failure of the 1954 Dammam talks considered the dispute to be over a problem of capture. In this respect Al-Sayf [1990] stated that due of the liquid nature of crude oil, which can not be controlled, the oil may then escape from one area to another through the divided zone disturbing the balance of the oil reserve. From the author point of view, Al-Sayf may, have been trying to demonstrate the parties' attempt to employ equitable principles and justice which had been expressed by them. However, El-Hakim, [1979, p. 91] warned that the use of deposit unity as a reason has to be accepted in order to solve problems of capture. He described such use as a factual element which is reasonable to take into consideration. The author supports Awad's view concerning the 1958 Saudi-Bahrain agreement as an economic solution to sovereign dispute. The agreement itself was precise in defining the rights of the government of Bahrain over its share, and in this respect the agreement stated:

This area cited and defined above shall be in the part falling to the Kingdom of Saudi Arabia [Article 2 1958 Saudi-Bahrain Continental Shelf Agreement].

the Article went on to say

The exploitation of the oil reservoirs in this area will be carried out in the way chosen by His Majesty on condition that he grants to the Government of Bahrain one half of the net revenue [Article 2 1958 Saudi-Bahrain Continental Shelf Agreement].

Despite the idea of capture which Al-Sayf attributed to this dispute, Al-Sayf emphasised the Kingdom's sovereignty over Abu Sa'afa. In this respect Al-

Sayf [1990, p.184] sees no rights whatsoever given to the Bahrain Government over the area or half the area's oil, but rather to half the net profit. The 1980 Norway-Iceland Agreement in Jan Mayen island is one of thirteen [US Department of State, 1990] cases worldwide which has adopted a similar method in respect of sovereignty and exploitation, but a relatively different way in which the parties share such deposits.

6.3 Saudi-Iran Agreement

The 1968 Saudi-Iran Continental Shelf Agreement (see Appendix E) is of great significance in terms of development of the law of the sea, particularly in relation to the continental shelf. Its importance is not limited to the Gulf area, but it has had influence worldwide. The impact which this agreement has had in the Gulf is reflected in the other agreements conducted between the Gulf states especially with Iran and also between Abu Dhabi-Qatar in the 1969 continental shelf agreement [Al-Ash'al, 1978]. Beyond the Gulf region, this agreement have served as a model, encouraging similar agreements to adopt similar methods [Amin, 1981, p. 104]. For example, the Italy-Yugoslavia 1968 Agreement has used the same technique with respect to the 12 nm limit as a belt used for islands lying offshore far from the mainland. Blake [1989, p. 12-13] stated that

The use of common zones shared revenues etc. is increasingly common in worldwide maritime boundary delimitations. In a number of important cases (for example France/U.K 1982, Libya/Tunisia 1982) large islands have been given half or partial effect in boundary alignments. These methods were pioneered in the Gulf 20 or 30 years ago and used ingeniously in combination with other methods.

6.3.1 A Brief History

The need to define the continental shelf boundary between Saudi Arabia and Iran was caused by two related factors. The first was the hydrocarbon deposit found in the area (Figure 6.2) and the second was the overlapping concession area between oil companies granted by the parties. The story started in 1933 when Saudi Arabia reached an agreement with ARAMCO which covered onshore and offshore areas measuring 1,285,000 sq.km. The area was granted to ARAMCO for 66 years. The onshore area lies in the east of the Kingdom of Saudi Arabia and measures 1,228,000 sq.km while the offshore area covers the whole Saudi submerged area in the Arabian Gulf which measures 57,000 sq.km [Ministry of Petroleum and Mineral Resources (KSA), 1983 p. 12]. The Saudi-ARAMCO concession was based on principles incorporated in the 1949 Saudi Decree regarding the sea bed and territorial waters of the Persian Gulf. The outer limit of the continental shelf boundary was not defined, but, agreement with neighbouring states was to be based on equitable principle. The Saudi decree stated:

the boundary of such areas will be determined in accordance with equitable principles by Our Government in agreement with other states [Royal Decree 1949].

In practical terms, there was no defined limit due to the nature of the Gulf sea bed.

In April 1958 Iran granted a concession to IPAC including two districts (see Figure 6.3). The first, lies to the north of the SIRIP Concession [Nahai and

Kimbell, 1963] and the second lies to the south of the SIRIP³ Concession and defined by latitude and longitude as indicated in table 6.2. Saudi Arabia did not recognize IPAC's southern concession which overlapped with the ARAMCO area.

Table: 6.2
IPAC Southern Area Concession of 1958 in the Arabian Gulf

No.	Latitude/ North	Longitude/ East
1	29°49'30"	50°13'00"
2	29°15'00"	49°04'00"
3	28°23'00"	49°45'00"
4	28°59'00"	50°45'00"

Source: Awad, 1974, p. 504.

On the 1st April 1963 the National Iranian Oil Company (NIOC) published an announcement in "Platt's Oilgram Service" in which it declared the area open for international bidding, from the 1st July 1964. Two areas of the Arabian Gulf adjacent to the Iranian mainland were to be included in this bidding. The problem of overlapping areas between Iran and the Kingdom seems to be largely due to the concessions granted by Iran based on a median line using Kharj as part of the Iranian mainland, while the Saudi concession was based on the equidistant

³. SIRIP is a shared company by Iran and Italy (Societe Irano-Italienne des Petroles) which signed an agreement with NIOC on 24 August 1957 in which SIRIP gained the concession which covered about 6209.5 sq.nm (11500 sq.km) in the northern part of the Arabian Gulf and off the Iranian coast in the Oman Gulf.

line from the two mainlands [Young, 1970, p. 154]. Figure 6.4 shows three overlapping areas: the first, is between Saudi Arabia and Kuwait, where Kuwait considered Umm Al-Maradim Island to be under its sovereignty which created a triangle within the Saudi area. The second, is between Iran and Kuwait, where the SIRIP concession overlaps with SHELL. The third is between Saudi Arabia and Iran where the IPAC concession overlaps with AOC (see Figure 6.4). The Iranian pre-announcement provoked diplomatic protest from some of the Gulf states, particularly Saudi Arabia, which issued a statement on 15 June 1963, against Area 2, District 1 of the announcement. The protest was over the area granted to IPAC on the grounds that it affected Saudi Arabia's legitimate rights in the Neutral Zone shared with Kuwait [Albaharna, 1974, p. 292]. The need for settling these problems was urgent so that rights of exploitation could be conducted without any objection from neighbours, and this accelerated the process of negotiation which ended in 1965. Although Iran initially refused to sign the agreement but was later ratified by both countries in the 1968 Agreement with some modification.

6.3.2 Boundary Line

The distance between the mainland of Saudi Arabia and the mainland of Iran varies from about 95 to 135 nm and the depth of the waters is not more than 75 meters (250 feet), although the average is much less [Young, 1970, p.152]. The boundary line which measure 138.75 nm in length can be divided into four geographical segments: The first, extends from point 1 where the line meets with the extension of the Saudi-Bahrain continental shelf boundary, to point A where

is meets the territorial sea of Al-Arabiya island. This segment measures 45.5 nm. It is an approximate equidistant line between the two mainlands. The water depth in this area reaches an average 18.2 m (196.8 feet) [The Geographer, 1970, p. 4].

The Second segment measures 48.5 nm. It has four turning points "A,B,-C,D" and is also an equidistant line of the territorial sea of the Al-Arabiya and Farsi Islands, but is not an integral part of the continental shelf boundary. It is in fact, a based local equidistant line involving median and territorial sea boundaries due to the overlapping of the territorial sea of the two Islands and their intersection with the main line of the continental shelf boundary [The Geographer, 1970, p. 4]. The shelf does not extend beyond the 12 nm belt due to the fact that only the effect of the territorial sea was given to al-Arabiya and Farsi Islands. Points 4 and 5 are the equidistant boundary which separates the two continental shelves from each other (see the heavy dashed line on Figure 6.2), which controls the vector of the overall continental shelf boundary [The Geographer, 1970, p. 4]. The water depth in this segment averages 49 m (163.5 feet).

The third segment lies between points D, 6, 7 and 8. It is based on the half effect given to the Iranian Kharj Island [The Geographer, 1981, p. 8]. The line extends about 21 nm with an average water depth of 48.2 m (160.5 feet). The fourth segment extends from points 8 to 14 which was a result of the 1968 agreement under which Iran shared the hydrocarbon resources in the area [The Geographer, (2) 1970, p. 5].

According to Padwa [1960, p. 639], the Gulf states have accepted the doctrine of the continental shelf and the right of access to seabed resources. One

of the implications is the equidistant method often employed by the Gulf States which they consider as a rule of Customary International Law [Amin, 1981, p. 143]. In the Saudi-Iran agreement, the equidistant line was used in the first segment and between al-Arabiyyah and Farsi Islands [Young, 1970]. In segment three, equidistance is modified by the effect given to Kharj Island and in segment four the line is divided in favour of Iran in order to share in the sea bed resources. The deviation of the line yielded about six miles of sea bed area to Iran. The half effect given to the Kharj Island could be based on three bases, two deal with the method used to implement the half effect and the third is a technical base, they are:

- 1) An equidistant line drawn between Saudi Arabia and the Iran mainland, and a second equidistant line measured from the Saudi mainland and the Kharj Island's low-water line. The half effect then a line drawn equidistance from the two equidistant lines drawn above.
- 2) The half effect could also be an equidistant line drawn between the Saudi Arabian mainland and a line mid-distance (8.5 nm) between Kharj Island and the Iranian mainland. Kharj lies 17 nm from the Irani coast.
- 3) Because the Saudi oil field (Marjan) and the Iranian oil field (Feridoon) shared one single geological structure, one party will therefore be at a disadvantaged if the other party produces more oil.

These few miles gained by Iran in the 1968 Agreement have especially increased Iran's share in the oil reserves [Hamadi, 1981, p.113]. However, Beydoun [1988] argued the case for complete Saudi sovereignty over all the hydro-

carbon deposit in the area. According to his view, it is only this agreement which gave Iran the right over part of this deposit. Beydoun [1988] stated that by 1968 agreement the substantial amount of potentially rich seabed area gave Iran an important asset by sharing with Saudi Arabia a single geological structure of hydrocarbon. It is clear that he based this view on the unity of resources concept. The unclear division lying between Iran and Saudi Arabia over the hydrocarbon deposit in Marjan Oilfield (Saudi Arabia) and Feridoon Oilfield (Iran) is reflected by Gault who stated:

The Saudi-Iran 1968 Agreement placed the greater share of Marjan Oil Field under Iranian jurisdiction [Gault, 1988, p. 213].

The Marjan oil field is owned by the Kingdom and started its production in 1973, its reserves reach 673 mm barrels [Beydoun, 1988]. According to Tiratsoo [1976, p. 167], Iran has the right to share such resources on the bases of two equal halves.

In evaluating the contribution which this agreement made to International Law, Awad [1974, p.514] pointed out that the Saudi-Iran agreement corresponded to the International Court of Justice in the Continental Shelf cases in the North Sea, despite the fact that this agreement was held before the North Sea Cases in respect to the role of islands. In the author opinion this agreement reflects several important points in respect to the relations between the two states, these can be summarised in the following points:

- 1) The width of the prohibited area established between the two continental shelves reflects the parties' desire to prevent future problems.
- 2) The deployment of naval forces by Iran to protect Iranian oil operations

near the disputed line [Young, 1970, p. 154] is an example of mutual suspicion over resources in boundary zones.

- 3) The reluctance of the Iranian Government to sign the 1965 agreement which was ratified later due to the exploration which was carried out by IPAC in the area and which revealed potential hydrocarbon deposit is another example of suspicion.
- 4) The boundary division was implemented on a single geological structure despite the effect of the exploitation of such a deposit.
- 5) Finally, the buffer zone technique that was used to solve hydrocarbon leakage, may be seen as the parties' fear of future conflict over an area rich with such resources and a need to prevent such disputes. This may be supported by the attached letters exchanged between them which were considered part of the agreement in which more details were added to the original agreement.

The parties thus have separate sovereignty over their part of the continental shelf. However, this has not always been satisfactory, as indicated by the threat of force on occasions e.g. the Iranian armed boat which captured an ARAMCO team working on a platform in the disputed area in February 1968 [Awad, 1974]. The academic question remains over the Saudi Islands Janah, al-Jurayd, al-qurayyin, Qiran and Hurqus. El-Hkim [1979, p. 95] stated:

It is not clear either why the Saudi islands of Janah, al-Jurayd, al-Qurayyin, Qiran and Hurqus have had no effect whatever in delimiting the Saudi-Iran continental shelf boundary.

6.3.3 Methods Employed in the Agreement

The Saudi-Iran Agreement owed its success partly to the variety of methods employed by the parties, including the half effect given to Kharj Island, the prohibited zone along the boundary, and the 12 nm belt enclosing al-Arabiyyah and Farsi Islands (see Appendix E).

6.3.3.1 The Half Effect Method

This approach was adopted with Kharj Island, which is owned by Iran, lies 17 nm from the Iranian mainland and is about 3 nm wide and 4 nm long. It has a maximum elevation of 284 feet [The Geographer, 1970, p. 5]. Iran's policy was based on ignoring any islands in order to delimit the Gulf boundary with its neighbours due to the negative effect which may have resulted on the Iranian side [Drysdale and Blake, 1985, p. 125]. But this general policy did not include Kharj Island which was counted as part of the mainland of Iran from the beginning of its submission to IPAC in 1958. M.A. Movahhed, one of the Iranian negotiators on continental shelf delimitation has expressed the view:

No island in the Gulf should be given any continental shelf rights. He exceptionally, asserts that the Iranian island of Kharg merits a full continental shelf because of its particular individual characteristics [Amin, 1981, p. 146].

Amin [1981] comments on this policy stated by Iran as the Iranian position with respect to the Iran-Kuwait continental shelf boundary. Iran justifies its position related to Kharj Island by the fact that the island is connected with the mainland by a pipeline, and the island's territorial sea overlaps that of the mainland. However, the Iranian explanation is not based on any valid legal argument. If accepted

as state practice, this would create abuse since many states could claim islands lying far from the mainland by joining them with a pipeline [Awad, 1974, p.511].

6.3.3.2 The Prohibited Area

According to the 1968 Saudi-Iran Agreement Article 4, a prohibited area within 500 m of the boundary between the two countries was to be created in order to solve the capture problem. This zone extended from the boundary line on both sides, creating a buffer zone between the two states measuring 1,000 m [Ministry of Foreign Affairs (KSA), 1936-1973, p. 19]. The prohibited area extends along the whole length of the boundary line. The parties are prohibited from conducting any operation including drilling and exploration and the wells in the immediate vicinity of the prohibited area shall be vertical wells but the party can deviate if technically required according to the letters exchanged between the two representatives [Conforti, et al, 1979, p. 99]. The letter stipulated:

The wells drilled in the immediate vicinity of the prohibited area shall be vertical wells, however, when a deviation is technically inevitable at a reasonable cost, such a deviation shall not be deemed as encroachment on the agreement [Conforti and others, 1979, p. 99].

The prohibited area measures 75 sq.nm From the economic point of view, it is a large area rich in hydrocarbon deposits, especially around points 8 to 14. Awad [1974, p. 515] pointed out that the buffer zone between the two states reflects unfriendly relations between the parties, whereas their interests might have been better served in other ways. In fact, the agreement was reached at a time when Iranian influence was growing in the Gulf area as the regional power

to succeed British influence.

The importance of this zone can be illustrated by the Saudi-Kuwait 1963 capture problem over the Al-Saffaniyah Field offshore area which fell within the Kingdom's jurisdiction and was operated by ARAMCO and the Japanese-held acreage in the neutral zone [Amin, 1981, p.150]. The problem was discovered when the Al-Saffaniyah Field production declined towards the Neutral Zone Field. ARAMCO took immediate practical action by increasing the production considerably to create a balance in the level of the reserve. The carefully drawn agreement between Saudi Arabia and Iran anticipated such a problem and sought to prevent it in the future.

6.3.3.3 The 12 nm Belt Method

This method was used to solve the boundary problem in the vicinity of Al-Arabiyah and Farsi Islands. The settlement of sovereignty over these two islands was carried out in the 1965 agreement. Al-Arabiyah and Farsi Islands had attracted the interest of neighbouring states since the beginning of the thirties when oil deposits were discovered nearby. Until 1914 the islands' sovereignty was not defined although the British Government was said to recognise Kuwaiti sovereignty over them [Indian Office, B.399]. However, according to the 1913 Anglo-Turkish Agreement, the ruler of Kuwait's influence did not extend beyond the green and the red line drawn by that agreement, so his influence did not extend to this limit. In addition, the 1915 Saudi-Anglo agreement did not recognise the 1913 agreement in relation to territorial sovereignty. Oil however is

said to have been known to exist near these islands since 1914 [Indian Office, B.399]. The gradual development of technology which made offshore oil deposits exploitable from the sea bed increased their importance in the 1930s when British influence was dominant. Until the end of the 1940s, Iran made no claim over the islands which lie slightly to the Saudi side of the median line. From the author point of view Farsi Island could not have been considered Iranian if the Saudis had carried out a proper study before the 1968 agreement. The two countries agreed over the sovereignty of Al-Arabiya and Farsi Islands in 1965 as Saudi and Iranian islands respectively. The 12 nm limit of territorial sea around the islands generated by the 1968 agreement meant that the existence of a territorial belt belonging to one party would rule out the other party's right according to the median line in the same area [Young, 1970, p. 153]. The line ABCD (see Figure 6.2) of the continental shelf boundary represents a modification of the equidistant principle reflecting the agreement's division of right over the two islands.

6.4 Saudi-Jordan Boundary

Jordan, along with Bahrain are the only Arab countries to have claimed the minimum territorial sea limit of 3 nm. The reason behind Jordan's claim is the extremely narrow coast on the Gulf of Aqaba (average width 7.5 nm) which allows only 8 nm breadth from its coast to the opposite Egyptian coast. There seems to be no obvious reason why Bahrain does not extend its territorial sea limits [Prescott, 1985, p. 158]. Jordan with approximately only 13.5 nm of

coastline will have less than 50 sq. nm of sea bed, and the only Arab state which has such disadvantageous due to its location. Iraq ranks second to bottom with 200 sq.nm of sea bed in the Arabian Gulf [El-Hakim, 1979, p. 56].

The Saudi-Jordan land boundary meets the coast on the Gulf of Aqaba. Its geographical location is latitude 29°21'05" north and longitude 34°57'08" east⁴.

According to the 1965 Saudi-Jordan Agreement (Appendix F), nearly 740 km of the boundary between the two states from Iraq at Anazah Mountain to a point on the Gulf of Aqaba, have been defined. In this agreement the parties exchanged land in which Saudi Arabia ceded 4,375 sq.mils (11,331 sq.km) of land in the interior as well as 10 nm (19 km) of coast, thus lengthening Jordan's coastline adjacent to its only port to 13.5 nm (about 25 km). Jordan in return ceded 3,750 sq.miles (9,712 sq.km) from Jordanian territory in the eastern desert [Blake, 1989, p.5]. Young, [1970], Hamadi [1981], and Bindagji [1981] have all put the figure 6,000 sq.km ceded to Jordan and 7,000 sq. km ceded to Saudi Arabia. Before the 1965 agreement Jordan had only 3.8 nm (7 km) coastline along the Gulf of Aqaba. By exchanging land along the boundary line, Jordan was able to gain, as well as an inland area, a longer coastline [Bindagji, 1981, p. 48]. (Figure 6.5).

The length of the Saudi-Jordan maritime boundary is about 4 nm, a short line due to the breadth of the Gulf of Aqaba at this point, which is about 8 nm between the nearest two points where the Saudi-Jordan territorial seas intersect

⁴. This location is based on a Saudi survey carried out by a private firm and does not represent an official position (See chart No. 11 of the Saudi Ports Authority).

[Saudi Ports Authority, 1983, Map No. 11]. Technically, there are different ways of defining adjacent boundaries shared by two states such as Saudi Arabia and Jordan. One of these is the method used for complicated and irregular coastlines. Another method can be used if the coast is smooth and gentle in general [see Awad, 1974, p.243 for more details]. The boundary between Saudi Arabia and Jordan runs from a coast which is not deeply indented or cut into, and which has no khuar or inlets to interrupt its regular features. As a result, the second method of equidistant lines from points chosen along the coast and with the same distance from each other was adopted experimentally. To carry this method out, a central point is chosen which in this example represents the point where the land boundary reaches the coast (see Figure 6.6). Two more points along the coast have to be chosen with approximate equal distance from A. These points are S1 where the S is the initial of Saudi and 1 is the first point from A on the Saudi side. In a similar way, the first point on the Jordanian side is J1. The second step is to draw a semi-circle using a compass in order to draw two lines from S1 and J1 seaward until they intersect creating a point at sea which is called point 1. This point represents the first point on the boundary line. Points S2 and J2 on both sides will be similarly chosen until all the remaining points are fixed to the outer limit of the Saudi-Jordan territorial sea in the Gulf. By connecting points A, 1, 2, 3, 4, 5, and 6 the Saudi-Jordan adjacent boundary line was drawn (see Figure 6.6).

6.5 Saudi-Qatar Agreement

In this section, discussion of the Saudi-Qatar 1965 Agreement (see Appendix G) will concentrate on Dawhat Salwa which is situated between the western shore of Qatar and the coast of Saudi Arabia on the Arabian Gulf. Dawhat Salwa consists of a long narrow bay extending up to approximately 58 nm (100 km). It is nearly closed to the open sea, as a result of which, fishery is important to the local population on both sides. The wider area found between Ra's Dukan on the Qatar coast and Al-Samamik Island on the opposite Saudi coast measures about 21.5 nm (40 km). The narrowest point however is found south of point 1 (see Figure 6.7) which measures about 4 nm (8 km). The boundary line measures about 50 nm (93.3 km) (table 6.3) and consists of 8

Table 6.3 The Saudi-Qatar Equidistant Line "points and distances"

Points Number	Distance (km)
Salwa-1	6
1-2	10.8
2-3	9.5
3-4	11
4-5	6
5-6	9
6-7	19
7-8	22
Total	93.30

Source: Al-Sayf, 1990 (Map)

segments along the mid points between the two coasts connecting Khuar Al-Barr on Qatar's coast and the Saudi coast at khashm Al-Ashir. The line then runs to the end point as shown in table 6.3. At the end of the boundary line between point 8 and the point where the Saudi-Bahrain boundary line ends there is a sector of about 8 km [Al-Sayf, 1990] which has not yet been defined due to the dispute between Qatar and Bahrain over the Hawar Islands. If the boundary from point 8 to the Saudi-Bahrain boundary line were to be delimited, the line would be straight running directly between the two points.

6.6 Saudi-UAE Agreement

This agreement has been dealt with in Chapter 3 under the discussion of the delimitation of the territorial sea in small or narrow seas as an example of an adjacent boundary in the Arabian Gulf (see section 3.7.2.3 for more details).

6.7 Conclusion

It can be concluded here that:

- 1) Resources are the main factors affecting and enforcing continental shelf delimitation. Nearly all the Saudi continental shelf agreements in the Arabian Gulf are a successful example of such agreements. In the Red Sea, resources were also found to be the motivation for such agreements.
- 2) The Saudi-Bahrain 1958 agreement is an equidistant line modified by various methods in order to reach an equitable result.
- 3) The Saudi-Bahrain agreement is also an economic solution to sovereign

dispute.

- 4) The Saudi-Iran 1968 Agreement was in favour of Iran and disadvantageous to Saudi Arabia.
- 5) The Saudi-Jordan maritime boundary is the shortest Saudi boundary and the least significant.
- 6) The Saudi-Qatar boundary is an agreed boundary by the 1965 Agreement.

The Saudi-Sudanese Red Sea Agreement is also motivated by the resources found at the bottom of the Red Sea similar to that in the Gulf, but where different kinds of resources such as minerals are involved instead of oil. It is also counted as a success which has used unique methods, and will be discussed in the following chapter.

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Chapter Seven

SAUDI ARABIA-SUDAN RED SEA AGREEMENT

7.1 Introduction

Chapter 5 focuses on the 1949 Saudi decree relating to the Saudi claim over the Arabian Gulf seabed resources. In 1968 Saudi Arabia issued another decree relating to the ownership of the Red Sea resources. The decree completed Saudi sovereignty over its seabed resources ushering the Kingdom into a new era in the development of seabed resources. By this decree, Saudi Arabia not only halted foreign claims over the control of the Red Sea's newly discovered resources, but also led to a unique joint agreement between Saudi Arabia and Sudan which could be used elsewhere as a model in joint seabed exploitation.

This chapter discusses the Saudi-Sudan 1974 Red Sea Agreement (see Appendix H), the legal status of the seabed resources, and the Saudi-Sudan Red Sea Commission, its functions and objectives. The chapter focuses also on the importance of this agreement as a model in the Red Sea which can be used a prime example. (the Figures in the accompanying Atlas).

7.2 The Origin of Brines and Metalliferous Elements

Geologists have concluded that the continents are floating on the earth's surface, and consequently, movement in the earth's crust is taking place in the sea as well as on the land. A notable example is in the Red sea, where the Arabian Peninsula moves away from the African continent at about 10 km every one

million years [Abu Bshaytt, 1985, p.1], or one centimetre every year. Because of this movement, a vast rift has been created along the bottom of the Red Sea extending northwards as far as Turkey, and southwards into east Africa (Figure 7.1). At the bottom of the rift sea water temperature is very high. For thousands of years, ordinary sea water has been percolating down through the bottom sediments of the Red Sea picking up salts and metals ions as a result of contact with Miocene evaporates and their interstratified shales. The dense brine continues to descend and heats up as it comes into contact with newly formed basaltic rocks. A chemical reaction takes place between the brine and basaltic lava, resulting in concentrations of metals ions in the brine. When the brine rises by convection, it discharges on the sea bottom. Through this sudden change in physio-chemical condition, metal ions precipitate out, at first in the form of sulphide, and then of ferrous argillaceous silicates, iron hydroxide and finally, on the border of the deepest trenches, manganese [Guennoc, et al, 1983].

7.3 Historical Background

For a long time in history the Red Sea has attracted scientists by its strange and wonderful phenomena e.g marine life , water colour, coral reefs and most recently its metalliferous mud. Recently attempts have been made to investigate the Red Sea more thoroughly, although in the past little detailed scientific research was devoted to it, partly due to lack of equipment and suitable vessels for research in deep water. In 1880 a Russian survey vessel noticed irregular eddies of warm brines around latitude 21° north. Samples from 2,000 feet deep

indicated exceptionally high temperatures and saltier water than previously encountered. In 1897 an Austrian ship called the *Pola* and a German vessel *Valdivia* both made similar tests in the same area, taking their samples from depths down to 6,500 ft. [Al-Sayari, 1973, p. 6].

Apart from these attempts in the last century, really serious scientific exploration of the Red Sea only started during the 1950s. The first refraction seismic profiles were completed by the American ship *Vema* and *Atlantis* in 1958. The result of this survey was later published by Drake and Girdler in 1964, and by Knott et al, in 1965. The first records of the seabed temperature and salinity date from the last century and were taken by vessels from the USSR, Austria and Germany in 1881, 1897 and 1898 respectively. In 1948 the Swedish vessel *R/V Albatross* carried out a test at a depth of 1937 m, followed by *R/V Atlantis USA* in 1959 [Guennoc et al, 1983]. The first discoveries of metalliferous mud were made in 1963-64 after the crossing of the Red Sea by several ships including *The Discovery*, a British research vessel. The result was published in 1969 by E.T Degens and D.A. Ross [Guennoc et al, 1983, p. 1].

Discovery Deep was the first site of metalliferous mud identified in the Red Sea. The second and the third sites were discovered by the American vessel *Atlantic II* in 1966, known as *Atlantis II* and *Chain Deeps*. The sediment in the former was too hot to touch when the sample was taken from the seabed, the water temperature was as high as 133°F. *Atlantis* is the richest and largest deep. The fourth deep was discovered in 1967 by the US vessel *Oceanographic*, lying to the north of *Discovery Deep*. By 1972 the 20 remaining deeps had been

discovered [Guennoc et al, 1983]. Figure 7.2 shows 18 sites of these deeps.

7.4 The Red Sea Resources

The Red Sea resources are of three kinds. First, is the hydrocarbons found in different parts in the Red Sea particularly the Gulf of Suez and in the south east coast. Second, materials that have resulted from evaporation and sedimentation such as salt, and dolomite. Third, the mineral deposits which have been discovered more recently [Department of research and studies, 1984]. The Red Sea metalliferous sediments are the most significant example of submarine hydrothermal mineralization so far discovered [Nawab, 1980]. These resources are found in the form of mud sediments up to 30 m deep (98 feet) that have been collecting over the past 10,000 years at the centre of the bed of the Red Seabed. They are found beneath pools of dense, extremely hot brine at 60°C (140°F.), at depths of up to 2 km. The deposits include zinc, copper, and small amount of other metals including gold and silver [Ford and Simnett, 1982].

Despite the discovery of these metals and deposits and the successful operation tests carried out by the Red Sea Commission, the only promising deep commercially is the Atlantis II Deep. However, the other 19 deeps contain valuable minerals which need to be surveyed and investigated in order to be exploited in the longer term when such operations become financially attractive. The Atlantis II Deep will be discussed here as an example of the importance of the Red Sea deposits for any future boundary agreement and mineral exploitation. The quantities of minerals in these deeps are not yet precisely defined, however,

table 7.1 gives a general idea of the Red Sea Metalliferous Deeps and tables 7.2 and 7.3 give the estimated quantities of some minerals in the Atlantis II Deep and their prices.

*Table 7.1: The Red Sea Metalliferous Deeps
(According to Guennoc, et al, 1983)*

Names of Deeps	Position (Latitude and Longitude)	Depth (m)	Thickness (m)	Metalliferous Sediments			
				Fe (%)	Mn (%)	Zn (ppm)	Cu (ppm)
Commission I	19° 19'20"N 38°40' 39"E	1700 to 2000	-	Values comparable to those of the Suakin trench (below)			
Suakin SW basin	19°37'N 38°47'E	2850	74	9	3	3000	300
Suakin E basin	19°38'N 38°47'E	2830	54	10	2	700	70
Volcano	20°02'N 38°27'E	2050 to 2400	-	traces	traces	-	-
Port Sudan	20°04'N 38°31'E	2830	322	5	0.3	360	70
Erba	20°43'N 38°11'E	2396	19	traces	traces	-	-
Aswad	20°54'N 38°19'E	?	-	traces	traces	-	-
Shagara	21°07'N 38°05'E	2496	8	3.5	3	200	70
Albatross	21°12'N 38°05'E	2133	72	5	0.3	300	70
Chain C	21°16'8"N 38°05'E	2165	167	-	-	-	-
Chain B	21°17'2"N 38°05'E	2130	140	12	35	12000	200
Chain A	21°18'N 38°05'E	2072	83	12	35	12000	200
Discovery	21°17'N 38°03'E	2224	209	10	1.3	1400	100
Valdivia	21°20'N 37°57'E	1500 to 1673	123	5	0.4	250	80
Wando	21°21'N 38°02'E	2013	?	16	2	1900	280
Atlantis II	21°19'to 21°27'N 38°02'to 38°07'E	2200	upper level lower level	28	5	34000	13000
Atlantis Terrace	21°26'N 38°06'E	1977	-	33	0.3	1000	150
Hatiba	22°10'N 37°55'E	2300	-	20	0.6	850	2500
Hadarba	22°43'N 37°36'E	2200	-	3.5	0.6	300	70
Thetis	22°43'N 37°36'E	1970	-	23	9	4200	750
Nereus	23°11'N 37°12'E	2432	11	5	0.6	400	70
Nereus E basin	23°11'N 37°15'E	2458	39	10	2	1500	150

Valdivia core 03-527k	23°39'N 36°25'E	1532	-	3	0.2	200	80
Vema	23°52'N 36°30'E	1611	-	5	0.3	250	70
Gypsum	24°42'N 36°25'E	1196	-	20	0.3	900	200
Kebrit	24°43'N 36°17'E	1573	107	3	0.3	250	70
Al Wajab	25°20'N 36°10'E	1800	?	?	?	?	?
Oceanographer	26°17'N 35°01'E	1528	100	1.11	0.14	87	24

According to table 7.2, the total metal weight 28,344,545 tons is worth about \$2,480,001,967 at 1967 prices and over six billion at 1993 prices [Al-Eqtisadiyah The International Arab Business Daily, 1993, p. 8]. Quantities of minerals are given at various levels by different sources; Blissenbach and Nawab (1982) disagree with Griffin in all the figures. Generally, however, iron is dominant by volume, then, zinc and copper. Katwah (1985) also adds an estimated 500,000 tons of cobalt, not generally given in other sources.

*Table 7.2: Atlantis II Deep Metals According to Griffin
(Adapted and Quoted from Abunafeesa, 1985)*

Metal	Estimate quantity (Tons)	Value \$ at 1967 prices	Value \$ at 1993 prices
Copper	1,060,000	1,270,000,000	2,293,840,000
Zinc	2,900,000	860,000,000	2,863,750,000
Silver	4,500	280,000,000	587,880,360
Gold	45	50,000,000	526,457,655
Lead	80,000	20,000,000	21,920,000
Iron	24,300,000	-	-
Total	28,344,545	2,480,001,967	6,293,850,008

The potential commercial annual production from Atlantis II is shown in table 7.3 which also shows the prices of 1993 [Al-Eqtisadiyah, 1993]. According to Blissenbach and Nawab [1982], at that rate of production, the resources may last 15 years; he gave an estimated figure of \$6.7 billion as the value in the 1980s, whilst Rahman [1983] gave \$5 billion only for the same period. The value in 1993 is over \$6 billion which is nearer to the figure given by Blissenbach and Nawab in the 1980s (table 7.2). Because the metal value in the 1980s was higher than it is these days, it can be said that these figures which are given for 1980 and 1993 prices are more accurate than those given by Rahman.

Table 7.3: Commercial Annual Production

Metal	Annual Production	Price \$ 1993 (Per ton)
Zinc	60,000	987.5
Copper	12,167	2,164
Cobalt	144,750	6,005
Silver	115,210	3.7040 per Oz
Gold	86,000	331.7 per Oz

Adapted from Nawab, 1984

By 1983 the Red Sea Commission had spent \$58 million on exploring Atlantis II Deep alone. Moreover production costs will be high, and any commercial operation would require about 400,000 tons of mud a day to be pumped in order to retrieve commercial minerals. [Abu Bshaytt, 1985].

7.5 The Claims to the Red Sea Resources

While the Truman proclamation in September 1945 was the most specific claim to seabed jurisdiction, Britain was the first nation which claimed the seabed and subsoil of the sea in 1858 when it claimed the Crown's right to the submarine area beyond the territorial waters [Al-Shubaili, 1981, p. 11]. Since 1945 international attention has been widely focused on the seabed and subsoil but it is surprising that more claims were not made a century ago. The implications were clear as early as 1851 when a cable was laid successfully across the English Channel. In 1866 another cable was laid, this time in the Atlantic Ocean. However, the most important event was an expedition in seabed and subsoil discovery made by H.M.S. Challenger in 1872, as a result of which the first specimens of manganese and phosphate nodules were discovered. At the end of the nineteenth century the first step towards offshore oil drilling had taken place in the USA [Al-Shubaili, 1981, p. 12].

After the discovery of hot brine in the Red Sea, which indicated the richest metal bearing seabed in the world, considerable interest was created by some international companies, particularly the Crawford Marine Specialists of San Francisco [Al-Sayari, 1973, p. 9]. This firm applied to the UN for 38.5 sq. miles. of exclusive mineral exploration area in the Red Sea. The firm wanted approval to sample and map mineral deposits over three years to be sure of the revenue from commercial production [Al-sayari, 1973, p. 9]. The UN answered that it had no authority to grant mineral rights in the Red Sea. Another firm applied to Sudan on the ground that these areas lie closer to Sudan than Saudi Arabia but

the application was refused. The Saudi Government protested that such an arrangement should not be made before any regional agreement.

7.5.1 Saudi claim

As a result of the great interest in the Red Sea deposits shown by foreign companies, the Saudis took two steps: the first was its claim on September 7, 1968 to offshore resources in the Red Sea. Royal Decree M/27. Article 1 provides that

All the hydrocarbon materials and minerals in the strata of the high sea bottom with respect to an area of the Red Sea extending below the high sea and contiguous to the continental shelf of Saudi Arabia shall appertain to the kingdom of Saudi Arabia. Such materials and minerals shall be referred to as "resources" [Ministry of Foreign Affairs Saudi Arabia, (no date)].

The second step was the Saudi invitation to a regional conference to prevent any outside intervention by non Red Sea States. The Saudi Decree M/27 made no reference to the Royal Proclamation of 1949. The Kingdom therefore asserted its claim to ownership of all the hydrocarbon materials and minerals in the Red Seabed which lies in the zone below the high sea and contiguous to the Saudi Continental Shelf [Bakhashab, 1987, p. 7]. The proclamation of 1968 (see Appendix I) defined the limits of the area concerned where the coast of the Kingdom is adjacent or opposite to the coasts of another state. It also claimed ownership of these "resources" (Article 3)

The Government of Saudi Arabia alone has the right to explore and exploit these "resources" otherwise, licence should be obtained from the government and according to the Saudi Arabian Law. [Bakhashab, 1987, p. 7].

It also mentioned Saudi views on joint enterprises with neighbouring states which have similar rights recognised by the Government of Saudi Arabia to explore and exploit these areas [Bakhashab, 1987, p. 7].

7.5.1.1 The Saudi Royal Decree of 1968

There were several factors that pointed to the need for a new Saudi decree. First among them was the increase of foreign interest in the area, particularly from western firms. Second was that, as far as the Saudis could see, Sudan had granted a West Germany firm the same rights as Saudi Arabia. Third was the need for a decree to cover the whole Saudi continental shelf, the 1949 decree being limited to the Arabian Gulf only. The 1968 decree consists of 6 Articles (see Appendix I). The first states that all the hydrocarbon materials and minerals in the strata of the high sea bottom with respect to an area of the Red Sea extending below the high seas and contiguous to the continental shelf of Saudi Arabia, shall belong to the kingdom of Saudi Arabia. Such materials and minerals shall hereafter be referred to as "resources".

Article 2 states that: "resources" shall be considered part of the Saudi Arabian territorial soil and be treated as state property in accordance with article 1 of the Mining Code issued under Royal Decree No. 90 dated 11/9/1382 Hegira.

Article 3 declares that: The Government of Saudi Arabia alone shall have the exclusive right to prospect, explore and exploit the said "resources" and no other organisation, be it public or private, national or foreign, may exercise any aspect of this right except with the express permission of the Saudi Arabian

authorities concerned, and in accordance with the regulations in force in Saudi Arabia. The Government of Saudi Arabia may exercise its right to prospect, explore and exploit such "resources" in participation with neighbouring governments, that may have similar rights recognised by the Government of Saudi Arabia in any jointly shared areas.

Article 4 declared that: The said "resources" may not be acquired through actual possession or acquisitive prescription, nor may the state's ownership thereof be subject to the provisions governing excitative prescription.

Article 5 provided for the Ministry of Petroleum and Mineral Resources to be the authority concerned with the administration of the said "resources" and the implementation of Saudi Arabian rules and regulations relating thereto.

Article 6: the implementation of the provisions of these regulations shall not, to the extent prescribed by the established rules of public international law, result in prejudicing the status of the high sea or disrupting the navigation therein.

In a comment on the 1968 decree, El-Ghonaymi stated:

The law is not only promoted by the substantial fortune that lies at the bottom of the Red Sea but also by claims of some foreign firms that international waters belong to no one [Quoted from Al-Sayari, 1973, p. 15].

Al-Ghonaymi further states that the law is mainly concerned with three notions

- (1) The principle of contiguity as a basis for the rights assumed by Saudi Arabia.
- (2) Participation with neighbouring countries in exploration and exploitation of jointly shared areas.
- (3) Preservation of the status of the high seas as a free waterway.

He goes on to say:

The title claimed by the law is founded on the principle of conti-

guity and that contiguity does not only express a geographical relationship but also demonstrates reason of security, expediency and economic concern [Quoted from Al-Sayari, 1973, p. 16].

Al-Ghonaymi argues that since Saudi Arabia had no officially-defined continental shelf in the Red Sea, nor an obvious physical shelf, the line separating the legal continental shelf from its contiguous zone would be defined to a point left to the discretion of Saudi Arabia, to be agreed upon with its neighbours. Thus

- 1) the law serves as an official declaration claiming the right of Saudi Arabia to prevent any subsequent party from invoking the principles of bona fide against the Saudi Government.
- 2) The law gives Saudi Arabia the benefit of being on the defensive not the offensive whenever any dispute may arise [Al-Sayari, 1973, p. 16].

Al-Ghonaymi's explanation of the motives and objectives of this decree are from the viewpoint of the Saudi Arabian Government. However, it was harmful to the UN efforts to establish such a decree, at a time it was seeking an international agreement, but there were other factors implied in the Saudi decree:

- 1) The discovery of those mineral resources in quality as well as quantity.
- 2) The claims by some foreign firms for ownership of the Red Sea resources, coupled with the UN declaration that it had no authority over the area [Al-Sayari, 1973, p. 18].

Bakhashab [1987, p. 7] pointed out that Saudi Arabia based its claim on the fact that the Red Sea is an area similar in its geographical configuration to a closed sea, so the claim was not based on the concept of the 200 nm. limit. Under the 1958 UN Convention a state had the right to establish its continental shelf to

a point where the depth of the superadjacent waters allowed the exploitation of the natural resources of the seabed. Article 1 of the 1958 Convention which deals with the continental shelf provided:

for the purpose of these articles, the term of continental shelf is used as referring to; a) The seabed and subsoil of the submarine areas adjacent to the coast but outside the area of the territorial sea to a depth of two hundreds meters or beyond that limit to where the superjacent waters admits of the exploitations of natural resources of the said area; b) To the seabed and subsoil of similar submarine areas adjacent to the coasts of islands.

The second step by the Saudi Government was to convene a conference of five Red Sea States in Jeddah in 1972. These were Sudan, Egypt, Ethiopia, Yemen and Saudi Arabia .The conclusion of this meeting was to emphasise coastal state rights in the Red Sea. They issued a statement [Al-Sayari, 1973, p. 19] to the effect that:

- (a) the mineral resources in the Red Sea basin are, and should remain, the property of the countries bordering upon it. These countries therefore affirm their legal right to this ownership and have agreed to take the necessary steps to protect these resources from encroachment by foreign countries and organisations.
- (b) These countries have agreed to further discuss detailed ways of cooperating constructively to explore for and exploit these resources. In this connection, the Saudi Arabian Government has been approached to coordinate between the governments concerned.
- (c) The next conference will take place in Saudi Arabia in November 1972,in accordance with Saudi Arabian arrangements.

In fact, each state had its own objectives at this meeting. Saudi Arabia with the longest Red Sea coast stood to gain most. They became stronger in their claim over the Red Sea resources locally and internationally, and also managed to send a message to their neighbours over these resources especially Sudan, which was already acting according to a median line view, and Israel which had been denying the Arab view of "the Red Sea as an internal lake".

7.5.2 Sudanese claim

In 1970 the Democratic Republic of Sudan issued a statement sent to the UN Seabed Committee which declared its rights over the Red Sea resources [Abunafeesa, 1985, p. 144]. The statement states that Sudan

Would certainly not view with favour any suggestion that it should renounce its title to that area of the Red Sea in which it had already been carrying out exploratory and prospecting activities for a number of years, since it possessed these rights under existing law... and the Red Sea fisheries were an important source of food" [El-Hakim, 1979, p. 58].

It is clear that Sudan had been active in the Red Sea for two or three years before 1971, possibly resulting from the Saudi decree M/27 in 1968. Also, Sudan based its right on the 1958 Geneva Convention to which Sudan was party. According to El-Hakim [1979], Sudan considered all the metalliferous sediments existing on the Sudanese side of the median line including the Atlantis II, Discovery and Chain Deeps to be under the Sudanese jurisdiction. Many experts shared this view. Griffin [1968] for instance argues that if ownership of the Red Sea resources was based on the median line, this would fully justify Sudanese claim. Based on such the median line, Sudan signed an agreement with the West Germany mining com-

pany Preussag AGA in 1973, to explore and exploit these resources.

7.6 The Parties Claim to Seabed

7.6.1 The Saudi claim

Saudi Royal Decree M/27, 1968 (Appendix I) reveals the Saudi view relating to overlapping areas of seabed with adjacent or opposite states. According to this proclamation the Saudi view advocates equitable principles, not necessarily the median line. The Saudi application of the equitable principle can be seen in actual agreements in the Arabian Gulf, for example the Saudi-Iran Continental Shelf Agreement of 1968. This used different methods, including equidistance in the southern part of the line which divided the two states, whereas in the northern part between points 8 and 14 special circumstances were considered in relation to natural resources. Here the line deviated to the west giving Iran a small area of the seabed, that was important for its oil deposits. This kind of agreement indicates some flexibility with regard to the application of the median line.

The Bahrain-Saudi Arabia Agreement was another example of "special circumstances", where the parties agreed on joint exploitation of the Fasht bu Safa oil deposit, (see chapter 6), the revenue being divided in equal parts while the area remained under the Saudi jurisdiction.

One of the most important cases in law was the 1969 North Sea Case in which the International Court of Justice gave its judgment between the Netherlands, Denmark and West Germany, although West Germany had not ratified the Convention and was not governed by its rules [Al-Sayari, 1973]. The court stated:

Delimitation is to be effected by agreement in accordance with equitable principles and taking into account of all the relevant circumstances, in such away as to leave as much as possible to each party all those parts of the continental shelf that constitute a natural prolongation of its land territory into and under the sea, without encroachment on the natural prolongation of the land territory of the other [Al-Sayari, 1973, p. 57].

West Germany based its rejection of the median line on the fact that it was not one of the parties to the 1958 Geneva Convention and on the natural injustice of the line. The ICJ concluded in 1969:

The international law of continental shelf delimitation does not involve any imperative rule and permits resort to various principles and methods, as may be appropriate, or a combination of them, provided that the application of equitable principles, a reasonable result is arrived at [ICJ, 1969].

However, the Red Sea has no proper continental shelf as in the North Sea Case, but a Saudi claim may be based on a 200 nm EEZ, as El-Hakim [1979, p. 183] pointed out:

Saudi Arabia asserts jurisdiction over a sea bed area which it considers falls beyond the outer limits of its continental shelf. Thus Saudi Arabia in this respect is based not on the doctrine of the continental shelf but rather, it may be stated, on what has now crystallised and come to be known as the concept of the 200 mile exclusive economic zone.

However, if the Saudis had accepted the 1958 Convention concept, its continental shelf claim might have been based on exploitative criteria, applicable in a narrow sea such as the Red Sea.

7.6.2 Sudanese claim

In November 1970 the Republic of Sudan issued the following declaration:

The Democratic Republic of the Sudan shall have the rights of

sovereignty over the continental shelf for the purpose of exploring it and exploiting its natural resources and no one shall explore or exploit as aforesaid or make a claim to the continental shelf without the express approval of the council of ministers [Act of Sudan, 1970, Appendix K].

It is reasonable to conclude from the date 28 November 1970, on which the act was issued, that the Sudanese were responding to the Saudi decree M/27 1968. A second response was the 1971 statement to the UN Seabed Committee, followed by the 1973 Red Sea Minerals Exploitation agreement with a German company. Sudan based its claim over the seabed on the 1958 Geneva Convention in which article 6 states:

Where the same continental shelf is adjacent to the territories of two or more states whose coast are opposite each other, the boundary of the continental shelf appertaining to such states shall be determined by agreement between them. In the absence of agreement, and unless another boundary line is justified by special circumstances, the boundary is the median line, every point of which is equidistant from the nearest points of the baseline from which the breadth of the territorial sea of each state is measured.

The strong reaction from the Sudanese Government reflects the importance of the Red Sea for Sudan. It is Sudan's only outlet to the sea. Moreover, the war in the south and the widespread drought has made Sudan one of the poorest countries in the world. This led to the increasing importance of the sea for Sudan as a source of food as well as mineral exploitation.

7.7 The Significance and Objectives of the Agreement

The Saudi-Sudanese Agreement was a direct consequence of the growing claims to the seabed by states worldwide as well as companies such as the American marine resources firm which applied to the UN for a 38.5 square-mile

area in the Red Sea in February 1968. Several other companies expressed an interest in the deposits lying in the area. This was due to the increased needs for strategic mineral resources and the sharp increase in mineral prices which reached their peak at the end of the 1970s and the early 1980s before declining.

The first aim to this agreement was to determine the boundaries between the two states. Saudi Arabia had completed and defined its boundaries in the Arabian Gulf except with Kuwait in the Saudi-Kuwait Neutral Zone at the time, but the Red Sea boundaries were undetermined. Secondly foreign claims could have resulted in foreign control over the Red Sea resource, and this was the main reason behind Saudi and Sudanese declarations in 1968 and 1970. The third objective was to resolve any disputes which may arise between the parties in the area. For example after the agreement between the West German Company Preusag and Sudanese Minerals Ltd. in 1973 brought a third party to the area. [El-Hakim, 1979].

7.8 The Common Zone as a Red Sea Model

There are now 13 joint arrangements worldwide according to the US Department of State [1990, p. 34], or 15 Common zones according to Blake [1991], including the 1991 USA-USSR boundary agreement which includes certain special zones. These shared zones, or zones of non-state and restricted state sovereignty as described by Blake [1991], can be divided into two types: The first, are zones which have been defined and stated between two or more sovereign seabed jurisdictions. This categories include the Saudi-Bahrain, Saudi-

Sudan Red Sea Joint Zone, Malaysia-Thailand Joint Development Zone, France-Spain, Iceland-Norway and Japan-South Korea. The second type of joint zones are shared agreements which have not been defined or limited by specific area, but rather lie along the boundaries between the two states or may even be found on one side of the boundary line and can be exploited in a whole or in part from the other side of the boundary. This latter type of zone may embrace one single geological structure. The resources in this type may not have been found or proven, and may require further surveying to be carried out in order to be proven. An example of these agreements are the Australia-Papua New Guinea, Argentina-Uruguay and Australia-Indonesia Agreements.

The Saudi-Sudan Joint Common Zone can be seen as a Red Sea model in the method that has been used to define its geographical boundary. It is a geological-based joint zone, where the depth of the waters is used as the limit of the two sovereignties, in this respect Article 3 and 4 state:

...to a line where the depth of the superjacent waters is uninterruptedly one thousand meters.

as the limit of exclusive sovereign rights in the area of the seabed adjacent to the two Saudi and Sudan Coasts, the area lying in the middle will be the common zone (see Figure 5.3).

The Red Sea agreement is also seen as a model for exploitation of mineral deposits in the form of both brine pools and metalliferous sediments [Couper, et al, 1983, p. 114], while the other common agreements are based on either living resources or hydrocarbons. Oil is unlikely to be discovered in the common zone, despite the fact that, the agreement has mentioned hydrocarbon as a resource

which could be explored and exploited by the commission as stated in Article 1(2).

Saudi Arabia is the financial sponsor of all the costs of exploring and exploiting Red Sea resources, including Sudan's share, which will be recovered from the revenue of the project. In this respect, Article 12 stated:

The Government of the Kingdom of Saudi Arabia shall provide such funds as would enable the joint commission to discharge effectively the functions entrusted to it. The Government of the Kingdom of Saudi Arabia shall recover such funds from the returns of the production of the common zone and in a manner to be agreed upon between the two countries.

The Government of Saudi Arabia provides the site of mining operation and all necessities which may be required in order to carry out its operations, such as electricity, gas, water and fuel at the same price as enjoyed by Saudi industries inside the Kingdom, supported by aid from the Government [Khatwah, 1985, p. 68].

7.9 Conclusion

To conclude, it can be said that, despite the calling off of the Red Sea mineral exploitation due to the decline in world mineral prices, the long term future of these sites looks promising, and the Red Sea Commission as a body represents healthy co-operation between two neighbouring states. It represents an example of a peaceful settlement of maritime boundary delimitations and is a prime example of the co-operation between two states bordering a semi-enclosed sea as stated in Article 123 of the 1982 Convention.

The Red Sea boundary with Sudan is largely a success story, but not all

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Saudi boundaries have been settled. Indeed some, as discussed in Chapter 8, remain to be defined.

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Chapter Eight

SAUDI ARABIA'S UNDELIMITED BOUNDARIES

8.1 Introduction

Saudi Arabia's undelimited maritime boundaries with its neighbours are found mainly in the Red Sea (see table 1.2). Only one boundary remains to be delimited in the Arabian Gulf, between Saudi Arabia and Kuwait, where there are difficulties in delimiting the area due to its complex political history and potential importance for oil. The unsettled Red Sea boundaries between Saudi Arabia and Egypt and Saudi Arabia and Eritrea are opposite boundaries, while the unsettled Saudi-Yemen boundary is an adjacent boundary. The latter is the most important and most potentially dangerous, despite the fact that the parties defined their land boundaries in 1934. The large number of islands involved complicate this problem. Potential gas and oil deposits could also feature prominently in this case which will hopefully find a peaceful solution. The Saudi-Eritrea boundary probably the least important economically and politically due to its short length and its relatively unproductive seabed.

The Saudi-Egypt Red Sea boundary is the longest unsettled Saudi maritime boundary (more than 360 nm) but despite this fact, it is relatively insignificant to the two states. Fishing in the vicinity is said to yield the lowest catch in the Red Sea and the mineral deposits are not commercially viable at present.

In the Red Sea, Saudi Arabia and Egypt have both declared straight baselines, primarily to gain control over extended internal waters in which the state can exercise the same degree of sovereignty as on land. The 1990 Egyptian claim

to straight baselines, particularly in the Red Sea (Figure 2.27), emphasises this function. By excluding Tiran island from its straight baseline, Egypt demonstrate that, territorial control is less significant than the economic factor, which they are anxious to gain and secure in the Gulf of Suez. Tiran island is no longer strategically important after Israel was granted free navigation through the Suez Canal, and as long as the Arab control over Bab Al-Mandab Strait remains. This chapter highlights the importance of settling undefined Saudi Arabia's maritime boundary with its neighbours.

8.2 Saudi-Kuwait Boundary

The boundary between these two states in the past was a line border and a zone border. The first was extending from the west at the point where the Saudi Arabian and Iraqi boundaries meet, and runs eastward until it meets the zone boundary, called the Saudi-Kuwait Neutral Zone, which was partitioned in a 1966 Agreement (see Figure 8.1) (see also Appendix J). The Neutral Zone consists of 2,500 sq. miles (6,475 sq.km) of desert. Its coastline measures over 40 miles (64.4 km) long on the Arabian Gulf [Day, 1982, p. 229]. This area was equivalent to 36 per cent of the area of Kuwait [Blake, 1991, p. 5]. The Neutral Zone extends from the land area defined according to the 1922 Uqair Agreement into the Arabian Gulf, because it is basically recognised in international law that, a boundary that reaches the sea does not terminate at the coast, but is continued through the water in some manner that is fair to both countries [El-Ghonemy, 1966, p. 699]. Article A(2) of the ICJ in the continental shelf "Tunisa-Libyan"

Judgment of 24 February 1982 stated:

The area relevant for delimitation constitutes a single continental shelf as the natural prolongation of the land territory of both parties [Conforti, 1987, p. 34].

The practice of Saudi Arabia and Kuwait in respect of this principle also supports this view, which is based on two factors. Firstly, is the concession granted by both countries to the Getty Oil Company whose concession stated:

His Majesty the King of the Kingdom of Saudi Arabia, among other things, has sovereignty over undivided one-half interest in and to the neutral territory lying between Saudi Arabia and Kuwait [El-Ghonemy, 1966, p. 700].

Secondly, the Saudi Royal Decree No. 6/5/4/3711 of 28 May 1949 and Decree No.33 of 16 February 1958 relating to the territorial waters of Saudi Arabia [El-Ghonemy, 1966, p. 700]. The pronouncements promulgated by both Saudi Arabia and Kuwait were regarding the offshore area of the two countries proper, and reaction of the Getty oil company was to submit in January 1963 a claim to Saudi Arabia in connection with the Saudis extending its territorial waters in the Neutral Zone. The company pointed out:

since the breadth of the territorial sea of Saudi Arabia proper was extended for six more miles, the company had the right to extend its operation in the territorial sea of the Neutral Zone [El-Ghone-my, 1966, p. 701].

8.2.1 Background to the Saudi-Kuwait Dispute

Since the concept of the state originally emerged, state territorial limits have never been permanently fixed, but change from time to time. Throughout history empires, kingdoms and states have passed through similar stages creating

a wide range of boundary marks, but as these types of rule decline their boundaries change shape. The changes taking place now in Eastern Europe and the former Soviet Union gives a fine contemporary example of such boundary changes. In the Arabian Peninsula, many international boundaries may be challenged in whole or part and none of them should be regarded as permanent. In this respect, Wilkinson [1991, p. 1] stated:

The only fully ratified international agreement that has ever been demarcated on the ground of Arabia is the short section from the Red Sea to Wadi Bana between the Ottoman Vilayet of Yemen and the "nine cantons" of British Aden.

However, even this boundary was dissolved after the unification of the two Yemens in 1990. Maritime boundaries however, have a unique feature resulting from their complexity and to resolve disputes that may arise between the parties, a solution has to be implemented, even though this solution often produces as much conflict as it removes [Buzan, 1978, p. 3].

The Neutral Zone between Kuwait and Saudi Arabia, resulted from the 1922 Treaty of Uqair, by which the Sheikh of Kuwait lost about two thirds of the territory originally allocated under the 1913 Anglo-Turkish agreement within the "Green Zone". As an attempt to mollify the sheikh, the Neutral Zone was established. Oil was reported to be there, which was the key factor in drawing a neutral zone. Blake [1991, p. 5] stated:

Far more important however were reports of oil in the vicinity of Khor Maqta, which the British wished to ensure was not lost entirely to Kuwait.

In this respect, the 1922 Uqair Agreement stated:

In this territory, the Government of Najd and Kuwait will share

equal rights until through the good offices of the Government of Great Britain a further agreement is made between Najd and Kuwait [Lauterpacht, et al (eds), 1991, p. 48].

However, according to Blake [1991, p. 5], the Treaty did not make any reference to offshore arrangements, made no provision for administration, and gave no guidance about what to do in cases of dispute.

After 1953, increasing oil production in the Neutral Zone led to increases in the number of workers which reached 4,000. Accusations were made by Kuwait that the Saudis were treating the entire workforce as though it was under Saudi law. The Saudis proposed the creation of a proper joint administration headed by a council of four, but Kuwait did not agree. Eventually, the idea of dividing the Neutral Zone was accepted by the parties and concluded in the 1965 agreement [Blake, 1991, p. 6]. This agreement came into effect by exchanging the instruments of ratification in 1966 and the signing of a subsequent demarcation accord at the end of 1976. The parties agreed to partition of the area, leaving the southern half part under Saudi sovereignty and the northern half under Kuwaiti sovereignty however, the parties enjoyed some rights over each part by the rights granted to the inhabitants and their properties on each side creating a new type of sovereignty where there is no complete state sovereignty, but by 1970 the parties had agreed to complete the allocation of properties and facilities in the zone [Day, 1982, p. 229].

This partition agreement is significant because it opened the door to a new era of full co-operation between the two neighbouring Arab States in matters relating to the future exploitation of natural resources in the zone [Al-Baharna,

1968, p. 735]. The "shared" zone (in respect of revenue not territory) between the two countries is more important than the Neutral Zone in respect to exploitation due to the limited area which the offshore territory represents.

8.2.2 The Islands Problem

Disputes relating to islands may be over sovereignty or concerning ownership of vast areas of seabed. Mid-ocean islands for example can possess an area of Exclusive Economic Zone or continental shelf covering to up 125,000 sq. miles of surrounding sea. A second problem relates to island status. Disagreement may rise over the distinction between an island which has full continental shelf rights and rocks which only have a 12 nm territorial sea if they lie within 12 nm of the baseline as stated in Article 121 of the 1982 Convention [Buzan, 1978, p.6].

The problem over Qaru and Umm Al-Maradim Islands began on 2 September 1949 when Kuwait granted a concession for the two islands to the American Oil Company of California [El-Ghonemy, 1966, p.706]. Kuwait claimed full sovereignty over them on the grounds that they were not connected with the original dispute which led to the establishment of the Neutral Zone, the dispute between the two states being on land and not about the seabed [El-Ghonemy, 1966, p.706]. As a result of the Saudi protest against the concessions, Kuwait offered to share sovereignty with Saudi Arabia which declined the offer, preferring to delay a decision on the islands until the boundaries of the Neutral Zone had been settled. At the present time, the islands remain under Kuwaiti control,

but Saudi Arabia has never formally abandoned its claim to sovereignty over them [Day, 1982, p. 231]. According to El-Ghonemy [1966, p. 707], Kuwait's claim to the two islands was based on the 1913 Anglo-Turkish agreement (Article 5) where Qaru and Umm al Maradim were included within the Red line within which the ruler of Kuwait had autonomy. However, El-Ghonemy argues that Kuwait's claim has no validity for several reasons. The first is that the 1913 agreement was never ratified by the parties. Secondly, Kuwait never became a party to the agreement by adherence or by accession, therefore the agreement can not be enforced against Saudi Arabia. Thirdly, Great Britain who had been party, explicitly pointed out that the agreement was not a document to which Kuwait became a beneficiary. Fourthly, Great Britain signed an agreement with Ibn Saud in 1915 in which the parties stipulated that the territories of Najd and Kuwait "shall be hereafter determined" in this respect the British Government explained to the Sheikh of Kuwait that:

The Anglo-Turkish Agreement was not a document to which he was actively a part, and that in any case, it had been superseded by clause VI of His Majesty's Government's Agreement of December 26, 1915 with Ibn Saud [El-Ghonemy, 1966, p. 707].

Finally, Kuwait's status under the 1913 agreement depended on the personal influence of the Sheikh of Kuwait over the tribes and not over territory. In this respect the Kuwait Political Agent in the 30 April 1913 passed comment on Articles 5, 6 and 7 of the draft agreement dealing with the territorial status and definition of Kuwait. He commented that

...the division of his "Mubarak's" territory into two portions, over which he and the Turkish Government will have authority different in degree and kind, will be unintelligible to the Sheikh and will

moreover lead to constant friction, for the inner segment defined in Article 5 has no naturally definable boundary and is a paper arrangement which the Shaikh will be unable to maintain in the exercise of his authority throughout the whole of the two portions over which at present it is identical in character ... the suggested difference will furnish the Bedouin tribes subject to the Shaikh and the Turkish authorities with endless opportunities for petty intrigue and friction [Schofield, 1991, p. 45].

Also, the 1913 agreement was designed primarily for administrative purposes, the status of the two regions being delimited by the Red and the Green lines (see Figure 8.2). Cox [1912] explained:

while the town, harbour and immediate surroundings "of Kuwait" should be completely autonomous the remainder of Koweit territory to the extent attributed to it in Lorimer's Gazetteer should be specifically recognized as being under the administrative influence of the Shaikh of Koweit and that the Porte should agree neither to place military posts nor take any other action within it without the previous joint consent both of the sheikh and of ourselves [schofield, 1991, p. 43].

The 1990-1991 Gulf War in which Iraq occupied Kuwait may change the nature of the agreement over these two islands because the relationship between the two states is now very warm due to the fact that the Saudis stood by the people of Kuwait against Iraqi aggression. Saudi Arabia paid more than \$24 billion in this crisis alone which in fact may be more than that amount of money which may be gained by the ownership of Qaru and Umm Al-Maradim and their oil revenues. Kuwait could modify its claim of complete control over the two islands and accept some Saudi share in this right. The joint arrangement over the partition zone resources since the 1922 Uqair Agreement, may point to the feasibility of sharing offshore resources.

Saudi Arabia's claim over the islands is not based on the 1913 Anglo-

Turkish agreement, but rather on the fact that one of these islands lies within Saudi territory. According to the Cabinet Office [in Schofield, 1991] His Majesty's Government recognized the territory within the inner boundary "the red circle" as definitely appertaining to Kuwait and that this is not open to dispute. It is arguable that beyond this area Saudi Arabia had some rights (see Figure 8.2). The equidistant line which separates the two states runs from the coast where the land boundary meets the sea, to north of Umm Al Maradim island leaving it on the Saudi side of the line according to the 1966 partition. Figure 8.3 shows the equidistant line based on the general direction of the coast as the main factor affecting the line in favour of Saudi Arabia. Figure 8.4 shows various proposed median lines drawn in 1959 which include the Saudi line, the Rationalised line, the Anglo-US talks line, and the line taking account of Bildani reefs [Schofield, 1990, p. 352].

The author's opinion is that; if Umm Al Maradim island agreed to be under Kuwaiti sovereignty, it would give Kuwait a large area of seabed originally under Saudi sovereignty. The Kuwait sovereignty over Umm Al Maradim island would generate 12 nm territorial sea and continental shelf overlapped with the Saudi mainland territorial sea. This would almost reduce half the Saudi territory and reduce also any Saudi advantage that resulted from the 1966 partition. According to Offshore [1990], Saudi crude oil reserves in the offshore area of the partitioned zone is 2.5 billion (bb1) of crude oil and 4.5,000 (bcf) of gas. The effect of the island could modify the general effect of the direction of the coast in favour of Kuwait. The overlap with Umm Al Maradim will cut by about half the

area which lies between the Saudi main coastline and the island, putting it under Kuwaiti sovereignty. Furthermore, the economic factor is the most important in this oil rich area.

8.3 Saudi-Yemen Boundary

The importance of the Saudi-Yemen boundary area in the Red Sea is economic and strategic. Fisheries in the area are good, and there are indications of petroleum. The Saudi-Yemen land boundary was the subject of a long historical dispute over the sovereignty of the coastal area and internal highlands, but it was finally agreed in the 20th May 1934. The large number of islands whose sovereignty is undecided, along with promising oil discoveries may encourage an early settlement of the maritime boundary between the two countries. Yemen¹ also established its territorial waters and continental shelf claim by decree No. 15, 1967 (Appendix L) which has similarity with the 1958 Saudi Decree.

8.3.1 Living Resources

The Saudi southern Red Sea coast has the largest continental shelf in the Red Sea, the breadth of which is 120 km wide around the Jizan area [Al-Jasr, 1989, p.181]. This large shelf extends into Yemeni waters forming the most important commercial fishing zone in the Red Sea. The shallow water is attractive to fish and marine plants which depend on each other. The Farasan islands area is the most significant for fishing for the near by coastal communities. Figures 8.5,

¹. North Yemen before the unity with the south.

8.6 and 8.7 (photographs) show some of Saudi's southern Red Sea Islands and fishing activities conducted by local fishermen, vegetation, birds and Coast Guards are also shown in some of these photographs. Figure 4.3 (chapter 4) shows fishing in the Red Sea and the potential commercial fishing area; shrimp is said to be one of the sea species found in commercial quantities [MEPA, 1989, p. 36]. According to the same source, Farasan area alone can increase the amount of fish landed in Saudi Arabia by about 25,500 tons a year [more details on living resources in the Red Sea in chapter 4].

8.3.2 Non-Living Resources

The potential importance of the southern Red Sea coast for non-living resources can be judged by efforts of the Yemeni Government to discover oil on the Red Sea coast and offshore. In 1953 a West Germany company (Deilmann Berhgou) under the name of Yemen Deilmann Petrol, under took aerial surveys and other prospecting work north of Hodeida, but this work stopped in 1955. In that year the Yemen Government granted exploration permits covering 40,000 sq.km to the Yemen Development Corporation, a majority American-owned company. But its activities were later abandoned, due to shortage of funds [Arab World File, 1981]. In 1959 American Overseas Investment Corporation was granted concessions in the Tihama coastal plain measuring 10,000 sq.km, but the company failed to start work. The concession was later withdrawn and transferred to John W. Mecom Co. (USA) in 1962. The drilling gave no result and work was stopped by the Yemeni civil war of 1962. In 1964 Yemen Fuel Co. (YFC) with

51 per cent shares and Egypt (49 per cent) established a joint venture. The company carried out oil operations including import and distribution. In 1970 the Algerian company Sonatrach shared concessions equally with the Yemen Oil and Minerals Industries Co. (Yominco). Yominco was revived as North Yemen National Oil Company in the following year then became the Yemen Petroleum Co. [Arab World File, 1981].

Despite all this work, oil was not discovered until 1981. The West German Deutsche Shell AG which was granted a concession in 1974 and abandoned it, was given a new exploration licence covering 15,000-18,000 sq.km in an offshore area in the Red Sea within an area extending from Saudi-Yemen boundary to the port of Hodeida. The most significant exploration work was carried out by Hunt Oil Co. and Yominco from 4 September 1981, in a concession covering an area of 12,600 sq.km. In March 1984 Hunt was granted an offshore concession covering an area of 12,955 sq.km extending from the Saudi Arabian border to approximately latitude 15° north. Later in October 1990 British Petroleum took control of this concession area. Saudi Arabia's policy towards all these Yemeni attempts was based on aid, technical support and advice. The good news of oil discovery in the area from the Saudi point of view can be summarised in the following statement of October 20, 1987:

The Kingdom of Saudi Arabia was the 1st to congratulate its brothers in the YAR at the time of the oil discovery in its land, and the Kingdom wishes its government and people every progress, well-being and prosperity [Middle East Economic Survey, 1987, p. A3].

According to all these concessions and joint ventures, it is clear that the

Red Sea area is an important hydrocarbon zone. This underlines the significance of any small portion of the land or the sea and most important its islands. The Saudi-Yemen 1934 land boundary agreement is well marked reflecting the attention given to the boundary and its potential for dispute. The 1934 Taif Agreement was concluded after the two states engaged in war, but it has yet to be extended offshore.

In part of Saudi Arabia, oil was said to be found in Farasan Islands as early as the Idrissi control over the area. According to Dr. Lanzoni [in Robertson, 1979, p. 31] crude oil was reported to appear at the ebb tide between Farasan Al-Kabir (Greater Farasan) and Farasan Al-Saghir (Lesser Farasan) Islands. In 1926 an oil concession in Farasan area had been granted by the Idrissi to the Eastern General Syndicate Limited. But the concession was lost to the Anglo-Saxon Oil Company which made a more attractive offer [Robertson, 1979, p. 27]. Also, in July 1936 the Kingdom of Saudi Arabia and the Petroleum Concessions Limited agreed on a contract for six years which covered the whole of the western coastal region of Saudi Arabia, beginning at the Trans-Jordan boundary and stretching to the Yemen border in the south, a with width of 100 km, including territorial water and islands [Robertson, 1979, p. 186]. In recent years Saudi Arabia has shown some interest in oil exploration in the Red Sea. The Campaign Francaise des Petroles, which had been exploring in the area since November 1977, has discovered oil in the area. The reserves are said to be as much as 5,000 million barrels [Arab Asian Affairs, 1982].

These activities, whether fishing or hydrocarbon extraction suggest the

need for more co-operation between the two states. Saudi Arabia has shown its willingness to achieve a closer Arab co-operation, and until the 1990 Gulf crisis, Yemen was the only Arab country whose people enjoyed rights of residence within the Kingdom. Aid from Saudi Arabia also ranked first of all the aid that Yemen received. The two states have been working together solving this issue by exchanging the documents related to their common boundary [Al-Watan, 1985]. Recently (1992-1993) Saudi Arabia and Yemen engaged in negotiations in order to define their boundary on land and in sea. The Saudis views is that any future settlement should be based on the 1934 Taif Agreement [MEES, 1992]. Asharq Al-Awsat Daily, reported on 13 January 1993 that, the fourth round of talks between the Committee of Experts of the two states was held in Riyadh, in which the Saudi side called for the 1934 Taif Agreement to be the basis of the talks, while the Yemeni side called for the principle of no loss or disadvantage, which would guarantee the legal rights of the two sides.

8.3.3 Islands

The southern Red Sea and the eastern coast in particular contains the largest number of islands in the Red Sea. The Farasan group alone contains as many as 80 islands including islands between the mainland and the Farasan archipelago. These islands include Umm Al-Kuthub and several others which occupy the area opposite to Jizan. Not far to the south lies Amnah Island, which is bigger and is more attractive because of the vegetation which covers a large area. Gadiyah Island is due to its proximity to the mainland probably the main

centre of activity where fishermen will often spend two or three weeks working. To the south² of Gadiyah lies Zahart Island, a small oval island not more than one hundred meters long which disappears at high tide. As can be seen from the photograph, the islands are low lying and much frequented by birds. There is also another island of circular shape, which is bigger and higher and visible from a distance [see Figure 8.5 (1,2,3 and 4)]. At the time of photographing these islands the sea was calm and the weather was fine. Just less than one mile to the west of Zahrat Island lies a long island called Ja'fari which has more vegetation and there are some fishermen's boats off the coast. Twelve miles south lies Big Ashiq Island near the Saudi-Yemen boundary. Near by is Small Ashiq Island [see Figure 8.6 (5,6,7 and 8)]. The nature of the islands is illustrated in Figure 8.7 (9,10,11 and 12).

There is no formal agreement over the ownership of these islands. The Saudi Ports Authority (1983, Chart No. 27) maintains certain installations and administrative buildings such as lighthouses and Coast Guards stations on some of these islands [see Figure 8.7 (11)]. Murayn Island is shown in Figure 8.7 (10). North west of Murayn and over one nautical mile away lies Rumayn Island [Figure 8.7 (11)]. The island is large and covered by vegetation [Figure 8.7(12)]. East of Murayn lies Rubah Island, Shi'b Al-Hashish Island and small Ashiq Island between the mainland and Shi'b Al-Hashish Island. The ownership of the islands involved has not yet been solved which is an essential factor in drawing

². The directions mentioned in the text are given while the author in a moving, boat to site the islands and reflect the positions at the time of taking the photographs.

an equidistant line. The author has therefore divided them after a considerable reading of several adjacent agreements effected by the presence of islands and the general direction of the coast and on the light of the 1934³ Taif Agreement. Employing such an equidistant line between Saudi Arabia and Yemen will cede more islands to Saudi Arabia which may include some of the Sumeir, Barri, Nakal, and Rafa Barri islands.

The author conducted field work in the Red Sea in March 1990 before the August 1990 Gulf crisis. At that time, relations between Saudi Arabia and North Yemen were brotherly and warm. Fuel and medicine were among the commodities exchanged between Coast Guards on both sides. Yemeni fishermen carried out their fishing under Saudi licence. Such a working relationship is one of the requirements of the 1934 Taif Agreement which stresses the need to exchange visits and participate in activities of common interest [Ministry of Foreign Affairs, 1936/ 1973]. Although the Taif Treaty does not apply offshore, the collaboration described is clearly in the spirit of the Taif agreement.

There is also a general understanding between the two parties along their common boundary on islands sovereignty. Indeed, there is no report of any kind of trouble between the two states along their maritime boundary. Moreover, the extensive Saudi presence on the islands either by permanent Coast Guards or fixed installations has never been contested by Yemen.

³. It is important to note here that, according to the 1926 Saudi-Idrissi Mecca Agreement, the old territory which was under the Idrissi influence in the 1920 shall be under the sovereignty of King Abdul Aziz.

8.3.4 Boundary Delimitation

An attempt to delimit the Saudi-Yemen boundary may be more complicated than it seems due to the type of delimitation required, which involves territorial waters and a continental shelf as well. In the author's opinion an adjacent line extending from the point where the Saudi-Yemen boundary meets on the coast to a point at the centre of the Red Sea might conveniently place the islands Rafa Barri, Sumeir, Irdhain, Barri and Nakal on the Saudi side of the line. The above islands are not included in the 1990 Yemen-British Petroleum concession which indicate Yemeni understanding in the area. According to the Yemeni statement presented to the United Nations in 1985 Article 3 stated that

The Yemen Arab Republic confirms its national sovereignty over all the islands in the Red Sea and the Indian Ocean which have been its dependencies since the period when the Yemen and the Arab countries were under Turkish administration. [Law of the Sea Bulletin, 1985].

From the author's point of view, Yemen by this statement making a claim over the two Yemeni islands of Hunnish occupied by Ethiopia. The Yemeni statement in no way affects Saudi rights over its islands in the Red Sea which the Saudis inherited by the 21 October 1926 Saudi-Idrissi Mecca Agreement. Article 1 of this agreement stated that

Al Sayd Hassan bin Ali Al-Idrissi have recognized that the old boundary which was declared by 1920 agreement between the King of Nejd and Imam Al-Sayd Muhammad bin Ali Al-Idrissi which was under Idrissi influence at that time shall be under the sovereignty of His Majesty the King of the Kingdom of Hejaz and the ruler of Nejd and its Dependencies according to this agreement [Ministry of Foreign Affairs (KSA), 1922/1951, p. 23].

The Idrissi influence dominated the coast of Tihamah where its territory

was situated between the territories of Ibn Saud (in the mountains of Assir) and Imam Yehya on the east and the Red Sea on the west including the Farasan and Kamaran Islands, and in the north from the boundary with Ibn Saud, south of Al-Gonfodah, to the south just north of the town of Hodeidah (Figure 8.8) [Sinclair, 1976, p. 12]. Hodeidah Port was under the Idrissi rule until 11th of March 1925 when it was occupied by the Imam of Yemen [Sinclair, 1976, p. 159].

According to Article 2 of the 20th May 1934 Taif Brotherhood and Islamic Co-Operation Agreement between the Kingdom of Saudi Arabia and the Kingdom of Yemen, the parties recognized the independence and the sovereignty of each state over its parts of the country and dropped any claim over any part of the territory beyond the boundary agreed upon. Any part of the Idrissi territory inherited by the two states would be recognized as part of the two states and any territorial claim shall be dropped. [Ministry of Foreign Affairs (KSA), 1922/1951, p. 153.].

A theoretical adjacent line shows the Saudi-Yemen maritime boundary (Figure 8.9) in the first attempt to define the area between the two states. It has to be emphasized that this attempt does not intend to draw a strict equidistance line but rather to show the most important islands involved and the trend that the equidistance line might take. However, the following steps will need to be undertaken before any agreement is reached.

- 1) A survey will have to be carried out in order to give an accurate map of the coastal water features such as islands, low-tide elevations and the coastline. The importance of this first step is due to the fact that, several

existing maps and charts show a different interpretations of this area.

- 2) The position of the land boundary where it meets the sea, based on the 1934 Taif Agreement must be sited accurately on charts, depending partly on fresh coastal surveys.
- 3) The ownership of the islands involved will have to be settled in order to employ the adjacent line between the two states taking into account other circumstances such as the general direction of the coast. This step is crucial to any future agreement. Figure 8.9 gives an example of what such a settlement might be once islands sovereignty has been resolved.
- 4) The geographical position of Ashiq island and Atwaq will play a major role in the trend of the equidistant line if full account of their position is taken. Ignoring them will be in favour of Yemen. The group then have to be divided between the parties on the bases of the general direction of the coast which will yield to Saudi Arabia more islands than Yemen.

The line shown in Figure 8.9 is an approximate boundary based on the admiralty chart No.141. The line where the boundary meets the sea was drawn approximately from two Saudi geological maps GM-18 No.1 and 2. This study is an academic attempt to answered some of the boundary problems in this part of Saudi Arabia.

Figure 8.9 shows the theoretical adjacent line which runs from the point where the land boundary meets the sea to point No.1 which lies an equidistance from the coast of Saudi Arabia and the coast of Yemen. From point No.1 the line then runs to connect with point No.2 which is an equidistance between Ashiq and

Atwaq Islands putting the former on the Saudi side and the latter on the Yemen side respectively. The line then moves to point No.3 which is the centre of a circle whose edges touch Ashiq and Atwaq islands. The line then runs to point No.4 which also is the central point of another circle whose edges connect Ashiq with unnamed islands. The line continue its move between central points shown by numbers 5,6,7,8, and 9. All these points are the centre of circles whose edges touch islands on both sides of the line. Point No.10 is the centre of a circle whose edges connect Fasht Island on the Yemeni side and Irdhaim Island on the Saudi side. From point No.10 the equidistant line runs to point No.11 which is the centre of a circle whose rim touches Sumeir Island to the north of the line and Sana Island to the south of the line. The line then runs to point No.12 which is an equidistance between Sana and a small island which lies south of Rafa Barri to the north of the line. Point No.13 is the end of the adjacent line which is also an equidistance between the last two islands. The area lying north of this line is theoretically Saudi territory, and the area lying to the south is theoretically Yemeni territory.

8.4 Saudi-Egypt Boundary

The Saudi-Egypt maritime boundary in the Red Sea has yet to be defined despite the good relations between the two states. It is potentially the longest maritime boundary between Saudi Arabia and its neighbours. Excluding the Gulf of Aqaba, the theoretical median line between the two states is over 360 nm long. The potential mineral deposits between the two states will increase the importance

of their common boundary. These deposits are not commercially viable at the present time, but they may become important in the future. The area also plays an important role in inter-oceanic navigation between the Red Sea and the Mediterranean sea through the Suez Canal ultimately joining the Indian with the Atlantic Ocean. The Saudi-Egyptian zone is less important for fishing and oil exploration. The author can see no motivation to push the parties to an urgent settlement and the boundary may remain undelimited for some time in the future. If world metal prices soared, mineral exploitation in a Saudi-Egyptian boundary area along the lines of the Red Sea Commission could conceivably become attractive.

8.4.1 Egyptian Straight Baselines

The straight baselines issued in 1949 by Saudi Arabia and in 1951 by Egypt used the same language to define their straight baseline and territorial waters. For instance Article 1 of the 1949 Saudi straight baseline stated the following

For the purposes of this decree,

- a- The term "nautical mile" is the equivalent of 1,852 meters
- b- The term "bay" includes any inlet, lagoon or other arm of the sea.
- c- The term "island" includes any islet, reef, rock, or permanent artificial structure not submerged at lowest low tide.
- d- The term "shoal" denotes an area covered by shallow water, a part of which is not submerged at lowest low tide.
- e- The term "coast" refers to the coasts of the Red Sea, the Gulf of Aqaba, and the Persian Gulf.

This is the same as the language used by the Kingdom of Egypt at that time. Also, Article 4 of the Egyptian straight baseline is similar to Article 3 of the Saudi decree, while Articles 6,7 and 8 in the Egyptian decree match Articles 5,6

and 7 of the Saudi decree respectively. Article 7 of the Egyptian straight baseline uses precisely the same language as Article 6 of the Saudi decree. One point can be seen from this similarity, that is that the two states were close in their co-operation of maritime affairs.

Egypt's 1990 straight baseline claim (Appendix M) adapted new methods far different from the 1951 claim [Law of the Sea Bulletin, 1990]. However, the decree does not meet the test of the 1982 Convention in respect of the coast being fringed with islands or deeply cut into Francalanci and Scovazzi [1991] argue that they

...give the rather paradoxical impression of being illegitimate though moderate. As the coast is devoid of relevant features, like deep indentations or fringes of islands, there seems to be no legal basis for establishing a straight baseline system.

This comment on the legitimacy of the Egyptian baseline may describe the Mediterranean baselines rather than that of the Red Sea, but between points 36 and 44 and in the Gulf of Aqaba the lines are clearly illegitimate, due to the smoothness of the coast. The segment from Ra's Muhammad to Abu Soma enclosing the Gulf of Suez is a closing bay which in fact, meets the semi-circle test. The baseline between points 44 to where the treaty boundary with Sudan is met can be described as fulfilling the requirement of the 1982 Convention, due to the islands fringed and indented coast.

The Egyptian straight baseline which runs along the Gulf of Aqaba southwards to the Egypt-Sudan boundary in the Red Sea is about 525.6 nm long. Although the baseline was established where the coast was neither fringed with islands nor had deep indentations, Egypt did not take an extreme attitude in

drawing this baseline. Francalanci and Scovazzi [1991, p. 7] stated that

Egypt took a rather moderate attitude in drawing the lines, which in many cases run very closely to the shore.

As a result, the straight baseline would have little effect in shifting the Egyptian maritime zones seawards [Francalanci and Scovazzi, 1991]. One important feature which can be noted in the Egyptian straight baselines is the number of shoals and reefs which are used as base points, some of which have lighthouses. The use of low-tide elevations (about 10) as base points reflects a liberal interpretation of Article 7 of the 1982 Convention. On the other hand the Saudi theoretical baseline is based on only a few low-tide elevations (three in number) which have lighthouses built on them. By ending its straight baseline at the boundary with Sudan at latitude 35° Egypt's policy towards the present boundary line is strongly emphasised. A change in the boundary line to the administrative line would affect large areas of the Red Sea bed in favour of Sudan (see Figure 5.3).

8.4.2 The Status of Tiran

About 30 islands are located at the entrance to the Gulf of Aqaba, the largest being Tiran and Sanafir. All are owned by the Kingdom of Saudi Arabia [Aamer, 1983, p. 169]. The 1990 Egyptian straight baseline, supports this view since Egypt makes no claim over the Saudi Islands, particularly Tiran. In 1957 by arrangement with Saudi Arabia, Egyptian forces occupied Tiran in order to control navigation through the Strait of Tiran and exclude Israeli ships from passing through the Gulf of Aqaba [El-Hakim, 1979]. The arrangement took place after the Saudis had made formal claims to Tiran and Sanafir in April 1957 [El-

Hakim, 1979]. However, Schofield and Blake [1988] dated this arrangement as early as 1950. Also, there is no evidence that these islands ever belonged to Egypt. In the 1987 Egypt-Israel Peace Treaty, Israel was granted the access through Tiran Strait by Egypt. The peace agreement was rejected by all Arab countries, especially Saudi Arabia. It could be argued that by excluding Tiran from its straight baselines, Egypt gave up its claim over the sovereignty of Tiran Island, and as a result, Egypt may lose the right to control the strait. In any case the Peace Treaty with Israel has no practical meaning without Saudi recognition in respect to the access through Tiran Strait.

8.4.3 The Equidistant Line

There are three options which can be used to define the median line or modified median line between the two states. The first is based on the median line drawn from low-water mark on both coasts. The second, would consist of a median line drawn from straight baselines along the two shores. Thirdly, the parties could agree on a joint zone similar to that agreed between Saudi Arabia and Sudan.

Because Egypt has claimed a straight baseline and a theoretical legal straight baseline has also been drawn by the author along the Saudi coast, it provides an opportunity to devise a median line based on these baselines. There are not many situations in the world where opposite states have drawn broadly comparable straight baselines. Figure 8.10 shows the theoretical equidistant line between the two states, which is over 360 nm long. It starts at a mid point

between Tiran Island and the Egyptian coast in the south eastern Sinai Peninsula. The line runs along equidistance points from the two straight baselines, until it reaches a point opposite the Egypt-Sudan border. The effect of the Egyptian straight baseline across Foul Bay between Banas and Sha'b Abu Fendera does not sharply affect the line direction. It is worth mentioning that the Egypt baseline employed the low-tide elevations extensively, which could justify Saudi moves to establish artificial baselines in the same way to eliminate such disadvantages as the indented line on the Saudi side (see Figure 8.10). Since Egypt issued its straight baseline in 1990, Saudi Arabia has kept silent on the matter, because the latest Egyptian straight baseline is more moderate than the old Egyptian 1958 straight baseline. Understanding between the parties is currently good and Saudi was not expected to comment.

8.5 Conclusion

The author's conclusion on this particular issue is that, undelimited Saudi boundaries present several different problems and potentially several different types of solution. The Saudi-Yemen boundary for instance, involves different delimitations such as territorial sea, continental shelf and EEZ; here the parties may seek a single line boundary.

Eritrea has a coastline in the Red Sea of about 1,000 km only a portion of which is opposite to the Kingdom of Saudi Arabia. The Dahlak Islands occupy a large area opposite the Farasan Islands, and the continental shelf adjacent to these two archipelagos is the largest in the Red Sea.

Ownership of islands counted as one of the major causes of boundary disputes and one of the most difficult to resolve and could not only delay a solution to maritime boundary, but also could lead to war. The Saudi-Kuwait maritime boundary is an example of such a case where Qaru and Umm Al-Maradim Islands are in dispute between the two states. The area is rich with hydrocarbon deposits and large quantities of oil and gas production could mean a great loss. Figure 6.4 shows the Saudi-Kuwait overlapped area on the basis of Kuwaiti sovereignty over Umm Al-Maradim Island. The equidistant line method employed by the author in Figure 8.3 places the island under Saudi territory. The direction of the coast plays a major role in defining the boundary which favours Saudi Arabia (see Figure 8.4).

Another example of islands ownership and its role in solving maritime disputes is the Saudi-Yemen maritime boundary. In this example the islands involved are many, but the direction of the coast also favours Saudi Arabia. The equidistant line is the relevant method in these circumstances (see Figure 8.9).

Ownership of islands between Saudi Arabia and Egypt is less significant than the two previous cases, due to the absence of any dispute over them, because they lie close to the mainland of the two coasts. Except Tiran Island which the Egyptians apparently no longer show any interest in claiming in the author's opinion. The median line method can be employed here or alternatively the depth of the water criteria as is used in the Saudi-Sudan 1974 Agreement.

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CHAPTER 8

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Chapter Nine

CONCLUSION

The present status of Saudi Arabia's maritime boundaries is illustrated in Figure 9.1 which shows the zones which the Kingdom could theoretically claim according to the 1982 Convention, and the zones actually claimed by Saudi Arabia. The effect which geography has had on Saudi Arabia's maritime zones due to its location on semi-enclosed seas (the Red Sea and the Arabian Gulf) is also reflected in Figure 9.1.

Maritime boundary delimitation has to meet four stages in order to define the boundary between opposite or adjacent states. The Kingdom successfully fulfils all the four stages in its seven maritime boundary agreements with its neighbours. These stages are:

First, a fixed land boundary on the coast between the adjacent states has to be agree on. The Kingdom has successfully defined all the five points with its neighbours. On 20 May 1934 the Saudi-Yemen Taif Agreement fixed the boundary between the two states starting from the sea and going inland. The Saudi-Jordan 1965 boundary agreement defined the boundary on the Gulf of Aqaba. In the same year, the Saudi-Qatar boundary was fixed on the Gulf of Salwa. In the following year, the Saudi-Kuwait boundary on the Gulf was agreed and finally in 1974 the Saudi-UAE boundary was drawn on the south west coast of the Gulf.

Secondly, the parties have to decide the baseline from which the measurement of the territorial sea and the other zones should be carried out, either by a straight baseline or the low-water mark. Saudi Arabia issued a decree in 1949

reflecting the importance of the sea to the Kingdom. It was according to Liebesny [1949]

a very carefully drawn document which is more detailed than many similar decrees and embodies modern theories of international law on the subject.

In practice, Saudi Arabia has never used the declared straight baseline from which the breadth of the territorial sea and the other zones are measured as the basis for any of the seven agreements the Kingdom has concluded with its neighbours in the Gulf and the Red Sea. However, the importance of this straight baseline derives from the effect which it generate on internal waters.

Thirdly, the ownership of islands has to be resolved, or they may cause delay in reaching agreement. The 1958 Saudi-Bahrain continental shelf agreement was not delimited before the sovereignty over Lubainah islands was resolved. Similarly the 1968 Saudi-Iran Agreement was settled only after the status of Farsi and Al-Arabiyyah islands had also been resolved. On the other hand, where there are disputed islands between the Kingdom and its neighbours the maritime boundary has yet to be solved e.g. in the former Saudi-Kuwait Partitioned Zone between Saudi Arabia and Kuwait, and the Saudi-Yemen Red Sea boundary.

Fourthly, the parties have to choose the method by which boundary delimitation is to be carried out. The Kingdom of Saudi Arabia has employed a variety of methods in order to define its boundaries with its neighbours (see Figure 9.2). Among these methods are:

- a) Joint on common zones. In the Saudi-Bahrain 1958 continental shelf agreement, the boundary was agreed, but revenues are shared in a formerly

disputed area in which Saudi Arabia was given sovereignty. The Saudi-Sudan 1974 agreement established a common zone with shared sovereignty and revenues.

- b) The establishment of an area of restricted oil exploration on the agreed boundary which may reflect an atmosphere of mistrust between Iran and Saudi Arabia at the time of the agreement.
- c) Median line and modified median line boundaries were employed in the Saudi-Bahrain and Saudi-Iran continental shelf agreements, with islands treated in different ways.
- d) The unity of the deposits kept under one state control where the other party has no right of exploring or exploiting the hydrocarbon lies under its territory because the main deposits lie beyond its territory, in other words, the single geological structure will not be divided (see Figure 9.3).

By these agreements the Kingdom has contributed to the development of boundary delimitation in the international law of the sea. Some of the methods used are applicable elsewhere. For example the Saudi-Bahrain 1958 continental shelf agreement established an early model of a joint zone, while the Saudi-Iran 1968 Agreement exemplified the giving of partial effect to Kharj island. The 1974 Saudi-Sudan Red Sea agreement established the first common zone of its kinds in the world, which could be used in the Saudi-Egypt boundary. Saudi Participation in the United Nations Conventions on the law of the sea, contributed to this development.

9.1 Saudi Arabia's Maritime Policy

Saudi Arabia is eager to define its maritime boundaries and encourage its neighbours to do so for several reasons. Economically, the Kingdom is a dominant power in the region due to its huge hydrocarbon reserves and large oil production. The country's influence in stabilizing the area has been shown in several major events which took place in the past few years, such as the Iran-Iraq war and the Gulf war against Iraq. The victory which the Iraqi army gained over Iran owed much to the Saudi aid and political support throughout the war years.

Another dimension of power is the religious status which the country has due to its guardianship of the sacred mosque in Mecca and the Prophets Mosque in Medina. The geographical location plays a very important role in Saudi power because it connects Asia with the African continent and the Mediterranean region with the Indian ocean. Saudi Arabia also controls the longest coast in the Red Sea. The long land boundaries with its Arab neighbours, and the large area which it covers also contributes to its geopolitical status.

Saudi Arabia feels responsible both towards its own people and the wider Arab people, as well as towards the Islamic community worldwide. The Saudis saw territorial claims as the most influential factor feeding aggression, encouraged by the rich natural resources mainly hydrocarbons. Because of all these factors, the Kingdom has taken the initiative to prevent such threats by settling most of its land and maritime boundaries with its neighbours. On some occasions, the Saudi compromise was in favour of the other party, for example the boundaries with the UAE and with Iran.

9.2 Straight Baselines

The problem of definition and interpretation found in the language of the 1958 Saudi Decree is mentioned by the Geographer [1970] which stated:

Due to the particular language of the decree, it is impossible to plot the decree lines with any degree of accuracy on a chart. As a result no map accompanies this study although a brief discussion of possible limits has been added.

This related mainly to the fact that, the decree treated two different seas as one body of water, despite the distance which separated them and the different names and features found along their territorial waters which must be treated and defined separately, particularly those name used to describe one feature.

All the coastal features found in Saudi Arabian waters have to be defined scientifically in order to be analyzed and to meet the international standard e.g. the term Dahdah "shoal". Some terms used in the Arabic language are not equivalent to those used in the English language.

This thesis has drawn, defined and interpreted for the first time the 1958 Saudi Arabia straight baseline which until now, has never been plotted on charts or shown on maps throughout the last 35 years. The definition of the terms used in the decree have also been clarified in this study. A theoretical straight baseline drawn on the basis of the 1982 Convention along the Saudi coast on the Red Sea and the Arabian Gulf has also been included. The Kingdom will gain more territory on the basis of the 1982 Convention than it has from the 1958 Saudi decree.

Saudi Arabia has approved the definitions of the terms for islands and low-tide elevation by issuing its charts on the Red Sea in 1983 which clearly

define these terms as set up in the 1982 Convention. The serrated line which is recognised by France to show low-tide elevations [see Beazley, 1991, p. 290] was used in the Saudi charts symbolising the Red Sea reefs.

A careful reading of the 1990 Egyptian straight baseline concluded that; by excluding Tiran island from its straight baseline, Egypt demonstrate that, territorial control is less significant than economic factor, which they were anxious to gain and secure in the Gulf of Suez. The Saudi Government has to include Tiran Island in any future Saudi straight baseline in order to gain more legal rights over this important island in any future claim by other party.

9.3 Boundary Delimitations

This thesis contains new contributions with respect to Saudi Arabian maritime boundaries with its neighbours.

9.3.1 The Red Sea

The Saudi-Egyptian maritime boundary in the Gulf of Aqaba is defined by an equidistant line based on the circles (See Figures 3.2).

The Saudi-Egyptian Red Sea boundary was also defined an equidistant line between two straight baselines. The 1990 Egypt straight baseline [Francalanci, and Scovazzi, 1991] and a theoretical straight baseline based on the 1982 Convention which was drawn by the author along the Saudi Red Sea coast (Figure 8.10). It is the first attempt to draw an equidistant line between these two states.

The Saudi-Yemen maritime boundary in the Red Sea (Figure 8.9) is the most important and most significant due to the fact that two types of delimitation are involved; continental shelf and territorial sea. The existence of hydrocarbon in the area also contributes to its significance. It is also not yet defined making this the first serious attempt of its kind. The equidistant adjacent boundary line drawn by using circles, shows for the first time an answer to the sovereignty of islands reflecting the most important islands involved and their effect along with the general direction of the coast on the boundary line. This attempt is made in the light of the 1934 Taif agreement, particularly the land boundary terminus and also taking into account the 1926 Mecca Agreement between Idrissi and King Abdul Aziz.

9.3.2 The Arabian Gulf

Another important boundary found between Saudi Arabia and the UAE in the Arabian Gulf signed in 1974 but never published. The thesis shows for the first time the equidistant line of the 1974 Saudi-UAE maritime boundary (Figures 3.6 and 3.7).

The 1974 Saudi-UAE Agreement reveals new methods of boundary delimitation which could be used elsewhere to solve the common problem of boundary delimitations and oilfields in particular which extend to another state.

- a) The prohibiting of exploring and exploitation in an area where the hydrocarbon is situated mainly in the area of the second party (Figure 9.3(1)).
- b) The compromise by the two parties where a portion of sea was exchanged

for land, the two being far away from each other (Figure 9.3(3)).

- c) The complete Saudi sovereignty over Shaybah oil field which came within Saudi territory (Figure 9.3(2)).
- d) The use of an island by one of the parties whilst the sovereignty of the island remains unchanged (Figure 9.3(4)).
- e) The two parties enjoy free access to the high sea whilst the seabed is under the sovereignty of one party.

The Saudi-Kuwait maritime boundary in the Arabian Gulf is defined by an adjacent line. The line shows that Umm Al-Maradim Island comes within Saudi sovereignty and any future agreement between Saudi Arabia and Kuwait should take into account this fact. Placing this island under complete Kuwaiti control would effect almost half of the Saudi legitimate rights over its territory in this rich area.

The author also discovered an attempt carried out in 1959 (Figure 8.4) shows the best example of islands role in maritime boundaries delimitation. Since that time the Saudi-Kuwait maritime boundary stil has not defined because the presence of islands which their sovereignty are in dispute.

9.3.3 The Global Effect of Saudi Maritime Boundaries

1) The 1968 Saudi-Iran Agreement has influenced the Gulf region, particularly the 1969 Abu Dhabi-Qatar Agreement. Beyond the Gulf region, this agreement has served as a model, encouraging similar agreements to adopt similar methods [Amin, 1981, p. 104]. Blake [1989, p. 12-13] stated that

The use of common zones shared revenues etc. is increasingly common in worldwide maritime boundary delimitations. In a number of important cases (for example France/U.K 1982, Libya/Tunisia 1982) large islands have been given half or partial effect in boundary alignments. These methods were pioneered in the Gulf 20 or 30 years ago and used ingeniously in combination with other method

2) The joint zone established by Saudi Arabia and Bahrain in the 1958 agreement was the first joint maritime zone in the world. This unique method which gave one state (Saudi Arabia) complete sovereignty over the common zone while granting the other state (Bahrain) a share in the net revenue, encouraged similar agreements of shared revenue. Blake [1989, p. 12] pointed out that

The Saudi Arabia-Bahrain and Saudi Arabia-Iran agreements demonstrate potentially useful approaches to maritime boundary delimitations.

3) The 1974 Saudi-Sudan Red Sea Agreement is the first of its kind to use the geological structure as a base in defining the boundary between the parties.

9.4 Geographical Factors

The Geographical factors which were found to most affect maritime boundaries are the following:

- 1) The presence of islands was found to be one of the major geographical factors affecting Saudi maritime boundary delimitation with its neighbours.
- 2) The length of the Saudi coasts, which increased the number of neighbouring states and thus led to an increase in the number of disputed boundaries. This also affected the relationship of the coast of Saudi Arabia with other states which falls into three categories: a) Opposite coasts such

as the Saudi-Iran coasts b) Adjacent coasts such as the Saudi-Yemen coasts c) An opposite and adjacent coast where the relationship gradually changes such as the Saudi-Qatar coast and the Saudi-UAE coasts. These categories determine the kind of method used in order to define the boundary, for example ignoring islands and islets and employing the median line method is found to be used where there are opposite coasts. The Saudi continental shelf delimitations are largely affected by these different relationships between coasts.

- 3) The existence of large numbers of reefs along with islands also greatly affects the breadth of the territorial sea and defines the breadth of the internal waters as well as the base points of straight baselines.
- 4) The general direction of the coast will play a major role in any future boundary delimitation by determining the status of the line boundary.
- 5) The semi-enclosed seas, namely the Red Sea and the Arabian Gulf, have a narrow breadth which affects the size and limit of the EEZ and the continental shelf.

9.5 The EEZ and Continental Shelf

Saudi policy relating to the EEZ is broadly based on the statement issued by the Saudi delegation to the Third UNCLOS which stated:

The Kingdom believed that every coastal state was entitled to extend its exclusive economic zone up to 200 miles on the basis of freedom of navigation and overflight in that area [Third UNCLOS, 1974, p. 144].

The Saudi EEZ measures some 186,200 sq.km [Couper, 1983, p. 227]. The

Kingdom claimed an Exclusive Fishing Zone (EFZ) in 1974, a claim which gave her rights over the fishing resources. This falls short of the rights given by the EEZ which extends to non living resources and activities such as scientific research, which were granted by Article 246(2) of the 1982 Convention. The need for a such claim seems to be necessary and legitimate.

Saudi Arabia is an arid land where water shortages have increased in recent years. This trend is not only evident in the Middle East, but there are also 27 countries facing water shortages worldwide [Postel, 1993]. But, water shortage problems in Saudi Arabia are more crucial due to the fact that the Kingdom depends heavily on seawater desalination plants [Al Sharaq Al-Awsat, 1993]. These plants are facing an increasing threat from pollution resulting from vessels waste, war and oil leakage as well as coastal industries which allow waste to leak into the sea placing the Arabian Gulf and relatively the Red Sea among the most polluted areas. In order to protect its national security and safe its national interests, the Kingdom has to practice its right over an EEZ by the rule established in section 5, 6 and 7 (Article 207-233) of the 1982 Convention.

Saudi Arabia has one of the richest continental shelves in the world, mainly because of hydrocarbon, despite its limited size compared with the UK, Japan or the USA. Figure 9.4 shows the size of some of the Arab states continental shelves as well as the oil production and the crude oil and gas proven reserves in the Middle East states. In 1990 Saudi offshore oil production represented almost 46 per cent of the total production of Egypt, Iran, Qatar and Saudi Arabia. This represents 4.4 per cent of the total world offshore production in the same

year [Offshore, June, 1990, p. 46]. This can be compared to the Saudi offshore production in 1982 which was one third of the total production of the Arabian Peninsula [Bake, 1982, p. 6]. The new figures indicate an increase in Saudi offshore production in the 1990s. However, in 1983 the Saudi offshore production represented 39.4 per cent of the total Saudi oil production [Drysedale and Blake, 1985, p. 114]. According to Offshore [1990], Saudi Arabia has almost half the Middle Eastern offshore crude oil proven reserves of 47.6 per cent. The Kingdom also has about 22 per cent of the area's proven gas reserves [Beydoun, 1988]. In addition to all this, the Red Sea and the Arabian Gulf are also important for fishing and mineral resources.

Economic motives were the main cause behind the early rush to claim offshore areas by the Arabian Gulf States and Saudi Arabia in particular. It is also, the chief factor in reducing the unsettled Saudi boundaries. Security also, played a role in the Saudi territorial sea and hence the claim of a straight baseline in order to gain more control over its internal waters.

9.6 Recommendations

Two types of recommendations are suggested here: practical and academic.

- 1) There is a need for new comprehensive Saudi legislation dealing with Saudi waters, including straight baselines based on the principles of the 1982 convention (Article 7), in order to define the baseline from which the territorial sea is measured. Consideration also needs to be given to the

proclamation of a Saudi EEZ which gives the state the right to control research and implement marine conservation.

- 2) The Kingdom should seek to settle unresolved boundary disputes with its neighbours in anticipation of renewed interest in offshore hydrocarbons and metalliferous mud.
- 3) The Arabian Gulf needs to be surveyed in the same way that the Red Sea has been surveyed, from which 1:150,000 scale charts have been produced. Tidal data along all the Saudi coasts and islands would assist in definition of low-tide elevations which are so important in maritime boundary delimitation.
- 4) Fishing activities by the Red Sea and Arabian Gulf states need to be researched in more detail to evaluate the importance of maritime boundaries in relation to fish stocks and fishing grounds.
- 5) The various Saudi maritime and marine centres and departments which are currently organised under several ministries and universities should be coordinated by a single body of international standing. This would result in more organised work and more specialized research in various fields.
- 6) The breadth of the present Saudi Contiguous Zone should to be extend by a further 6 nm on the basis of the 1982 convention, to gain more control and protection from illegal immigrants, pollution, drug and goods smuggling and from those whom may harm the national security.

9.7 Suggestions

Undoubtedly, national territorial ambition was one of the major reasons behind border disputes in the Middle East. Farsi, Al-Arabiyah Islands and Bahrain, were all subject to disputes in the past. By removing these influences and replacing them with the common heritage shared by all the region's states, a new era may be ushered in which would result in more understanding and the peaceful settlement to any future conflicts.

One of the common factors is the need to replace the name of the Arabian Gulf or Persian Gulf by the Islamic Gulf. From the authors point of view, such a change may lead to more co-operation between nations sharing the most influential factor on human feeling, that is religion.

On the technical side, there is a need for establishing a body for the validation of any Saudi map which represents an official view of the boundary of neighbouring states, particularly those countries involved with the Kingdom's boundaries. Some of the published Saudi Arabia maps do not reflect the present status of the region's boundary, which may raise questions from the parties concerned.

Maritime disputes have contributed to three wars in the region, between the Arab countries and Israel in 1956 and 1967; between Iran and Iraq in 1979 and between Iraq and Kuwait 1991. The Iraq-Kuwait 1991 war was more complicated and is hard to describe as a result of maritime dispute alone, due to the fact that onshore oil fields and political motivations are also contributed to this conflict. However, from the authors point view, these oil field were used as a

reason by Iraq in order to occupy Kuwait, while the Iraqi need for larger portion of coastline was in fact, one of the main motivations behind the Iraqi aggression. It is only in recent years that Iraq has claimed its rights over these oilfields.

Despite the contribution which Saudi Arabia has already made to maritime boundary delimitation in an effort to prevent such conflict, there is still a need for establishing a teaching and research program on maritime boundaries in the Kingdom. This might involve training personnel, participation in worldwide maritime affairs, keeping up to date information related to boundary issues, and organising interdisciplinary conferences and meetings. Saudi Arabia's wide experience of successful boundary delimitation, could contribute much to such an enterprise.

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Appendices

APPENDIX A

SAUDI ROYAL DECREE NO. 33 OF FEBRUARY 16, 1958 CONCERNING THE TERRITORIAL WATERS OF THE KINGDOM OF SAUDI ARABI¹

With the help of God Almighty; We Sa'ud ibn Abd al-Aziz Al Sa'ud, King of Saudi Arabia, in accordance with the dictates of the public interest, have decreed as follows:

Article 1

For the purposes of this decree:

- a- The term "nautical mile" is the equivalent of 1,852 meters
- b- The term "bay" includes any inlet, lagoon or other arm of the sea².
- c- The term "island" includes any islet, reef, rock, Qut'ah, Fasht, Qasr or permanent artificial structure not submerged at lowest low tide.
- d- The term "Dhdah" (shoal) denotes an area covered by shallow water, a part of which is not submerged at lowest low tide.
- e- The term "coast" refers to the coasts of the Red Sea, the Gulf of Aqaba, and the Persian Gulf.

Article 2

The territorial sea of the Kingdom of Saudi Arabia, as well as the air space above and the territorial sea bed and the subsoil beneath are under the sovereignty of the kingdom, subject to the established rules of international law.

Article 3

The inland waters of the kingdom include:

- a- The waters of bays along the coasts of the Kingdom of Saudi Arabia.
- b- The waters above and landward from any Dhdah "shoal" not more than twelve nautical miles from the mainland or from a Saudi Arabian island.
- c- The waters between the mainland and a Saudi Arabian Island not more than twelve nautical miles from the mainland.
- d- The waters between Saudi Arabian islands not farther apart than twelve nautical miles.

¹. Published in the Official Gazette (Umm al-Qura), No. 1706 of February 21, 1958

². The term "inlet" renders two Arabic words used in the original text: (sharm), which is used in the Red Sea, and (Khaur), which is used in the Arabian Gulf.

Article 4

The territorial sea of the Kingdom of Saudi Arabia lies outside the inland water of the kingdom and extends seaward for a distance of twelve nautical miles.

Article 5

The following are the base-lines from which the territorial sea of the Kingdom of Saudi Arabia is measured:

- a- Where the mainland or the shore of an island is fully exposed to the open sea, the lowest low-water mark on the shore.
- b- Where a bay confronts the open sea, lines drawn from headland to headland across the mouth of the bay.
- c- Where a shoal "Dhdah" is situated not more than twelve nautical miles from the mainland or from a Saudi Arabian island, lines, drawn from the mainland or an island, and along the outer edge of the shoal.
- d- Where a port or harbour confronts the open sea, lines drawn along the seaward side of the outermost works of the port or harbour and between such works.
- e- Where an island is not more than twelve nautical miles from the mainland, lines drawn from the mainland and along the outer shores of the island.
- f- Where there is an island group which may be connected by lines not more than twelve nautical miles long, of which the island nearest to the mainland is not more than twelve nautical miles from the mainland, lines drawn from the mainland and along the outer shores of all the islands of the group if the islands form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain.
- g- Where there is an island group which may be connected by lines not more than twelve nautical miles long, lines drawn along the shore of all the islands of the group if the islands form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain.

Article 6

If the measurement of the territorial sea in accordance with the provisions of this decree leaves an area of high sea wholly surrounded by the territorial sea and extending not more than twelve nautical miles in any direction, such area shall form part of the territorial sea. The same rule shall apply to a pronounced pocket of high sea which may be wholly enclosed by drawing a single straight line not more than twelve nautical miles long.

Article 7

If the territorial sea measured from the baselines fixed by Article 5 of the decree be overlapped by the waters of another state, boundaries will be determined by our government in agreement with that state in accordance with

equitable principle.

Article 8

To assure compliance with the laws of the Kingdom relating to security, navigation, fiscal and sanitary matters, maritime surveillance covers a contiguous zone outside the territorial sea, extending for a distance of six nautical miles in addition to the twelve nautical miles measured from the baselines of the territorial sea, in accordance with Article 5 of this decree.

Article 9

The provisions of this decree shall not affect the rights of the Kingdom with respect to fishing.

Article 10

Decree No. 6/4/5/3711³ promulgated on 1 Sha'ban 1368 corresponding to 28 May 1949 is revoked.

Article 11

Our Ministers of Foreign Affairs, Interior, Finance, and Health are charged with the execution of this decree, each with regard to the provisions concerning him.

Article 12

This decree shall come into effect as of the date of its publication in the Official Gazette.

³. The original Arabic shows "Decree No. 6/5/4/3711" which is in error.

APPENDIX B

MINISTRY OF FOREIGN AFFAIRS DECLARATION CONCERNING THE LIMITS OF THE EXCLUSIVE FISHING ZONES OF SAUDI ARABIA IN THE RED SEA AND THE ARABIAN GULF⁴

Dated 1974 No. 2/7650/46/200

The Foreign Ministry issued a declaration concerning the policy of the Kingdom of Saudi Arabia in relation to the fishing zones in the Red Sea and the Arabian Gulf adjacent to the coasts of the Kingdom of Saudi Arabia.

The following is the text of the declaration:

Whereas the fish resources are considered a principal diet for the people of the Kingdom of Saudi Arabia and a vital factor for its social and economic progress; and recognising that jurisdiction over those fish resources is required for their protection and prudent exploitation; and in affirmation of the provisions of Article 9 concerning fishing of the Royal Decree No. 33 of 27 Rajab 1372 A.H. (corresponding to 16 February 1958) concerning the territorial waters; and considering that other States have at present affirmed their jurisdiction over the fish resources in the areas adjacent to their territorial seas; therefore, the Kingdom of Saudi Arabia declares the following policy for the protection of the exclusive fishing rights of the Kingdom in the areas adjacent to its coast and the coasts of its islands in the Arabian Gulf and the Red Sea:

Article 1

The exclusive fishing zones of the Kingdom of Saudi Arabia are those areas contiguous to the coasts of the kingdom and the coasts of its islands, from the coastal sea of the kingdom towards the high seas; if the fishing zones, measured from the baselines referred to in Article 5 of the Royal Decree concerning the territorial waters referred to above, be overlapped with those of another coastal state, the boundary shall be the median line every point of which is equidistant from the baselines from which the territorial seas is measured.

Article 2

Fishing and all related activities by non-Saudis in the exclusive fishing zone are prohibited unless prior permission is obtained from the Government of the Kingdom of Saudi Arabia.

⁴. Source: 1) Ministry of Foreign Affairs (no date).
2) El-Hakim, 1979.

Article 3

The implementation of this declaration shall not prejudice the status of the fishing zones as high seas in accordance with the established principles of international law.

Article 4

The outer limits of the exclusive fishing zones of Saudi Arabia in the Arabian Gulf and the Red Sea shall be drawn on maritime charts.

APPENDIX C

ROYAL PRONOUNCEMENT CONCERNING THE POLICY OF THE KINGDOM OF SAUDI ARABIA WITH RESPECT TO THE SUBSOIL AND SEABED OF AREAS IN THE PERSIAN GULF CONTIGUOUS TO THE COASTS OF THE KINGDOM OF SAUDI ARABIA⁵

We Abd al-Aziz ibn Abd al-Rahman King of Saudi Arabia, after reliance on God Almighty, being aware of the need for the greater utilization of the world's natural resources which are the bounty of God, and of the desirability of giving encouragement to efforts to discover and make available such resources.

Recognizing that by God's providence valuable resources may underlie parts of the Persian Gulf off the coasts of Saudi Arabia, and that modern technology, by the grace of God, makes it increasingly practicable to utilize these resources;

Appreciating that recognized jurisdiction over such resources is required in the interest of their conservation and prudent utilization when and as development is undertaken;

Deeming that the exercise of jurisdiction over such resources by the contiguous nation is reasonable and just, since the effectiveness of measures to utilize or conserve these resources would be contingent upon cooperation and protection from the shore and since self protection compels the coastal nation to keep close watch over activities off its shores which are of a nature necessary for the utilization of these resources and;

Considering that various other nations now exercise jurisdiction over the subsoil and sea bed of areas contiguous to their coasts:⁶

Declare the following policy of the Kingdom of Saudi Arabia with respect to the subsoil and sea bed of areas of the Persian Gulf contiguous to the coasts of our kingdom:

The subsoil and sea bed of those areas of the Persian Gulf seaward from the coastal sea of Saudi Arabia but contiguous to its coasts, are declared to appertain to the Kingdom of Saudi Arabia and to be subject to its jurisdiction and control. The boundaries of such areas will be determined in accordance with equitable principles by our government in agreements with other states having jurisdiction and control over the subsoil and sea bed of adjoining areas. The character as high seas of the waters of such areas, the right to the free and

⁵. The official Arabic text was published in Umm al-Qura (Mecca), Supplement No. 1263, 2/8/1368, corresponding to the 29 May 1949.

⁶. In the proclamations of the Persian Gulf sheikhdom (Kuwait, Bahrain, Qatar and the Trucial Coast), reference is made to the exercise of authority over sea bed and subsoil on the basis of international practice.

unimpeded navigation of such waters and the air space above those waters, fishing rights in such waters, and the traditional freedom of pearling by the peoples of the Gulf, are in no way affected.

This Pronouncement is made for the information and guidance of all whom it may concern

May the faithful always put their trust in God !

Promulgated in our Palace at Riyadh on the first day of the month of Sha'ban of the year of the Hegira 1368, corresponding to the twenty-eighth day of the month of May in the year 1949⁷.

⁷. The proclamations of the Persian Gulf sheikhdom do not contain a formal clause at the end. The Bahrain proclamation is dated June 5, 1949; that of Kuwait June 12, 1949. The available copies of the other proclamations do not bear a date, but were issued at a b o u t t h e s a m e t i m e .

APPENDIX D

AGREEMENT CONCERNING DELIMITATION OF THE CONTINENTAL SHELF BETWEEN SAUDI ARABIA AND BAHRAIN

Riyadh, 22.2.1958

Source: ST/LEG/SER.B/16, p. 409

In force: 22.2.1958

Whereas the regional waters between the Kingdom of Saudi Arabia and the Government of Bahrain meet together in many places overlooked by their respective coasts, and in view of the royal proclamation issued by the Kingdom of Saudi Arabia on the 1st Sha'aban in the year 1368 (corresponding to 28th May 1949) and the ordinance issued by the Government of Bahrain on the 5th June 1949 about the exploitation of the sea-bed, and in view of the necessity for an agreement to define the underwater areas belonging to both countries, and in view of the spirit of affection and mutual friendship and the desire of H.M. the King of Saudi Arabia to extend every possible assistance to the Government of Bahrain, the following agreement has been made:

First clause

1. The boundary line between the Kingdom of Saudi Arabia and the Bahrain Government will begin, on the basis of the middle line from point 1, which is situated at the mid-point of the line running between the tip of the Ras Al Bar (A) at the southern extremity of Bahrain and Ras Muharra (B) on the coast of the Kingdom of Saudi Arabia.
2. Then the above-mentioned middle line will extend from point 1 to point 2 situated at the mid-point of the line running between point (A) and the northern tip of the island of Zakhnuniya (C).
3. Then the line will extend from point 2 to point 3 situated at the mid-point of the line running between point A and the tip of Ras Saiya (D).
4. Then the line will extend from point 3 to point 4, which is defined on the attached map and which is situated at the mid-point of the line running between the two points E and F which are both defined on the map.
5. Then the line will extend from point 4 to point 5, which is defined on the map and which is situated at the point (sic) of the line running between the two points G and H which are defined on the map.
6. Then the line will extend from point 5 to point 6, which is defined on the map and which is situated at the mid-point of the line running between the

two points I and J which are defined on the map.

7. Then the line will extend from point 6 to point 7 situated at the mid-point of the line running between the south-western tip of the island of Umm Nasan (K) and Ras Al Kureya (L).
8. Then the line will extend from point 7 to point 8 situated at the western extremity of the island Al Baina As Saghir, leaving the island to the Government of Bahrain.
9. Then the line will extend from point 8 to point 9 situated at the eastern extremity of the island Al Baina Al Kabir, leaving the Island to the Kingdom of Saudi Arabia.
10. Then the line will extend from point 9 to point 10 situated at the mid-point of the line running between the north-western tip of Khor Fasht (M) and the southern end of the island of Chaschus (N).
11. Then the line will extend from point 10 to point 11 situated at the mid-point of the line running between point O situated at the western edge of Fasht Al Jarim and point N referred to in subsection 10 above.
12. Then the line will extend from point 11 to point 12 situated at latitude 26 degrees 31 minutes 48 seconds north and longitude 50 degrees 23 minutes 15 seconds east approximately.
13. Then the line will extend from point 12 to point 13 situated at latitude 26 degrees 37 minutes 15 seconds north and longitude 50 degrees 33 minutes 24 seconds east approximately.
14. Then the line will extend from point 13 to point 14 situated at latitude 26 degrees 59 minutes 30 seconds north and longitude 50 degrees 46 minutes 24 seconds east approximately, leaving the Rennie Shoals (known as Najwat Al Riqai and Fasht Al Anawiyah) to the Kingdom of Saudi Arabia.
15. Then the line will extend from point 14 in a north-easterly direction to the extent agreed upon in the royal proclamation issued on the 1st Sha'aban in the year 1368 (corresponding to 28th May, 1949) and in the ordinance issued by the Government of Bahrain on the 5th June, 1949.
16. Everything that is situated to the left of the above-mentioned line in the above subsections belongs to the Kingdom of Saudi Arabia and everything to the right of that line to the Government of Bahrain, with the obligation of the two governments to accept what will subsequently appear in the second clause below.

Second clause

The area situated within the six defined sides is as follows:

1. A line beginning from a point situated at latitude 27 degrees north and longitude 50 degrees 23 minutes east approximately.
2. From there to a point situated at latitude 26 degrees 31 minutes 48 seconds north and longitude 50 degrees 23 minutes 15 seconds east approximately.
3. From there to a point situated at latitude 26 degrees 37 minutes north and longitude 50 degrees 33 minutes east approximately.
4. From there to a point situated at latitude 26 degrees 59 minutes 30 seconds north and longitude 50 degrees 46 minutes 24 seconds east approximately.
5. From there to a point situated at latitude 26 degrees 59 minutes 30 seconds north and longitude 50 degrees 40 minutes east.
6. From there to a point situated at latitude 27 degrees north and longitude 50 degrees 40 minutes east approximately.
7. From there to the starting point.

This area cited and defined above shall be in the part falling to the Kingdom of Saudi Arabia in accordance with the wish of H.H. the Ruler of Bahrain and the agreement of H.M. the King of Saudi Arabia. The exploitation of the oil resources in this area will be carried out in the way chosen by His Majesty on the condition that he grants to the Government of Bahrain one half of the net revenue accruing to the Government of Saudi Arabia and arising from this exploitation, and on the understanding that this does not affect the right of sovereignty of the Government of Arabia nor the right of administration over this mentioned area.

Third clause

Two copies of a map shall be attached to this agreement, making as clear as possible the positions referred to in the foregoing subsections, subject to the map being made final by the expert knowledge of the committee defined in the fourth clause below. The map shall become final and an integral part of the agreement after approval and signature by the cited representatives of the two governments of the two parties.

Fourth clause

The two parties shall choose a technical body to undertake the necessary measures to confirm the boundaries in accordance with the provisions of this agreement on the condition that this body shall complete the work within two months at the most after the date of publication of this agreement.

Fifth clause

After the committee referred to in the fourth clause has completed its work and the two parties agreed on the final map which it will have prepared, a body of technical delegates from both sides shall undertake the placing of signs and the establishing of the boundaries in accordance with the detailed announcements made clear in the final map.

Sixth clause

This agreement shall come into effect from the date on which it is signed by the two parties.

APPENDIX E

AGREEMENT CONCERNING THE SOVEREIGNTY OVER THE ISLANDS OF AL-ARABIYAH AND FARSI AND THE DELIMITATION OF THE BOUNDARY LINE SEPARATING THE SUBMARINE AREAS BETWEEN THE KINGDOM OF SAUDI ARABIA AND IRAN

Teheran, 24.10.1968

Source: 696 UNTS 189; ST/LEG/SER.B/18, p. 403

In force: 29.1.1969

The Royal Government of Saudi Arabia, represented by His Excellency Shaikh Ahmed Zaki Yamani, Minister of Petroleum and Mineral Resources, of the one part and the Imperial Government of Iran represented by His Excellency Dr. Manoochehr Eghbal, Chairman of the Board and General Managing Director of the National Iranian Oil Company, of the other part, desirous of resolving the difference between them regarding sovereignty over the islands of Al-Arabiyyah and Farsi and desirous further of determining in a just and accurate manner the boundary line separating the respective submarine areas over which each party is entitled by international law to exercise sovereign rights, now therefore and with due respect to the principles of the law and particular circumstances, and after exchanging their credentials, have agreed as follows:

Article 1

The Parties mutually recognize the sovereignty of Saudi Arabia over the island of Al-Arabiyyah and of Iran over the island of Farsi. Each island shall possess a belt of territorial sea twelve nautical miles in width, measured from the line of lowest low water on each of the said islands. In the area where these belts overlap, a boundary line separating the territorial seas of the two islands shall be drawn so as to be equidistant throughout its length from the lowest low water lines on each island.

Article 2

The boundary line separating the submarine areas which appertain to Saudi Arabia from the submarine areas which appertain to Iran shall be a line established as hereinafter provided. Both Parties mutually recognize that each possesses over the seabed and subsoil of the submarine areas on its side of the line sovereign rights for the purpose of exploring and exploiting the natural resources therein.

Article 3

The boundary line referred to in Article 2 shall be:

- (a) Except in the vicinity of Al-Arabiya and Farsi, the said line is determined by straight lines between the following points whose latitude and longitude are specified herein below:

Points	Latitude	Longitude
1	27°10'0"N	50°54'0"E
2	27°18'5"N	50°45'5"E
3	27°26'5"N	50°37'0"E
4	27°56'5"N	50°17'5"E
5	28°08'5"N	50°06'5"E
6	28°17'6"N	49°56'2"E
7	28°21'0"N	49°50'9"E
8	28°24'7"N	49°47'8"E
9	28°24'4"N	49°47'4"E
10	28°27'9"N	49°42'0"E
11	28°34'8"N	49°39'7"E
12	28°37'2"N	49°36'2"E
13	28°40'9"N	49°33'5"E
14	28°41'3"N	49°34'3"E

- (b) In the vicinity of Al-Arabiya and Farsi, a line laid down as follows:

At the point where the line described in paragraph (a) intersects the limit of the belt of territorial sea around Farsi, the boundary shall follow the limit of that belt on the side facing Saudi Arabia until it meets the boundary line set forth in Article 1 which divides the territorial seas of Farsi and Al-Arabiya; thence it shall follow that line easterly until it meets the limit of the belt of territorial sea around Al-Arabiya; thence it shall follow the limit of that belt on the side facing Iran until it intersects again the line described in paragraph (a).

The map prepared by the A.M. Service Corps of Engineers U.S. Army compiled in 1966 was used and shall be used as the basis for the measurement of the coordinates described above and the Boundary Line is illustrated in a copy of

the said map signed and attached hereto.

Article 4

Each Party agrees that no oil drilling operations shall be conducted by or under its authority, within a zone extending five hundred (500) meters in width in the submarine areas on its side of the Boundary Line described in Article 3, said zone to be measured from said boundary.

Article 5

This Agreement is done in duplicate in the Arabic and Persian languages, both texts being equally authentic. An English translation thereof is also signed by both Parties and annexed thereto.

This Agreement shall enter into force upon the date of exchange of the instruments of ratification which shall take place at Jeddah as soon as possible.

In witness whereof, the above-named plenipotentiaries, duly authorized by their respective governments, have signed this Agreement.

Done at Teheran, this Second day of Sha'ban, 1388 (Hegira calendar), corresponding to the Second day of Aban, 1347 (Iranian Calendar), and to the twenty fourth day of October, 1968.

(II) Exchanges of letters

Ia

Your Excellency:

With reference to the offshore boundary agreement signed by us today (hereinafter referred to as "the Agreement" on behalf of our respective governments, I have the honour to propose the following technical arrangement to facilitate the determination of geographical locations offshore in the Marjan-Feridoon area:

As soon as possible after the entry into force of the Agreement a joint technical committee of four members shall be established composed of two experts appointed by each government. This committee shall be charged with establishing agreed positions defined by coordinates of latitude and longitude with reference to the map attached to the Agreement, for the following offshore sites at which tangible markers of various kinds already exist:

On the Iranian Side:

1. The well site known as Feridoon 3
2. The well site known as Feridoon 2

On the Saudi Arabian Side:

3. The well site known as Feridoon 7, or in case there shall be no tangible markers therein, the well site known as Marjan 1. It is understood that whenever a new well is drilled on the Saudi Arabian side with tangible markers on it and conveniently close to the boundary line, such a well shall also be included in the reference points, thus making the number of the reference points four altogether.

The positions for these points fixed by the committee shall be regarded as accepted by both governments if neither government objects within one month after the committee has presented its reports, which report shall be submitted to both governments on the same date.

Thereafter, for all purposes arising under the Agreement positions for oil operations in the Marjan-Feridoon area carried on under the authority of either government shall be established by reference to these points in accordance with standard survey techniques.

If the foregoing proposal is acceptable to your Excellency, this letter and your reply to that effect shall constitute an agreement between our respective governments, effective on the date on which the Agreement comes into force.

With assurance of my high esteem.

Teheran on 2nd Sha'ban 1388 corresponding to 2nd Aban 1347 and 24th October 1968.

IIa

Your Excellency:

I have the honour to inform Your Excellency that I have received Your Excellency's letter of the following text: [See letter Ia]

I have the pleasure to convey to Your Excellency my government's approval of the contents of your letter, the text of which is hereinabove stated, considering that the said letter and my reply thereto shall constitute an agreement between our respective governments, effective on the date on which the Agreement comes into force.

With renewed assurance of my high esteem.

Teheran on 2nd Sha'ban 1388 corresponding to 2nd Aban 1347 and 24th October 1968.

Ib

Your Excellency:

With reference to the offshore boundary agreement signed by us today on behalf of our respective governments, I have the honour to propose, for the more effective implementation of this Agreement (hereinafter referred to as "the Agreement" the following understandings:

- (a) The oil drilling operations which are prohibited by Article 4 of the Agreement within the zone I therein described (hereinafter referred to as "the Prohibited Area" shall include exploitation carried out directly from the Prohibited Area and shall also extend to all drilling operations which could be carried out within the Prohibited Area from installations which are themselves located outside it.

The term "oil drilling operations" as used in Article 4 of the Agreement shall mean drilling operations for oil and/or gas.

Our two governments shall ensure that the wells drilled in the immediate vicinity of the Prohibited Area shall be vertical wells, however, when a deviation is technically inevitable at a reasonable cost, such a deviation shall not be deemed as encroachment on the agreement, provided that the deviation is within the minimum range of good drilling practice and further provided that the party concerned does not contemplate, by such deviation, the violation of the provisions set forth in the agreement and this letter.

Should our two governments mutually agree that gas injection and/or drilling an observation well, is technically beneficial and advisable for the Marian-Feridoon reservoir, our two governments shall agree on the location, the conducting of drilling the wells and their operations in the Prohibited Area for the sole purpose specified in this paragraph, provided that the wells to be drilled shall be conducted by each government, directly or through its authorized agent, on its respective side of the Prohibited Area under the terms and condition to be agreed upon by our two governments.

- (b) Our two governments shall, directly or through authorized agents, exchange with each other all obtained directional survey information during the course of drilling operations carried out as from the effective date of the agreement within two kilometres of the Boundary Line. This exchange shall be made on a reciprocal and continuous basis.
- (c) Each government shall ensure that the companies operating under its respective authority shall not carry out operations that may, for technical inconsistency with the conservation rules according to sound oil industry practice, be considered harmful to the oil and gas reservoir in the Marjan-Feridoon area.

This letter and Your Excellency's reply thereto shall constitute an agree-

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ment between our respective governments, to become effective on the date on which the agreement enters into force.

With renewed assurance of my high esteem.

Teheran on 2nd Sha'ban 1388 corresponding to 2nd Aban 1347 and 24th October 1968.

Ib

Your Excellency:

I have the honour to inform Your Excellency that I have received Your Excellency's letter of the following text: [See letter Iia]

I have the pleasure to convey to Your Excellency my government's approval of the contents of your letter, the text of which is hereabove stated, considering that the said letter and my reply thereto shall constitute an agreement between our respective governments, effective on the date on which the Agreement comes into force.

With renewed assurance of my high esteem.

Teheran on 2nd Sha'ban 1388 corresponding to 2nd Aban 1347 and 24th October 1968.

APPENDIX F

AGREEMENT FOR THE DETERMINATION OF BOUNDARIES BETWEEN THE HASHIMITE KINGDOM OF JORDAN AND THE KINGDOM OF SAUDI ARABIA⁸

In the Name of Allah, the Compassionate, the Merciful

The Government of the Hashimite Kingdom of Jordan and the Government of the Kingdom of Saudi Arabia, in order to strengthen the ties of brotherhood and friendship which bind their two countries and their brotherly peoples together, and in order to consolidate the fruitful co-operation which is based on improving the natural ties prevalent between them, and considering the benefits which may be secured for the common good of both countries, have decided to agree on a final determination of the boundaries between their two countries, and to solve the problems related thereto. Both governments have appointed official delegations for this purpose. The delegation representing the Hashimite Kingdom of Jordan:

1. H. E., Mr. Abd al-Wahhab al-Majali, the Minister of the Interior and Minister of State for Prime Ministry Affairs, Chairman.
2. Mr. Muhammad al-Amin al-Shanqiti, the Jordanian Ambassador to Saudi Arabia.
3. The Director of General security, Major-General Radi al-Abdallah.
4. H. E., al-Sharif Muhammad Hashim, the advisor of his Majesty, the King, for Tribal Affairs.
5. Mr. Hajim Tell, the Undersecretary of the Ministry of the Interior.
6. Mr. Subhi al-Hasan, Director of Lands and Survey.
7. Brigadier Arshid Marshud, Commander of the desert region.
8. Lieutenant Colonel Hammad Salim, from the desert region.
9. Mr. Ahmad al-Sa'd al-Hamud, from the General Security Forces.
10. Captain Butros Audah, from the General Staff of the Armed Forces.
11. Mr. Sulayman Qamwah, public official in the Department of Land and Survey.

The delegation representing the Kingdom of Saudi Arabia:

- 1) H. E., al-Shaykh Abdallah al-Sudayri, Undersecretary for Municipal Affairs in the Ministry of the Interior, Chairman.

⁸. Law No. 36 of the year 1965, official Gazette of The Hashimite Kingdom of Jordan No. 1868. 26 August, 1965. pp. 14042-1405.

Translation by Najib Saliba with George Grassmuck Canter for Near Eastern and North African Studies. The University of Michigan, Ann Arbor, 1966. Checked by Lands and Survey Department and by Suleiman Mousa, Department of Culture and Arts, both of the Government of Jordan, May, 1967.

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- 2) H. E., al-Shaykh Ahmad al-Kahimi, the Saudi Arabian Ambassador in Amman.
- 3) H. E., al-Shaykh Sultan al-Sudayri, Governor of al-Qrayyat and inspector of the Western borders.
- 4) H. E., Major General Sulayman al-Jarid, director of Boundaries, Coast Guards, and Ports.
- 5) H. E., Brigadier-General Rashid al-Balla, delegate of the Defense Ministry.
- 6) H.E., Nasir al-Shu'aybi, assistant to the head of the political branch in the Royal Cabinet (Royal Diwan).
- 7) Mr. Muhammad Sa'id al-Faris, engineer.

After holding several meetings in the city of Amman in the period between the ninth of Rabi 1, 1385 A.H. and the twelfth of Rabi' 2, 1385 A.H., which is equivalent to the period between July 7, 1965 A.D. and August 9, 1965 A.D., to study the boundary situation, the two delegated parties have agreed to the following:

1. A- The boundary between the Hashimite Kingdom of Jordan and the Kingdom of Saudi Arabia starts from the point of intersection of the line of Longitude $39^{\circ}18'$ with the line of Latitude $32^{\circ}14'$ on Mount Unaza and then proceeds in a straight line to the point of intersection of Longitude 39° with Latitude 32° , then it moves in a straight line to the point of intersection of Longitude 37° with Latitude $31^{\circ}30'$, from which it continues in a straight line to the point of intersection of Longitude $37^{\circ}40'$ with Latitude $30^{\circ}20'$ which is north of the lower Mashas Hadraj by two thousand meters, leaving lower Mashas Hadraj for Saudi Arabia; then the boundary continues in a straight line from that point to the point of intersection of Longitude $37^{\circ}30'$ with Latitude 30° leaving the position of Bir al-Ni'am for the Hashimite Kingdom of Jordan, then the boundary continues in a straight line to the point of intersection of Longitude $36^{\circ}45'$ with Latitude $29^{\circ}52'$, leaving the position of Bir Bani Murrah and the position of al-Annab for the Hashimite Kingdom of Jordan. Then the boundary goes on in a straight line to the point of intersection of Longitude $36^{\circ}30'$ with Latitude $29^{\circ}30'$ after which it continues in a straight line to the point of intersection of Longitude $36^{\circ}4'$ with Latitude $29^{\circ}11'$ which lies to the north of Hallat Ammar by about one thousand metres, leaving Hallat Ammar for Saudi Arabia. The boundary continues from this point north of Hallat Ammar in a straight line to a point located 300 metres to the north of the north east corner of Makhfar (Police Station) al-Durrat, and from which it continues to the sea.

B- The delimitation and sketching of the boundaries mentioned above, in the previous paragraph, were undertaken on two maps with a scale of 1/500,000, which were prepared in the year 1960: I 200 B Wadi al-Sarhan, and I 201 B al-Jawf and Sukaka. Both maps were combined into one map, which was signed by the delegations of both parties and is considered a

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component part of the agreement. The green colour on this map indicates the regions which are governed by the terms of the agreement. These are regions located between the boundary line drawn in red ink according to paragraph "A" above and the broken line drawn in black ink shown on the attached map. This map is considered the authoritative source to consult for the determination of boundaries between the two contracting kingdoms.

2. Notwithstanding all that has been specified in Item one, if petroleum or its products are discovered in the region coloured green and delimited on the map referred to in Item One the two kingdoms promise to divide equally between them the rights, interests, and profits resulting from the discovery and production of petroleum or its products. The kingdom in whose territory petroleum discovered in the above mentioned green coloured regions must give the other kingdom its share. The way in which the discovered petroleum or its products will be produced and used, and the way in which each country's share will be paid, shall be regulated in a special agreement to be concluded between them.
3. A- The two contracting kingdoms promise to protect the rights of pasturage and the rights to the use of the waters of the wells belonging to the tribes of each country inside the regions coloured green and referred to in Items One and Two of this agreement. Furthermore, these tribes will be subjected to the laws and regulations of the country in whose territory they encamp provided the laws do not conflict with the rights of pasturage.

B- Each of the two contracting countries promises to guarantee free passage across its territory for the subjects of the other country as well as for the importation or exportation of goods in transit regardless of their point of origin. These subjects and goods will not be liable for any taxes or customs duties when they follow the ways and routes agreed upon. The country whose territory is being used for such purposes retains its usual customary right of inspection and supervision.
4. All previous agreements made between the two countries concerning the determination of boundaries and which contradict the terms of this agreement are abolished.
5. This agreement will be ratified according to the constitutional procedures in each of the contracting kingdoms and will go into effect one month after the documents of ratification have been exchanged.

This agreement was written in Amman on the twelfth of Rabi 2, 1385 A.H., which is equivalent to the ninth of August, 1965 A.D.

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Chairman of the Jordanian delegation empowered to sign:

Abd al-Wahhab al-Majali, Interior Minister and Minister of State for Prime Ministry Affairs.

Other members empowered to sign:

Muhammad al-Amm al shngiti

Radi al-Abdallah

Muhammad Hashim

Chairman of the Delegation of Saudi Arabia empowered to sign:

Aballah al-Sudayri, Undersecretary for Municipal Affairs, in the Ministry of the Interior.

Other members empowered to sign:

Sultan al-Sudayri

Sulayman al-Jarid

Rashid al-Balla

Nasir al-Shu'aybi

Muhammad Sa'id Faris

APPENDIX G

AGREEMENT OF DELIMITATION OF THE LAND AND THE MARITIME BOUNDARY BETWEEN THE KINGDOM OF SAUDI ARABIA AND QATAR⁹

Riyadh 24/10/1965

Source: Ministry of Foreign Affairs, 1936/1973,
Collection of Documents and Agreements.

The Government of the Kingdom of Saudi Arabia represented by His Excellency Shaikh Zaki Yamani Minister of Petroleum and Mineral Resources.

And Government of Qatar represented by His Highness Shaikh Khalifah bin Hammad Al Tani, the Deputy of the Ruler and Crown Prince.

By the wishes of the two governments in delimiting the land and sea boundaries between their countries, due to the importance of this matter, and because of the brotherhood and good relation between them;

Taking into account the letter of 23, of Jumada 1 of 1371 A.H. which sent from His Majesty King Faisal bin Abdul Aziz Al Saud to His Highness Shaikh Ali bin Abdullah Al Tani;

Have agreed on conducting the following:

Article 1

Dawhat Salwa has to be divided between the two countries by the equidistance method from both coasts and the mid line will be used as passable if the coasts are winding.

Article 2

The land boundary between the Kingdom of Saudi Arabia and Qatar start form a point on the Dawhat Salwa coast. Its Geographical location approximately is :-

Longitude 50°49'46" east

Latitude 24°44'50" north

From this point and with a straight line to the top point "bi Garn Abu Wa'il", and from this point and with a straight line towards the Southern edge of "Jawb As-salamah Area" whose geographical location is:

Longitude 50°55'44" east

Latitude 24°32'43" north

From it and with a straight line to a point located on the South Eastern edge of "Jawb As-Salamah Area" which its Geographical location is

⁹. Source: Translated by the Author.

APPENDICES

Longitude 51°00'00" east

Latitude 24°30'00" north

Extending from this point with a straight line to a point located on the Southern edge of "Sabakhat Sood Ntheel" its Geographical location is:

Longitude 51°05'55" east

Latitude 24°28'16" north

Extending from it by a straight line to a point on the "Khour El-Adid" coast, whose geographical location is approximately

Longitude 51°16'02" east

Latitude 24°36'48" north

All these points indicated initially on map GF 2224 dated of December 1961 Scale 1:200000 which is attached to this agreement which is signed by the parties.

Article 3

An international Firm shall carry out the survey and define the points and boundary line on the land and draw a map for the land and sea boundary which will be signed by the parties as the official map.

Article 4

The cost of the survey will be shared between the two governments

Article 5

A technical committee comprising of two member from each side will be responsible for preparing the details of the survey operation, and the defined points and boundary line between the two states in this agreement, and will supervise the survey operation and its result.

Article 6

This agreement is conducted in Riyadh City on the Eleventh day of Sha'Ban 1385 Hegira corresponding to the Fourth day of December 1965 from two copies, one for each party. The agreement will be in force immediately after the exchange of the document by the two governments.

This agreement shall be in force after the exchange of the ratified documents from the two governments.

Qatar
Khalifah bin Hammad Al Tani

Kingdom of Saudi Arabia
Ahmad Zaki Yamani

APPENDIX H

AGREEMENT BETWEEN SUDAN AND SAUDI ARABIA RELATING TO THE JOINT EXPLOITATION OF THE NATURAL RESOURCES OF THE SEABED AND SUBSOIL OF THE RED SEA IN THE COMMON ZONE

Khartoum, 16.5.1974

Source: ST/LEG/SER.B/IG, p. 452

In force: 26.8. 1974

Article 1

For the purposes of the present agreement the following expressions shall have the meanings hereunder assigned to them:

- (1) "Sea-bed" includes the sea-bed and sub-soil of the Red Sea.
- (2) "Natural resources" comprise the non-living substances including the hydrocarbon and the mineral resources.
- (3) "Territorial sea" means the territorial sea as defined in the laws of the two governments.
- (4) "The competent minister" means the Minister appointed by the Government of the Kingdom of Saudi Arabia and the Minister appointed by the Government of the Democratic Republic of the Sudan to represent each of them in the joint commission.

Article 2

The two governments covenant to co-operate through all ways and means to explore and exploit the natural resources of the sea-bed of the Red Sea.

Article 3

The Government of the Kingdom of Saudi Arabia recognizes that the Government of the Democratic Republic of the Sudan has exclusive sovereign rights in the area of the sea-bed adjacent to the Sudanese Coast and extending eastward to a line where the depth of the superjacent waters is uninterruptedly one thousand meters. The Government of the Kingdom of Saudi Arabia claims no rights in this area.

Article 4

The Government of the Democratic Republic of the Sudan recognizes that the Government of the Kingdom of Saudi Arabia has exclusive sovereign rights in the area of the sea-bed adjacent to the Saudi Arabian coast and extending westwards to a line where the depth of the superjacent waters is uninterruptedly one thousand meters. The Government of the Democratic Republic of the Sudan

claims no rights in this area.

Article 5

The two governments recognize that the area of the sea-bed lying between the two areas defined in Articles 3 and 4 above is common to both governments and shall hereafter be known as the Common Zone. The two governments have equal sovereign rights in all the natural resources of the Common Zone which rights are exclusive to them. No part of the territorial sea of either government shall be included in the Common Zone.

Article 6

The two governments confirm that their equal sovereign rights in the Common Zone embrace all the natural resources therein and that they alone have the right to exploit such resources. The two governments undertake to protect their sovereign rights and defend them against third parties.

Article 7

To ensure the prompt and efficient exploitation of the natural resources of the Common Zone there shall be established a Commission referred to hereafter as the Joint Commission. The Joint Commission shall be charged with the following functions:

- (a) To survey, delimit and demarcate the boundaries of the Common Zone.
- (b) To undertake the studies concerning the exploration and the exploitation of the natural resources of the Common Zone.
- (c) To encourage the specialized bodies to undertake operations for the exploration of the natural resources of the Common Zone.
- (d) To consider and decide, in accordance with the conditions it prescribes, on the applications for licences and concessions concerning exploration and exploitation.
- (e) To take the steps necessary to expedite the exploitation of the natural resources of the sea-bed in the Common Zone.
- (f) To organize the supervision of the exploitation at the production stage.
- (g) To make such regulations as may be necessary for the discharge of the functions assigned to it.
- (h) To prepare the estimates for all the expenses of the Joint Commission.
- (i) To undertake any other functions or duties that may be entrusted to it by the two governments.

Article 8

The Joint Commission established under Article 7 of this Agreement shall be a body corporate enjoying in the Kingdom of Saudi Arabia and the Democratic Republic of the Sudan such legal capacity as may be necessary for the exercise of

all the functions assigned to it.

Article 9

The joint commission shall consist of an equal number of representatives from each of the two countries and each side in the joint commission shall be headed by the competent Minister. The regulations shall lay down the joint commission's rules of procedure.

Article 10

The Joint Commission shall have a sufficient number of officials. The Joint Commission shall determine their number and terms of service.

Article 11

The seat of the Joint Commission shall be the city of Jeddah in the Kingdom of Saudi Arabia. The Joint Commission may, however, hold meetings at any other place it decides upon.

Article 12

The Government of the Kingdom of Saudi Arabia shall provide such funds as would enable the Joint Commission to discharge effectively the functions entrusted to it. The Government of the Kingdom of Saudi Arabia shall recover such funds from the returns of the production of the Common Zone and in a manner to be agreed upon between the two countries.

Article 13

Whereas the Government of the Democratic Republic of the Sudan has concluded on 15 May 1973 an Agreement whereby it has given exploration licences to Sudanese Minerals Limited and the West German Company of Preussag which Agreement has created legal obligations on the Government of the Democratic Republic of the Sudan, the two governments have agreed that the joint commission shall decide on this matter in such a manner as to preserve the right of the Government of the Democratic Republic of the Sudan and in the context of the regime established by this agreement for the common zone.

Article 14

In the event that any accumulation or deposit of a natural resource extends across the boundary of the exclusive sovereign rights area of either government and the common zone, the joint commission shall determine the manner in which it is to be exploited provided that any decision taken shall guarantee for the government involved an equitable share in the proceeds of the exploitation of

such accumulation or deposit.

Article 15

The application of this agreement shall not affect the status of the high seas or obstruct navigation therein, within the limits provided for by the established rules of public international law.

Article 16

If a dispute arises respecting the interpretation or implementation of this agreement or the rights and obligations it creates, the two governments shall seek to settle such dispute by amicable means.

If the settlement of the dispute through amicable means fails, the dispute shall be submitted to the International Court of Justice. The parties accept the compulsory jurisdiction of the International Court of Justice in this respect.

If one of the two governments takes a measure which is objected to by the other, the objecting government may ask the International Court of Justice to indicate interim measures to be taken to stop the measure objected to or to allow its continuance pending the final decision.

Article 17

This agreement is subject to ratification in accordance with the constitutional requirements of each government and shall enter into force on the day on which the instruments of ratification are exchanged.

APPENDIX I

SAUDI ARABIAN DECREE RELATING TO OWNERSHIP OF RED SEA RESOURCES¹⁰

[September 7, 1968]

Royal Decree No. M-27 Dated 9/7/1388 Hegira

With the help of Almighty God, We, Feisal, Ibn Abdel Aziz Al Saud King of the Kingdom of Saudi Arabia, having persuaded Section 19 of the Council of Ministers Regulations issued by Royal Decree No. 28 dated 22/10/1377 Hegira and in accordance with the resolution of the Council of Ministers Number 1006 dated 7/7/1388 Hegira and in accordance with what the Deputy Prime Minister has submitted to us, we order the following:

- 1) We approve the regulations of owning the Red Sea resources in the form annexed to this decree.
- 2) The Deputy Prime Minister and the Minister of Petroleum and Mineral Resources shall execute this our decree.

(Sgd) Feisal

Regulations Relating to Ownership of Red Sea Resources

Section 1:

The Kingdom of Saudi Arabia owns all the hydrocarbon materials and minerals existing in the strata of the seabed and this is in respect to the zone extending in the Red Sea bed adjacent to the Saudi continental shelf, which materials and minerals are hereinafter referred to as "resources".

Section 2:

These "resources" are deemed to be a part of the Saudi Territory and to be treated as the property of the state according to the first section of mining regulations in respect to which Royal Decree No. 90 dated 11/9/82 has been issued.

Section 3:

The Government of the Kingdom of Saudi Arabia alone shall have the individual right to explore and mine these "resources" and to exploit them, and nobody, public or private, national or foreign, can exercise any form of this right except with the express permit from the competent Saudi Authorities and in accordance with the regulations applicable in the Kingdom of Saudi Arabia.

¹⁰. Reprinted from an unofficial English translation of Royal Decree No. M-27 issued by the Kingdom of Saudi Arabia.

And the Government of the Kingdom of Saudi Arabia may exercise its rights in exploring or mining these "resources" and exploiting them by way of sharing with the neighbouring governments which have similar rights recognised by the government of the Kingdom of Saudi Arabia in common zones.

Section 4:

These "resources" shall not be owned by possession or prescription and the rules of limitation by lapse of time shall apply to the ownership of the state thereto.

Section 5:

The Ministry of Petroleum and Mineral Resources shall be the competent authority to supervise these "resources" and to apply the Saudi rules and regulations relating thereto.

Section 6:

The application of these regulations shall not affect the description of the high seas or obstruct navigation therein within the limits provided for by the established rules of public international law.

APPENDIX J

AGREEMENT BETWEEN THE KINGDOM OF SAUDI ARABIA AND THE STATE OF KUWAIT RELATING TO THE PARTITION OF THE NEUTRAL ZONE¹¹

Signed July 7, 1965
In force July 25, 1966

In the Name of God the Compassionate, the Merciful

Whereas the two contracting parties have equal rights in the shared zone whose land boundaries are delineated in accordance with the boundary convention of Al Uqair dated 13/4/1341 H., corresponding to 2nd December, 1922, and the agreed Minutes signed in Kuwait on 12/10/1380 H., corresponding to 21st March, 1961 (called hereinafter the "Partitioned Zone"), and

Whereas the aforesaid Convention did not regulate the exercise of those rights, and as that state of affairs was of a provisional nature which entailed serious practical difficulties, and

Whereas the two contracting parties, by an exchange of notes on 15/3/1383 H., corresponding to 5/8/1963 (in regard to partitioning the Neutral Zone) have agreed to put an end to that temporary state of affairs by means of partitioning that zone into two sections, so that the one shall be annexed to the State of Kuwait and the other shall be annexed to the Kingdom of Saudi Arabia, provided that the equal rights of the two parties shall be preserved in full in the whole partitioned zone as had originally been decided by the convention made at Al Uqair, that it should be shared between the two parties, and shall be safeguarded by the provisions of international responsibility. They therefore have agreed upon the following:

Article 1

The boundary line between the two sections of the zone is to be the line which divides them into two equal parts and which begins from a point at the mid-eastern shore on the low-tide line, and ends at the western boundary line of the zone. That boundary line shall be demarcated in a natural manner by the Committee of Survey which is to determine the boundary lines of the Neutral Zone and which is to be set up in the manner agreed upon in the protocol annexed to the notes exchanged between the two parties at Jeddah on 15/3/1383 H., corresponding to 5/8/1963. This boundary line shall be approved by the two sides in an agreement they will conclude later on.

¹¹. Unofficial translation supplied by Sayed M. Hosni. See also International Legal Materials 1134 (1965). The Arabic text appears in the official Gazette of Kuwait, Kuwait Al-Yoam, No. 581 (June 19, 1966).

Article 2

Without prejudice to the provisions of this Agreement, the area lying to the north of the line dividing the partitioned zone into two equal parts shall be annexed to Kuwait as an integral part of its territory, and the area lying to the south of the line dividing the Partitioned Zone into two equal parts shall be annexed to the Kingdom of Saudi Arabia as an integral part of its territory.

Article 3

Each of the contracting parties shall exercise over that part of the Partitioned Zone annexed to its territory the same rights of administration, legislation and defense as those exercised in its territory of origin, while observing other provisions of this Agreement, and without prejudice to the rights of the contracting parties to natural resources in the whole of the Partitioned Zone.

Article 4

Each of the contracting parties shall respect the right of the other party to the shared natural resources either existing at present or which shall exist in future in that part of the Partitioned Zone which is annexed to its territory.

Article 5

If one of the parties cedes or otherwise alienates any part of said equal right which are safeguarded by the provisions of this agreement, and which are exercised over any part of the partition zone by any other state, the other party shall be relieved of its obligations under this agreement.

Article 6

Each of the contracting parties shall be under obligation not to take any local or international measure or action which may result in whatsoever manner in hindering the other party from exercising the rights which are safeguarded by this agreement, and it shall be under obligation to co-operate with the other party fully to protect their rights.

Article 7

Each of the contracting parties shall exercise over the territorial waters which adjoin that part of the Partitioned Zone which will be annexed to its territory the same rights as those exercised over the part annexed to its territory; and the two contracting parties shall agree to determine the boundary line which divides the territorial waters which adjoin the Partition Zone.

For the purpose of exploiting the natural resources in the Partition Zone, not more than six marine miles of the sea-bed and sub-soil adjoining the Partitioned Zone shall be annexed to the mainland of that Partitioned Zone.

Article 8

In determining the northern boundary of the submerged area adjoining the Partitioned Zone, it shall be delineated as if the zone has not been partitioned and without regard to the provisions of this agreement.

The two contracting parties shall exercise their equal rights in the submerged area beyond the aforesaid six mile limit mentioned in the preceding article by means of joint exploitation, unless the two parties agree otherwise.

Article 9

Each of the contracting parties shall, in the part of the partitioned zone annexed to the other party, evacuate the establishments occupied by its government officials who perform administrative and legal work, and hand it over to the other party, provided that such provision shall not apply to establishments occupied by government officials engaged in oil digging, checking and auditing accounts, technical supervision and purchasing work.

Article 10

If one of the contracting parties entrusts the companies, that have been granted a joint concession by the two parties with the construction, in that part of the Partitioned Zone annexed to its territory of establishments for judicial and administrative purposes in accordance with the terms of the concession, the cost of constructing such establishments shall be deducted from the capital expenses of the concessionary companies, provided that such costs shall be limited to necessary and reasonable expenses.

Article 11

The present agreements of oil concessions shall remain in force and each Party pledges to respect, in that half of the Partitioned Zone to be annexed to its territory, their provisions and the amendments entered into. It shall also undertake such legislative and legal measures necessary for the continued exercise by the concessionary companies of their rights and the discharge of their obligations.

Article 12

Each contracting party shall be responsible, in that part of the Partitioned Zone to be annexed to its territory, for protection and security according to the obligations provided for in the present concession agreements in force.

Article 13

To avoid double taxation, each contracting party shall undertake to enact

legislative safeguards which ensure the non-imposition of taxes, customs duties or royalties on the companies that have been granted a concession in the Partitioned Zone by the other party.

Article 14

Entry and movement in the Partitioned Zone of citizens of the two contracting parties, who are working as officials, employees, labourers and contractors in establishments and firms engaged in the exploitation of natural resources according to concessions now in force or affiliated firms, shall be by a valid passport issued by the other party or by a card of special form to be issued by one of the contracting parties, and to be agreed upon, without the need to obtain an entry visa.

Article 15

Without prejudice to the concessionary oil agreements in force, each of the parties shall ensure, in that part of the Partitioned Zone to be annexed to its territory, to the citizens of the other party freedom to work and the right to practice any profession or occupation on equal footing with its citizens, concerning oil resources granted in the present concessions or in what may supersede them in future.

With regard to natural resources which may be discovered in future, the two parties shall agree on the rights of each other's citizens to work or practice any occupation related thereto.

Article 16

Each of the contracting parties shall respect the rights of the other party's citizens in the present establishments and constructions existing in that part of the Partitioned Zone to be annexed to its territory.

Article 17

To ensure the continuance of the two contracting parties efforts in exploiting natural resources in the Partitioned Zone, a joint permanent committee (called hereinafter the "Committee") shall be set up.

Article 18

The Committee shall be composed of an equal number of representatives of the two contracting parties; and the two competent Ministers for Natural Resources in the two contracting governments shall agree upon the number of committee members, its rules of procedure and the manner of securing the necessary appropriations for it.

Article 19

The committee shall have the following powers:

- (a) To facilitate passage of officials and employees (other than the citizens of the two parties) of concessionary companies and of ancillary companies and establishments in the Partitioned Zone.
- (b) Studies relative to projects of exploiting shared natural resources.
- (c) To study the new licenses, contracts, and concession relating to shared natural resources and submit its recommendations to the two competent ministers as to what it deems appropriate in this respect.
- (d) To consider whatever the two competent Ministers refer to it.

The Committee in performing its duties shall have the right to sign contracts, and shall submit its reports and recommendations directly to the two competent ministers. The two contracting parties shall endeavour to make sure that the committee be ready to start its work within six months at most from the date of the entry into force of the present agreement.

Article 20

The two competent ministers shall consult together in granting or amending any new concession relating to shared natural resources. The party which does not agree with the other shall send him a written notification giving the reasons, before granting or amending the new concession. If any other establishment or company is allowed to replace any present establishment or company exploiting natural resources in the Partitioned Zone, this replacement shall not be considered as a new concession, provided that the interests of the other party shall not be prejudiced.

Article 21

The two contracting parties shall undertake to supply the Committee with information, data and documents which it may require to facilitates its task.

Article 22

If a dispute arises with regard to the interpretation or application of this agreement or the rights and obligations which it creates, the two contracting parties shall seek to settle such dispute by friendly means for the settlement of disputes including recourse to the Arab League.

If the aforesaid methods fail to settle the dispute, then it shall be submitted to the International Court of Justice.

The two contracting parties accept the compulsory jurisdiction of the International Court of Justice in this respect.

If one of the two contracting parties takes a measure which is objectionable to the other party, the objecting party may, pending the final settlement of the dispute, ask the International Court of Justice to indicate any interim measures

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to be taken to suspend the measure which is objected to or allow its continuance.

If one of the contracting parties refuses to abide by the judgement made against it, the other party shall be relieved from its obligations under this agreement.

Article 23

This agreement shall be subject to ratification by each contracting party in accordance with its constitutional procedure and shall come into force on the date of exchanging instruments of ratification.

Done in two original texts in Arabic, both of which are equally authentic.

For the State of Kuwait

For the Kingdom of Saudi Arabia

Jaber Al-Ahmad Al-Sabah

Ahmad Zaki Yamani

APPENDIX K

TERRITORIAL WATERS AND CONTINENTAL SHELF ACT OF SUDAN, 1970 ¹²

1. Preliminary

1.1 Interpretation

In this Act, unless the context otherwise requires:

- (b) "Bay" means any extension, inclination, inlet, lagoon, bend, gulf, or other arm of the sea.
- (e) "Coast" means the coast of the Democratic Republic of the Sudan adjacent to the Red Sea, as marked on charts or maps officially recognised by the Democratic Republic of the Sudan, and includes the outermost permanent harbour works which form an integral part of the harbour system.
- (g) "Passage" means navigation through the territorial waters.
- (h) "Innocent Passage" means the passage of the ship through the territorial waters so long as it is not prejudicial to the peace, good order or security of the Democratic Republic of the Sudan and is in conformity with rules of international law and includes stopping and anchoring but only insofar as the same are incidental to ordinary navigation or are rendered necessary by force majeure or by distress.
- (k) "Continental Shell" means the sea bed and subsoil of the submarine areas but outside the territorial waters of the Democratic Republic of the Sudan, to a depth of two hundred meters or beyond that limit to where the depth of the superjacent waters admits of the exploitation of the natural resources of the said areas.

2. Internal waters and territorial waters

2.1 Internal waters

For the purposes of this Act the internal waters of the Democratic Republic of the Sudan means the internal waters on the landward side of the boundaries of the territorial waters of the Republic and include the following.

- (a) Ports, wharfs and anchorages.
- (b) Waters of a bay the coasts of which belong to the Democratic Republic of the Sudan.
- (c) Waters on the landward side of any shoal not more than twelve nautical miles from the mainland or from a Sudanese island.
- (d) Waters between the mainland and any Sudanese island not more than

¹². Source: Lapidoth, R., 1982.

twelve nautical miles from the mainland.

- (e) Waters between the Sudanese islands not further apart than twelve nautical miles.

2.2 Territorial waters

The territorial waters of the Democratic Republic of the Sudan extend seaward to a distance of twelve nautical miles and shall be measured from the straight baseline as marked on large-scale maps recognised by the Democratic Republic of the Sudan.

2.3 The baseline for measuring the territorial waters

- (1) The baseline for measuring the breadth of the territorial waters of the Democratic Republic of the Sudan shall consist of:
- (a) Where the coast of the mainland or an island is wholly exposed to the open sea, the lowest low-water line as marked on large-scale charts officially recognised by the Democratic Republic of the Sudan.
 - (b) Where a bay belongs to the Democratic Republic of the Sudan, a line drawn from headland to headland across the mouth of the bay.
 - (c) Where a shoal is situated not more than twelve nautical miles from the mainland or from a Sudanese island, the lowest low water line on that shoal.
 - (d) Where a port or harbour faces the open sea, a line drawn along the seaward side of the outermost works of the port or harbour and between such works.
 - (e) Where an island is not more than twelve nautical miles from the mainland, appropriate lines drawn from the mainland and along the outer shores of the island.
 - (f) Where there is an island group which may be connected by lines not more than twelve nautical miles long, of which the island nearest to the mainland is not more than twelve nautical miles from the mainland, appropriate lines drawn from the mainland and along the outer shores of all the islands of the group if the islands form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain.
 - (g) Where there is an island group which may be connected by lines not more than twelve nautical miles long, of which the island nearest to the mainland is more than twelve nautical miles from the mainland, lines drawn along the outer shores of all the islands of the group of the islands which form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain.
- (2) If the delimitation of the territorial waters in accordance with the provisions of this Act results in any portion of the high seas being wholly surrounded by territorial waters and such portion does not extend more

than twelve nautical miles in any direction, such portion shall form part of the territorial waters.

2.4 Foreign ships

- (a) The ships passing through the territorial waters shall comply with the Sudanese laws in force as well as the provisions of international law and agreements and, in particular of those relating to carriage and navigation.
- (b) The Democratic Republic of the Sudan may suspend in specified areas of its territorial waters the passage of foreign ships if such suspension is, in its opinion, necessary for its security but such suspension shall take effect only after having been duly published.
- (c) The passage of military vessels in the territorial waters shall be subject to previous permission, and the government may take all necessary action against ships committing any breach, and submarines shall navigate on the surface and shall show the flag of the nation to which they belong.

2.5 Power to exercise control over area of high seas

The government may exercise necessary control over the high seas contiguous to its territorial waters up to a distance of six nautical miles measured from the limits of the territorial waters of the Democratic Republic of the Sudan:

- (a) To prevent infringement of its customs, fiscal, immigration, sanitary or security laws within its territory or territorial waters.
- (b) To punish infringement of any of the laws aforesaid committed within its territory or territorial waters.

3 Continental Shelf

3.1 Rights of sovereignty, power to erect installations etc. on the continental shelf

- (a) The Democratic Republic of the Sudan shall have the rights of sovereignty over the continental shelf for the purpose of exploring it and exploiting its natural resources and no one shall explore or exploit as aforesaid or make a claim to the continental shelf, without the express approval of the Council of Ministers.
- (b) The rights of the Democratic Republic of the Sudan referred to in the preceding subsection or their exercise shall not depend on actual or notional occupation or on any express declaration.

3.2 Power to erect installations etc. on the continental shelf

- (a) The Democratic Republic of the Sudan shall have the right to construct and maintain or operate on the continental shelf installations and other devices necessary for its exploration and the exploitation of its natural resources and to establish safety zones around the installations and other devices erected and to take in those zones, measures necessary for their protection.
- (b) The safety zones aforesaid may extend to a distance of 500 metres around the installations and other devices which have been erected, measured from each point of their outer edge.

3.3 Status of superjacent waters or air space not affected

The rights of the Democratic Republic of the Sudan over the continental shelf shall not affect the legal status of the superjacent waters as high seas or that of the air space above those waters.

3.4 Natural resources

The natural resources referred to in this chapter consist of the mineral and other non-living resources together with living organisms belonging to sedentary species, that is to say, organisms which, at the harvestable stage, either are immobile on or under the seabed or are unable to move except in constant physical contact with the sea-bed or the subsoil.

APPENDIX L

THE TERRITORIAL WATERS AND CONTINENTAL SHELF OF THE (NORTH) YEMEN ARAB REPUBLIC, 1967¹³

Territorial Waters¹⁴ (Decree No. 15, 1967)

Article 1

Definitions of nautical mile, bay, island, and so forth

Article 2

The territorial waters of the Yemen Arab Republic, the air space over them and the land beneath them and the subsoil under them are under the sovereignty of the Republic, with due consideration of the rules of international law relating to the innocent passage of vessels of other nations in the coastal sea.

Article 3

The territorial waters of the Yemen Arab Republic include the inland waters and the coastal sea of the Republic.

Article 4

The inland waters of the Republic include:

- (a) The waters of the bays along the coasts of the Republic.
- (b) The waters above and landward from any shoal not more than twelve nautical miles from the mainland or from a Yemeni island, and the waters between such a shoal and the land.
- (c) The waters between the mainland and any Yemeni island not more than twelve nautical miles from the mainland.
- (d) The waters between the Yemeni islands which are not farther apart than twelve nautical miles.

Article 5

The coastal sea of the Yemen Arab Republic lies outside the inland waters of the Yemen Arab Republic and extends seaward for a distance of twelve nautical miles.

¹³. Before the unity with South Yemen.

¹⁴. Source: Lapidoth, R., 1982

Article 6

The determination of the baselines from which the coastal sea of the Republic is measured shall be made according to the following:

- (a) If the mainland or the shore of the island is fully exposed to the sea, the lowest low-water mark on the shore.
- (b) In case of the existence of a bay facing the sea, lines drawn from headland to headland across the mouth of the bay.
- (c) In case of the existence of a shoal not more than twelve nautical miles from the mainland or from a Yemeni island, lines drawn from the mainland or the island and along the outer edge of the shoal.
- (d) In case of the existence of a wharf or port facing the sea, lines drawn along the seaward side of the outermost works of the wharf or port and between such works.
- (e) In case of the existence of an island not more than twelve miles from the mainland, lines drawn from the mainland along the outer shores of the island.
- (f) In case of the existence of an island group which may be linked together by lines not more than twelve nautical miles long, lines drawn along the shore of all the islands of the group if the islands form a chain, or along the outer shores of the outermost islands of the group if the islands do not form a chain.

Article 7

If the measurement of the territorial waters in accordance with the provisions of this resolution leaves an area of high sea wholly surrounded by territorial waters and extending not more than twelve nautical miles in any direction, such area shall form part of the territorial waters. The same rule shall apply to a pronounced pocket of high sea which may be wholly enclosed by drawing a single straight line not more than twelve nautical miles long.

Article 8

In the event of waters of another State overlapping with the internal waters or the coastal sea of the Yemen Arab Republic the boundaries will be determined in agreement with the State concerned in accordance with the principles observed in international law or by mutual agreement.

Article 9

To enforce the laws and regulations relating to security, navigation, fiscal and sanitary purposes, maritime surveillance covers an area falling next to the coastal sea and contiguous to it, to a distance of six nautical miles in addition to the twelve nautical miles measured from the baselines of the coastal sea. This order shall not affect the rights of the Yemen Arab Republic with respect to

fishing.

The Continental Shelf (Decree No. 16, 1967)

Article 1

The Yemen Arab Republic enjoys sovereign rights over the sea bed and the subsoil of the continental shelf beyond the territorial waters of the Republic to a depth of 200 meters or, beyond that limit, to where the depth admits of the exploitation of the natural resources which exist in the sea bed. The Yemen Arab Republic furthermore enjoys sovereign rights over similar continental shelf in the case of islands belonging to the Yemen Arab Republic.

The foregoing do not affect the status of the superjacent waters of the said areas as being high seas or the freedom of navigation within the sea waters and in the air space above.

Article 2

The Yemen Arab Republic has alone the right of prospect, exploration and exploitation of all the natural mineral resources and other non-living resources together with living organisms belonging to sedentary species which exist on or under the sea bed of the regions mentioned in Article 1. To this end it has the right to construct, maintain and operate the installations necessary for this purpose, and to establish, for a distance of 500 meters around such installations, safety zones and to take in those zones measures necessary for their protection

Article 3

The rights referred to in the two preceding articles, or their exercise, do not depend on occupation, effective or notional, of the said regions or on any special declarations.

Article 4

It is forbidden for any foreign, natural or artificial, person to undertake the exploitation of any of the natural resources in the continental shelf except by a decree from the President of the Republic.

APPENDIX M

DECREE OF THE PRESIDENT OF THE ARAB REPUBLIC OF EGYPT NO. 27 CONCERNING THE BASELINES OF THE MARITIME AREAS OF THE ARAB REPUBLIC OF EGYPT¹⁵

9 January 1990

Article 1

The maritime areas coming under the sovereignty and rule of the Arab Republic of Egypt, including its territorial sea, shall be measured from the straight baselines connecting all the points defined by the co-ordinates referred to in Article 2.

Article 2

1. In the Mediterranean Sea, in accordance with annex 1, which constitute an inseparable part of this decree;
2. In the Red Sea, in accordance with annex 2, which constitutes an inseparable part of this decree.

Article 3

The lists of co-ordinates referred to in Article 2 of this decree shall be published in accordance with the rules customarily followed in this regard and shall be notified to the Secretary-General of the United Nations.

Article 4

This decree shall be published in the Official Gazette.

¹⁵. Law of the Sea Bulletin, No. 16, December 1990.

Annex 1

I. The Mediterranean

Sequence	Latitude (North)	Longitude (East)
1	31°40'30"	25°08'56"
2	31°34'24"	25°10'48"
3	31°30'56"	25°14'30"
4	31°30'12"	25°19'55"
5	31°38'00"	25°53'24"
6	31°36'18"	26°14'24"
7	31°31'18"	26°38'30"
8	31°27'12"	26°59'06"
9	31°24'30"	27°03'48"
10	31°22'12"	27°21'00"
11	31°12'36"	27°28'30"
12	31°12'00"	27°38'00"
13	31°14'48"	27°51'36"
14	31°06'12"	27°55'00"
15	31°05'30"	28°25'48"
16	31°03'18"	28°35'24"
17	30°58'30"	28°49'56"
18	30°54'54"	28°54'52"
19	30°50'36"	29°00'00"
20	30°59'54"	29°23'48"
21	31°01'48"	29°31'00"
22	31°08'54"	29°47'18"
23	31°12'00"	29°51'42"
24	31°12'36"	29°52'30"
25	31°19'12"	30°02'54"

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26	31°21'42"	30°06'24"
27	31°30'18"	30°21'18"
28	31°30'00"	30°22'42"
29	31°27'18"	30°28'18"
30	31°36'00"	31°01'42"
31	31°36'00"	31°07'00"
32	31°35'12"	31°11'24"
33	31°33'42"	31°16'12"
34	31°26'42"	31°36'00'
35	31°29'30"	31°45'18"
36	31°32'06"	31°52'00"
37	31°32'06"	31°54'12"
38	31°30'18"	31°57'24"
39	31°20'42"	32°06'42"
40	31°18'12"	32°20'30"
41	31°03'54"	32°34'12"
42	31°08'56"	32°55'36"
43	31°13'12"	33°04'00"
44	31°13'48"	33°06'12"
45	31°14'12"	33°08'42"
46	31°13'36"	33°13'18"
47	31°12'00"	33°20'30"
48	31°11'06"	33°23'54"
49	31°07'06"	33°32'00"
50	31°07'42"	33°43'24"
51	31°11'54"	33°58'18"
52	31°14'36"	34°05'18"
53	31°19'24"	34°13'06"

Annex 2

2. The Red Sea

Sequence	Latitude (North)	Longitude (East)
1	29°29'36"	34°54'18"
2	29°29'00"	34°52'12"
3	29°26'12"	34°50'48"
4	29°25'26"	34°49'48"
5	29°22'36"	34°48'12"
6	29°22'00"	34°47'18"
7	29°20'30"	34°46'36"
8	29°18'18"	34°44'24"
9	29°13'24"	34°44'30"
10	29°11'48"	34°44'00"
11	29°10'24"	34°42'48"
12	29°09'36"	34°41'30"
13	29°02'12"	34°40'12"
14	29°00'42"	34°41'03"
15	28°59'18"	34°41'10"
16	28°58'30"	34°40'48"
17	28°58'10"	34°38'56"
18	28°56'42"	34°38'12"
19	28°55'54"	34°38'42"
20	28°51'42"	34°38'48"
21	28°50'48"	34°37'42"
22	28°44'03"	34°37'36"
23	28°38'24"	34°34'48"
24	28°32'28"	34°31'03"
25	28°30'00"	34°31'24"

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26	28°28'24"	34°30'30"
27	28°26'20"	34°27'48"
28	28°22'54"	34°27'18"
29	28°16'24"	34°24'36"
30	28°10'00"	34°27'30"
31	28°03'24"	34°26'56"
32	27°58'48"	34°26'12"
33	27°43'12"	34°15'36"
34	27°27'12"	34°02'18"
35	27°11'24"	34°59'24"
36	26°51'06"	34°00'18"
37	26°45'42"	34°04'54"
38	26°42'42"	34°06'36"
39	26°06'36"	34°17'24"
40	25°42'30"	34°35'24"
41	25°29'42"	34°41'00"
42	25°20'48"	34°51'54"
43	24°47'18"	35°11'00"
44	24°38'18"	35°11'36"
45	24°26'00"	35°22'48"
46	24°15'18"	35°39'00"
47	24°09'42"	35°43'00"
48	23°54'12"	35°47'36"
49	23°33'48"	36°20'36"
50	22°53'12"	36°20'06"
51	22°36'30"	36°35'12"
52	22°20'18"	36°39'24"
53	22°16'12"	36°48'54"
54	22°03'48"	36°53'54"

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55	22°01'30"	36°53'48"
56	22°00'00"	36°52'54"

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