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REPORT ON

**DEVELOPMENT OF
GLOBAL AND REGIONAL CONTAINER TRADE
BETWEEN 1989 AND 1991**

- A MARKET RESEARCH -

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1. EXECUTIVE SUMMARY:

1. THE WORLDWIDE TOTAL OF CONTAINER MOVEMENTS OVER HARBOUR FACILITIES REACHED 84.2 MILLION TEU DURING THE YEAR 1990. CALCULATING A NET WEIGHT OF 9 METRIC TONNES PER FCL, RESULTING 750 MILLION TONNES OF CONTAINERIZED CARGO REPRESENT A 15% SHARE IN GLOBAL SEABORNE TRADE, A PROPORTION THAT IS EVER INCREASING.
2. DURING 1990, CONTAINER TRADE BY CELLULAR CONTAINER SHIPS ON THE NORTHERN HEMISPHERE AMOUNTED TO 27 MILLION TEU, OF WHICH 5.5 MILLION TEU SAILED FROM THE AMERICAN EAST COAST, 6.4 MILLION TEU FROM EUROPE, 1.4 MILLION TEU FROM THE GULF-INDIA REGION, 8.4 MILLION TEU FROM JAPAN, AND 5.1 MILLION TEU FROM THE AMERICAN WEST COAST.
3. ADDITIONALLY, 17.8 MILLION DWT (40.4% OF TOTAL) OF PARTLY-CELLULAR CONTAINER SHIPS SAILED FROM THE AMERICAN EAST COAST, 14.9 MILLION DWT (33.8%) FROM EUROPE, 4.0 MILLION DWT (9.1) FROM THE GULF-INDIA REGION, 4.2 MILLION DWT (9.5%) FROM JAPAN, BUT ONLY 3.2 MILLION DWT (7.3%) FROM THE AMERICAN WEST COAST.
4. CONTAINER SHIPPING WILL CONTINUE TO GROW DRAMATICALLY, BECAUSE IT IS ONLY JUST BEGINNING IN VAST AREAS LIKE CHINA AND INDIA. TODAY ALMOST 70 PER CENT OF GENERAL CARGO IS MOVED IN CONTAINERS, AND MORE AND MORE BULK TRADES ARE CONTAINERIZED.
5. AROUND 38% OF CONTAINER VESSEL CAPACITY CONTRACTED IN MID-1989 WAS FOR SHIPS LOADING 3,000 TEU OR MORE, MANY OF WHICH WILL NOT BE DELIVERED UNTIL THE MID-1990S. AS MAJOR OPERATORS TAKE DELIVERY OF LARGE, NEW TONNAGE, THE TRICKLE-DOWN EFFECT OF FIRST GENERATION SHIPS BEING RE-DEPLOYED IN FEEDER TRADES CONTINUES.
6. BETWEEN THE YEARS OF 1982 AND 1986, TEU-MILE OPERATING COSTS OF CELLULAR CONTAINER SHIPS DECREASED BY 40%. AVERAGE CONTAINER SHIP SIZE EXPANDED FROM 1,200 TEU TO 2,800 TEU CAPACITY, WHILE MARKET SHARES OF THE TOP TEN CARRIERS INCREASED FROM 58 TO 71%.
7. SHIPPERS IN GROWING NUMBERS DICTATE THE PACKAGING, ROUTING AND TRANSPORT ARRANGEMENTS. INCREASINGLY, A PRINCIPAL CRITERION FOR SHIPPERS AND THEIR CONTRACTED CARRIERS IS THE SHIP TURNAROUND TIME, GIVEN THE HIGH DAILY COST OF THESE SHIPS, INSTEAD OF THE PORT CHARGES.
8. FOR MANY CARGOES A GROWING CHOICE OF PORTS IS NOW POSSIBLE, AND THE PROXIMITY OF MANY PORTS MAKES THEM DIRECT COMPETITORS ALONG THE VARIOUS TRADE ROUTES. IMMEDIATE PROSPECTS FOR INDIVIDUAL PORTS WILL THEREFORE BE CLOSELY LINKED TO THE FORTUNES OF THEIR MAJOR CUSTOMERS.
9. THE NEED TO OVERCOME THE PROBLEMS ASSOCIATED WITH IMBALANCES IN CARGO FLOWS, MINIMIZATION OF EMPTY BACKHAULS, MAXIMIZATION OF CAPACITY UTILIZATION, HAS INDUCED THE SERVICES BY HIGH-CAPACITY DEDICATED CONTAINER SHIPS THAT LIMIT THEIR CALLS TO REGIONAL LOAD CENTRES CONNECTING WITH A SYSTEM OF LOCAL FEEDER SERVICES.
10. ONE CONSEQUENCE IS THE RAPID DEVELOPMENT OF FEEDER NETWORKS BY ROUND-THE-WORLD OPERATORS SERVING INTRA-ASIAN TRADE OR AS AN ADJUNCT TO US SERVICES. THIS MEANS FURTHER EXPANSION FOR THE BIG SOUTH EAST ASIAN HUB PORTS, AND ALSO THE ESTABLISHMENT OF FURTHER HUB PORTS THAT ARE STRATEGICALLY LOCATED ALONG THE MAJOR EAST-WEST ROUTES.

11. TO SERVE THE INDIAN SUBCONTINENT, SRI LANKA'S PORT OF COLOMBO IS BEING DEVELOPED AS A HUB FOR CONTAINER TRADE. IN SOUTH ASIA, TRADE IMBALANCES BETWEEN EUROPE AND THE FAR EAST HAVE ALSO MADE ONE-WAY SERVICES OUT OF EUROPE TO THIS LOCAL HUB FINANCIALLY APPEALING.
12. DURING THE RECENT GULF CRISIS, THE SPANISH PORT OF ALGECIRAS IN THE STRAIT OF GIBRALTAR WAS ESTABLISHED AS HUB CENTRE FOR THE COMMERCIAL MEDITERRANEAN-BOUND TRADE AND MILITARY GULF-BOUND TRADE VIA DEDICATED FEEDER VESSEL SERVICES. FOR WESTBOUND MEDITERRANEAN TRADE, THE EGYPTIAN PORTS OF DAMIETTA AND PORT SAID ARE COMPETING TO INCREASE THEIR MARKET SHARE.
13. DURING 1990, MORE THAN 17,000 VESSELS (WITH A TOTAL OF 410 MILLION DWT) PASSED THE SUEZ CANAL, OF WHICH 3,077 OR 17.9% OF TOTAL WERE CONTAINER SHIPS (82 MILLION DWT OR 19.9%).
14. JEDDAH AS THE MOST NATURAL CHOICE FOR RELAY HUB TO MIDDLE EAST AND EAST AFRICAN DESTINATIONS DID NOT DEVELOP IN TIME DUE TO GOVERNMENT RESTRICTIONS, SO PORTS AT THE UNITED ARAB EMIRATES, ESPECIALLY PORT RASHID AND LATELY FUJAIRAH, WERE ABLE TO PROMOTE THIS TRADE SINCE 1985.
15. MORE PORTS IN THE GULF OF ADEN ARE VEYING TO INCREASE THEIR SHARE, WITH THE PORT OF ADEN ITSELF, BEING IN THE MOST ADVANTAGEOUS GEOGRAPHICAL POSITION, UNDER REDEVELOPMENT AT PRESENT.
16. KUWAIT'S PORT OF SHUWAIKH GOT SEVERLY, AND ITS PORT OF SHUAIBA SLIGHTLY, DAMAGED DURING THE RECENT GULF WAR. DUBAI'S PORT OF JEBEL ALI WAS FOR THE MEANTIME DECLARED THE DISTRIBUTION CENTRE FOR KUWAIT'S CARGO, UNTIL BOTH PORTS ARE FULLY OPERATIONAL.
17. THE IRAN STARTED BOOSTING IMPORTS OF CAPITAL AND CONSUMER GOODS, THUS INCREASING SHIPPING TRADE INTO THE ARABIAN GULF AND OFFERING A CERTAIN CHANCE FOR TRANSHIPMENT THROUGH KAAP DAMMAM.
18. SINCE BEGINNING OF A POSSIBLE RECONCILIATION IN SOUTH AFRICA, MOST WESTERN COUNTRIES INCREASED TRADE WITH ITS STRONG ECONOMY. THIS WILL DIVERT SOME CONTAINER SHIPPING AROUND THE CAPE, PARTICULARLY WITH LOW OPERATING COSTS OF THE FIFTH GENERATION VESSELS AND INCREASING TOLL FEES FOR THE SUEZ CANAL PASSAGE.
19. DECLINING RATES AS A RESULT OF OUT-CONFERENCE QUOTING FAR EAST TRADERS WHICH REAP MARGINAL PROFITS PER BOX UNDER HIGH THROUGHPUT PERFORMANCE TO GENERATE CASH AND MARKETS FOR THE EXPENSIVE CONTRACTED FIFTH GENERATION CONTAINER VESSELS, WILL CAUSE THE DIRECT GULF TRADE TO DIVERT INTO FAR EAST TRADE, AND FEEDER OFF GULF-BOUND BOXES IN HUB PORTS LIKE ADEN OR COLOMBO.
20. BESIDES THE **TERMINAL ROUTES** INTO THE ARABIAN GULF AND TO THE INDIAN SUBCONTINENT, IT IS GLOBAL ROUTES SUCH AS ROUND-THE-WORLD, US EAST COAST-FAR EAST, EUROPE-AUSTRALIA AND EUROPE-FAR EAST CONTAINER SERVICES THAT ARE IMPORTANT FOR THE MIDDLE EAST WITH WAYPORT CALLS IN THE RED SEA OR THE GULF OF OMAN.
21. FEEDER SERVICES IN THE NORTHERN GULF ARE OFTEN PERFORMED BY **NATIONAL SHIPPING LINES** AND MIGHT FALL UNDER GCC-AGREEMENT REGULATION. ADDITIONALLY, **SHORTSEA LINER OPERATORS**, CATERING FOR THE GULF PORTS, TRANSPORT CARGO BACK TO THE BIG RELAY HUBS AT THE GULF ENTRANCE AND THUS SERVE AS FEEDER VESSELS. FINALLY, **COMMERCIAL COMMON CARRIERS** SERVE AS PURE FEEDER FOR OTHER LINES AND THUS KEEP THEIR EQUIPMENT AND INVENTORY COSTS AT ZERO.

22. ACCORDING TO ITS SHIPPING SERVICES, THE MIDDLE-EAST REGION CAN BE CLASSIFIED INTO **THREE GEOGRAPHICAL RANGES**: THE **RED SEA AND GULF OF ADEN** REGION IS LINED BY A LIMITED NUMBER OF WAY PORTS ALONG THE NORTH AMERICA-EUROPE-EAST ASIA SHIPPING ROUTES.
23. PORTS ALONG THE **ARABIAN SEA AND GULF OF OMAN** COASTS ARE ALREADY LOCATED OUTSIDE THE DIRECT MAJOR SHIPPING ROUTE, BUT OFFER A HUGE POTENTIAL AS RELAY HUBS FOR THE TRANSHIPMENT OF CONTAINER, UNITIZED AND BREAKBULK CARGO INTO THE ARABIAN GULF AND TO PORTS OF PAKISTAN AND THE INDIAN WESTCOAST.
24. **THE ARABIAN GULF** OFFERS THE HIGHEST DENSITY OF FULLY EQUIPPED CONTAINER PORTS, WITH THE EMIRATES' PORTS IN GROWING COMPETITION WITH THE PORTS IN THE GULF OF OMAN FOR ATTRACTING TRANSHIPMENT AND TRANSIT CARGO, WHEREAS THE INNER GULF COMPRISES MAINLY TERMINAL DESTINATION POINTS.
25. CONTAINER LINES ARE ATTACHING GROWING IMPORTANCE TO THE INDIAN SUBCONTINENT AND EAST AFRICA. A STOP-OVER AT **PUJAI RAH OR KHOR FAKKAN** IN SHARJAH, IN PREFERENCE TO OTHER UAE PORTS, CAN SAVE A COMPANY USING A MAIN-LINE VESSEL ABOUT \$25,000 A VOYAGE, EQUIVALENT TO ONE DAY'S SAILING TIME.
26. APART FROM THE GENERAL DECREASE OF IMPORT VOLUMES, THE WEIGHT PROPORTION OF SEA-BORNE IN OVERALL IMPORTS INTO THE KINGDOM DECLINED BY 7.1% FROM 90.7% IN 1983 TO 83.6% IN 1990. AT THE SAME TIME, THE **PROPORTION OF LAND IMPORTS DOUBLED** PRACTICALLY FROM 6.7% TO 13.2%.
27. CONSEQUENTLY, THE KINGDOM'S **PORTS LOST IMPORTANCE** AS TRADE INLETS MAINLY TO THE ROAD NETWORK. WITH THE ONGOING DEVELOPMENT OF THE KINGDOM'S ROAD NETWORK, THE IMPORT TRADE OF RELATIVELY LOW-VALUE TRANSPORT-COST SENSITIVE CARGOES WAS TRANSFERRED FROM SEA VESSELS TO ROAD CARRIERS.
28. THE VAST MAJORITY OF THE DECLARED 185,000 TONNES OF **RE-EXPORTED IMPORTS** WERE TRANSIT CARGOES FROM THE EMIRATES, BEING INDUSTRIAL AND AGRICULTURAL PRODUCTS, OF WHICH ABOUT TWO-THIRDS WERE TRANSPORTED BY TRUCK THROUGH THE CUSTOMS PORT OF SALWA.
29. ALREADY IN APRIL 1988, SEAPA TRIED TO STOP ONWARD **TRANSIT BY LAND** INTO THE KINGDOM BY PROHIBING ENTRY INTO ITS PORTS BY VESSELS THAT HAD DISCHARGED ANY CARGO BOUND FOR SAUDI IMPORTERS IN NON-SAUDI PORTS FOR ONWARD TRANSPORT INTO THE KINGDOM.
30. FOR SOME CONTAINER LINES, **GULF PORT TRANSHIPMENT** IS THEIR SOLE METHOD OF HANDLING INDIAN OCEAN TRAFFIC, AND THIS TREND HAS BECOME MORE PRONOUNCED. SOME LINES ALSO PREFER TO CALL AT ONE PORT ONLY IN THE GULF, AND MOVE THE BOXES ON TO FINAL DESTINATION BY SEA FEEDER, OR OVERLAND BY TRUCK.
31. DAMMAM VIA **LAND TRANSIT** FROM JEDDAH MIGHT BE CHEAPER FOR SMALL CONSIGNMENTS THAN DIRECTLY BY SHIP AND CERTAINLY FASTER. DURING THE GULF WAR, RIYADH AS FINAL DESTINATION OF NORTH-EUROPE TRADE VIA JEDDAH WAS ONLY ABOUT 80% OF FREIGHT RATES VIA DAMMAM.
32. THE **RED SEA AREA** CONSTITUTES A MARKET FOR CONTAINERIZED TRADE OF ALMOST ONLY ONE-THIRD THE SIZE OF THE ARABIAN GULF. THE RED SEA IS NOT A FEEDER MARKET, AND IN GENERAL IT CAN BE REGARDED AS FULL IN/EMPTY OUT.
33. IN ORDER TO ATTRACT ENTERPRISES, WHICH WILL GENERATE ADDITIONAL CONTAINERIZABLE TRADE, THE PORTS OF AQABA, DJIBOUTI, FUJAI RAH AND

JEBEL ALI, ESTABLISHED **FREE TRADE ZONES**, WHILE IN PORT SAID, ADEN, QISHM, BAHRAIN AND KUWAIT THEY ARE IN THE PLANNING STAGE.

34. AIRPORTS SPECIALIZING IN **SEA/AIR CARGO** PRESENTLY EXIST IN DUBAI AND SHARJAH, WHICH COULD BE OFFERED CHEAPER IN THE UPPER GULF.
35. MAJOR RECOMMENDATIONS IN THE LIGHT OF GROWING CONTAINER TRADE ARE TO EXPAND THE PRESENT CONTAINER TERMINAL IN JEDDAH ISLAMIC PORT AND TO TENDER A SECOND LEASE CONTRACT THERE, AND A CONTRACT FOR A MULTI-PORPOSE TERMINAL IN KAAP DAMMAM OR JUBAIL COMMERCIAL PORT IN ORDER TO **PERMIT FREE COMPETITION** BETWEEN PORT CONTRACTORS.
36. FURTHER RECOMMENDATIONS ARE TO EASE LEGAL AND CUSTOMS RESTRICTIONS IN ALL SEAPA PORTS IN ORDER TO FACILITATE REGULAR **SEALAND TRANSIT SERVICES** INTO KUWAIT, AND LATER INTO THE IRAQ AND IRAN.
37. TO DISCUSS THE **POTENTIAL OF SEA/AIR TRANSPORT** AT THE OLD JEDDAH AIRPORT AND, AFTER THE INAUGURATION OF KING FAHD INTERNATIONAL AIRPORT DURING 19983, AT DAHRAN AIRPORT WITH THE MINISTRY OF DEFENSE AND AVIATION.
38. TO EARMARK **BONDED WAREHOUSES** WITHIN THE PORT PERIMETERS OF JEDDAH ISLAMIC PORT AND KAAP DAMMAM TO BE LEASED TO FREIGHT FORWARDERS FOR GROUPAGE AND CONSOLIDATION AND OPERATED, FOR INSTANCE, AS SEA/AIR TERMINALS.
39. TO FACILITATE THE, PRESENTLY CONSIDERED, ESTABLISHMENT OF A **FREE TRADE ZONE** IN THE AREA BETWEEN YANBU COMMERCIAL PORT AND THE YANBU ROYAL COMMISSION, AND TO ALLOW LEASING OF AREAS 1, 2 OR 3 OF JEDDAH ISLAMIC PORT AS FREE ZONES FOR RE-EXPORT FACILITIES TO INDUSTRIAL COMPANIES.

2. GLOBAL TRADE PATTERN AND DEVELOPMENT:

2.1. GENERAL BACKGROUND:

WORLD TRADE IS DOMINATED BY THE **INDUSTRIALIZED NATIONS** AND THEIR INTERESTS AND STRATEGIES. THE CONCENTRATION OF TRADE FLOWS ON THIS COUNTRY GROUP CORRESPONDS TO THE INCOME SITUATION. THE SHARE OF INDUSTRIALIZED COUNTRIES IN WORLD SEABORNE TRADE DURING 1990 WAS 56.6%. MORE THAN 70% OF THE EXPORTS OF THE DEVELOPED NATIONS ARE TRADED BETWEEN THESE COUNTRIES, ONLY ABOUT ONE-FOURTH GOES TO DEVELOPING COUNTRIES.

SEABORNE TRADE OF **DEVELOPING COUNTRIES** DURING 1990 HAD A SHARE OF 36.6%, OF WHICH ROUGHLY HALF WERE OIL AND GAS EXPORTS. ONLY 25% OF THE DEVELOPING COUNTRIES' EXPORTS REMAIN IN THE THIRD WORLD, WHILE ABOUT TWO THIRDS ARE DIRECTED TO THE INDUSTRIALIZED STATES, WITH THE REMAINING TRADE WITH EAST BLOC COUNTRIES.

ON THE **IMPORTS** SIDE, STIMULATING EFFECTS ARE TO BE EXPECTED FROM GROWTH IN WESTERN EUROPE AND JAPAN, AND BY THE REVALUATION OF THEIR CURRENCIES, WHILE CONTRADICTIONARY IMPULSES MAY BE PREDICTED FOR THE US ECONOMY DUE TO THE DOLLAR DOWNFALL.

THE **ASIA-PACIFIC REGION** REMAINS THE FASTEST GROWING TRADING ARENA AND A DRIVING FORCE IN THE WORLD'S SHIPPING AND PORTS INDUSTRIES. AS THE OVER-HEATED ECONOMIES IN NORTHEAST ASIA (JAPAN, HONGKONG, SOUTH KOREA, TAIWAN) COOL OFF, THEY INVEST IN SOUTHEAST ASIA (MALAYSIA, THAILAND, SINGAPORE, CHINA, PHILIPPINES, INDONESIA, BRUNEI), THUS FUELLING A SECOND

WAVE OF DEVELOPMENT THERE.

ALMOST HALF THE WORLD'S POPULATION LIVES IN THIS REGION, NOT EVEN COUNTING INDIA. AS THE REGION'S INTERDEPENDENCE GROWS, ITS RELIANCE **ON** THE USA BEGINS TO LESSEN. THIS PROCESS IS ADDITIONALLY SUPPORTED BY THE SHRINKING GLOBAL IMPORTANCE OF THE US DOLLAR, PARTICULARLY AS A LENDING CURRENCY, AGAINST THE YEN.

AS SHIPPERS AND CARRIERS COME CLOSER TOGETHER TO COOPERATE IN THE TRANSPORTATION OF GOODS BETWEEN THE WORLD'S THREE MAJOR TRADING BLOCS (NORTH AMERICA, EUROPE, ASIA), **CONFERENCES** WILL BECOME LESS RELEVANT TO THEIR NEEDS, THUS OUTLIVING THEIR USEFULNESS.

MANY DEVELOPING COUNTRIES HAVE ACHIEVED **SELF-SUFFICIENCY** IN DOMESTIC CONSUMPTION DEMAND, PARTICULARLY FOR CEMENT, FERTILIZERS, AND STEEL. THEIR CORRESPONDING INDUSTRIES HAVE MATURED, AND NOW SEARCH FOR WAYS TO SELL EXCESS PRODUCTION.

HOWEVER, **TRADE PROMOTION** IN DEVELOPING COUNTRIES IS CRITICALLY DEPENDENT ON THE EFFECTIVE DISTRIBUTION OF EXPORT COMMODITIES. DISTRIBUTION COSTS OFTEN RANGE BETWEEN 30% AND 50% OF THE MARKET PRICES OF SUCH A TRADED PRODUCT. WHERE THE PURCHASES ARE ACTUALLY MADE, DEPENDS MAINLY ON THE RELATIVE STRENGTHS OF THE CURRENCIES INVOLVED AT THE TIME OF PURCHASE.

2.2. GLOBAL SEA TRADE PATTERN:

THE SEABORNE PROPORTION OF WORLD TRADE HAS HELD FAIRLY STEADY AT 20% TO 25% OF TOTAL SHIPMENTS, RISING FROM ABOUT 3,250 MILLION METRIC WEIGHT TONNES IN 1974 TO 4,000 MILLION TONNES IN 1980. AFTER A WORLDWIDE RECESSION, THE TRADE RESUMED ITS CLIMB IN 1986. IN CONTRAST, THE SIZE OF THE WORLD MERCHANT FLEET ALMOST DOUBLED BETWEEN 1970 AND 1990, RISING FROM 340 MILLION TO 658 MILLION DWT.

SINCE THE FIRST CONVERTED CARGO SHIP CARRIED TWENTY 24' CONTAINERS IN THE YEAR 1958, CONTAINERIZATION HAS COME A LONG WAY. THE WORLDWIDE TOTAL OF CONTAINER MOVEMENTS OVER HARBOUR FACILITIES BETWEEN 1987 AND 1988 GREW BY 10.6% TO 73 MILLION TEU. UNDER CONTINUOUS GROWTH, THEY REACHED 78.6 MILLION TEU IN 1989 AND 84.2 MILLION TEU IN 1990. CALCULATING A NET WEIGHT OF 9 METRIC TONS PER FCL, RESULTING 750 MILLION TONNES OF CONTAINERIZED CARGO REPRESENT A 15% SHARE IN GLOBAL SEABORNE TRADE, A PROPORTION THAT IS EVER INCREASING. A GLOBAL TALLY OF CONTAINER BOXES IN 1988 COUNTED 5.5 MILLION TEU, WITH AN ESTIMATED 20% GROWTH DURING 1989.

DURING 1990, MORE THAN 17,000 VESSELS (WITH A TOTAL OF 410 MILLION DWT) PASSED THE SUEZ CANAL, OF WHICH 21.5% OR 3,682 WERE OIL TANKERS (38.7% OR 159 MILLION DWT), 25.9% OR 4,444 GENERAL CARGO SHIPS (8.6% OR 35 MILLION DWT), 17.9% OR 3,077 CONTAINER SHIPS (19.9% OR 82 MILLION DWT), 17.2% OR 2,959 BULK CARRIERS (14.6% OR 60 MILLION DWT), BUT ONLY 0.3% OR 56 WERE PASSENGER SHIPS.

THESE VESSELS CARRIED 171 MILLION WEIGHT TONNES OF CARGO THROUGH THE SUEZ CANAL ON THE NORTHBOUND ROUTE, WHILE ANOTHER 101 MILLION TONNES OF CARGO CROSSED SOUTHBOUND. THE MAJORITY OF COMMODITIES WERE OIL PRODUCTS (39% NORTHBOUND VERSUS 14% SOUTHBOUND), FOLLOWED BY CONSTRUCTION MATERIALS (17% SOUTHBOUND), FEEDSTOCKS (14% NORTHBOUND), CHEMICALS (18% SOUTHBOUND) AND FOODSTUFF (13% SOUTHBOUND). SAUDI ARABIA CONSTITUTED THE MOST IMPORTANT USER OF THE CANAL, WITH 15.2% OF ALL CANAL CROSSINGS CALLING AT THE COUNTRY'S PORTS.

HOWEVER, THIS COMBINED TOTAL OF 272 MILLION WEIGHT TONNES REPRESENTED

LESS THAN 10% OF THE GLOBAL SEABORNE TRADE. FOR ONE, MOST OF THE ESTIMATED 135 MILLION WEIGHT TONNES OF CRUDE OIL BOUND FOR THE AMERICAS, AND OF THE 230 MILLION TONNES BOUND FOR EUROPE, WERE SHIPPED FROM THE MIDDLE EAST AROUND THE AFRICAN CONTINENT, OR PUMPED VIA CROSS-SEA PIPELINES. THE REMAINING 910 MILLION TONNES OF WORLDWIDE TRADED CRUDE OIL WERE GEARED FOR OTHER DESTINATIONS VIA PIPELINES, ROADS, OR SEA TRANSPORT NOT CROSSING THE SUEZ CANAL.

SIMILAR TO THE CRUDE OIL TRADE, MOST OF THE TRADING IN OTHER LIQUID BULKS, DRY SOLID BULKS, LIFESTOCKS AND PROJECT CARGOES IS ON A TERMINAL SPOT BASIS. SHIPPING THUS MOSTLY GOES FROM SOURCE TO DESTINATION OF THE COMMODITY AS A TERMINAL OPERATION, OFTEN WITH EMPTY CARGO HOLDS ON THE RETURN VOYAGE. MUCH OF THIS TRADE IS THEREFORE PERFORMED ON A VESSEL CHARTER BASIS, ENABLING A CLEAR CALCULATION OF PROFITS POSSIBLE FOR THE SHIPPER.

THE MAJORITY OF THE 309 CAR CARRIERS WERE BEING OPERATED DURING 1990 BY THE FAREAST-BASED COMPANIES NYK (21% OF TOTAL 6.6 MILLION CARS SHIPPED WORLD-WIDE DURING 1990), MITSUI OSK (19%) AND K-LINE (17%), WHILE EUROPE-BASED COMPANIES SUCH AS WALLENIIUS (WG) WITH 11%, NMCC WITH 6%, HOEGII UGLAND AUTOLINERS (HUAL) WITH 0%, AND NORWEGIAN SPECIALISED AUTO-CARRIERS (NOSAC) WITH 5% HOLD A SHARE OF JUST ABOVE ONE FOURTH. UGLAND EUROPEAN CAR CARRIERS (UECC) IS FORMED AS A FIRST EUROPE-BOUND CONFERENCE BETWEEN WG AND NYK.

IN CONTRAST, BREAK-BULK AND UNITIZED CARGO IS BEING INCREASINGLY CARRIED BY LINE OPERATORS, WITH PORTS OF CALL ON A FIXED SCHEDULE, AND ADDITIONAL PORTS, IF AT ALL, ONLY ON AN INDUCEMENT BASIS.

2.3. CONTAINER PORTS AND SHIPPING ROUTES:

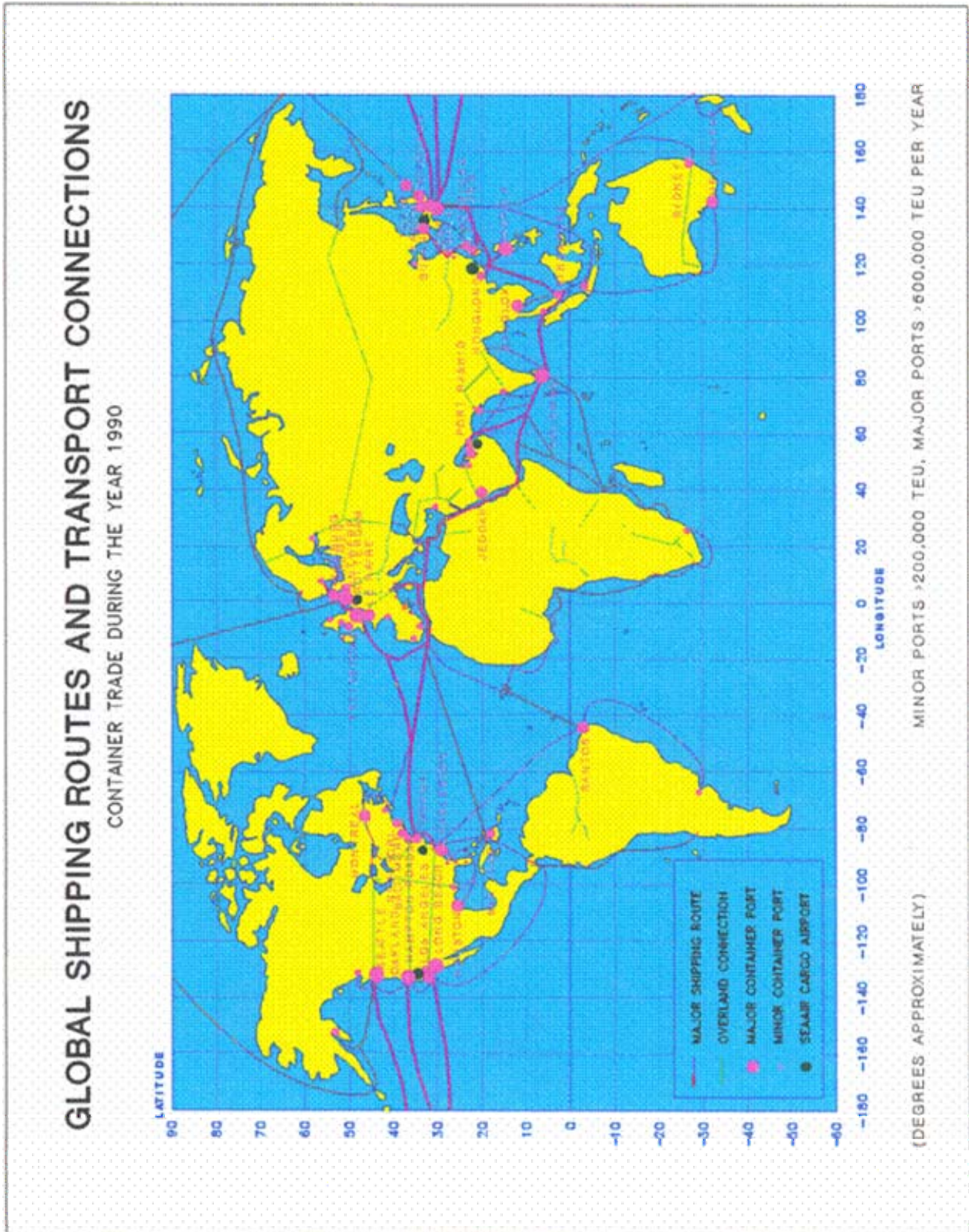
CONTAINER SHIPPING WILL CONTINUE TO GROW DRAMATICALLY, BECAUSE IT IS ONLY JUST BEGINNING IN VAST AREAS LIKE CHINA AND INDIA. TODAY ALMOST 70 PER CENT OF GENERAL CARGO IS MOVED IN CONTAINERS, AND MORE AND MORE BULK TRADES ARE CONTAINERIZED.

BETWEEN THE YEARS OF 1982 AND 1986, TEU-MILE OPERATING COSTS OF CELLULAR CONTAINER SHIPS DECREASED BY 40%. PARALLEL, AVERAGE CONTAINER SHIP SIZE EXPANDED FROM 1,200 TEU TO 2,800 TEU CAPACITY, WHILE THE MARKET SHARE OF THE TOP TEN CARRIERS (VESSEL CAPACITY IN THE PACIFIC TRADE) INCREASED FROM 58% TO 71%.

TABLE 1: GLOBAL CONTAINER VESSEL SAILINGS DURING THE YEAR 1990

	FULLY CELL.CONT. SHIPS		PARTLY CELL.CONT. SHIPS	
	TEU ('000)	% OF TOTAL	DWT ('000)	% OF TOTAL
CANADA EAST COAST	1,160	4.32	6,400	13.82
US EAST COAST	3,520	13.10	9,700	20.95
US GULF COAST	820	3.05	1,700	3.67
NORTH EUROPE	3,780	14.07	10,100	21.81
SOUTH EUROPE	2,540	9.46	4,800	10.37
WEST AFRICA	210	0.78	2,200	4.75
ARABIAN GULF	1,060	3.94	2,700	5.83
INDIAN CONTINENT	290	1.08	1,300	2.81
JAPAN/FAREAST	8,370	31.16	4,200	9.07
CANADA WEST COAST	560	2.08	200	0.43
US WEST COAST	4,550	16.94	3,000	6.48
TOTAL	26,860	100.00	46,300	100.00

THE NEED TO OVERCOME THE PROBLEMS ASSOCIATED WITH IMBALANCES IN CARGO FLOWS, MINIMIZATION OF EMPTY BACKHAULS, AND MAXIMIZATION OF CAPACITY UTILIZATION, HAS INDUCED STRUCTURAL AND ORGANISATIONAL CHANGES IN SHIPPING, SUCH AS ROUND-THE-WORLD SERVICES. THESE SERVICES ARE PROVIDED BY HIGH-CAPACITY DEDICATED CONTAINER SHIPS THAT LIMIT THEIR CALLS TO REGIONAL LOAD CENTRES CONNECTING WITH A SYSTEM OF LOCAL FEEDER SERVICES.



DURING 1990, CELLULAR CONTAINER SHIP SAILINGS ON THE NORTHERN HEMISPHERE AMOUNTED TO 27 MILLION TEU OF CAPACITY, OF WHICH 5.5 MILLION TEU CAPACITY SAILED FROM THE AMERICAN EAST COAST, 6.4 MILLION TEU FROM EUROPE, 1.4 MILLION TEU FROM THE GULF-INDIA REGION, 8.4 MILLION TEU FROM JAPAN, AND 5.1 MILLION TEU CAPACITY FROM THE AMERICAN WEST COAST (SEE MAP ON GLOBAL SHIPPING ROUTES).

ADDITIONALLY, 17.8 MILLION DWT (40.4% OF TOTAL) OF PARTLY-CELLULAR CONTAINER SHIPS SAILED FROM THE AMERICAN EAST COAST, 14.9 MILLION DWT (33.8%) FROM EUROPE, 4.0 MILLION DWT (9.1) FROM THE GULF-INDIA REGION, 4.2 MILLION DWT (9.5%) FROM JAPAN, BUT ONLY 3.2 MILLION DWT (7.3%) FROM THE AMERICAN WEST COAST.

THESE DEVELOPMENTS WILL INFLUENCE LONG-TERM TRENDS AT INDIVIDUAL PORTS, AND ARE CERTAIN TO AFFECT LOCAL SHIPPING AND INTERNATIONAL LINER CONFERENCES. SHIPPING LINES ARE PAYING INCREASED ATTENTION TO SHIPPER DEMANDS FOR TRADE WITH SOUTHEAST ASIA.

ONE CONSEQUENCE IS THE RAPID DEVELOPMENT OF FEEDER NETWORKS BY ROUND-THE-WORLD OPERATORS, SUCH AS EVERGREEN, K-LINE OR YANG MING LINE, SERVING INTRA-ASIAN TRADE OR AS AN ADJUNCT TO US SERVICES. PERHAPS THE MOST EXTENSIVE OWN FEEDER NETWORKS ARE THOSE OPERATED BY AMERICAN PRESIDENT LINES (APL), MAERSK, SEA-LAND AND SOUTH-EAST ASIAN COMPANIES SUCH AS NEPTUNE ORIENT LINES (NOL) AND MALAYSIAN INTERNATIONAL SHIPPING CORPORATION (MISC) WHICH ALSO USE THEM FOR LOCAL CARGOES. APL'S SYSTEM IS PARTICULARLY INTERESTING IN ITS USE OF AN ARTERIAL ROUTE BETWEEN THE FOUR HUB PORTS KAOHSIUNG, SINGAPORE, COLOMBO AND FUJAIRAH (WEST ASIAN EXPRESS). TAIWANESE UNIGLORY SERVES AS AFFILIATE OF EVERGREEN IN FEEDERING ITS INTRA-ASIAN MARKETS.

NOT ONLY DOES THIS MEAN FURTHER EXPANSION FOR THE BIG THREE REGIONAL HUB PORTS HONGKONG, SINGAPORE AND TAIWAN'S PORT OF KAOHSIUNG, BUT ALSO THE ESTABLISHMENT OF FURTHER HUB PORTS THAT ARE STRATEGICALLY LOCATED ALONG THE MAJOR EAST-WEST ROUTES.

TO SERVE THE INDIAN SUBCONTINENT, EVERGREEN LINES IN 1989 DECIDED TO DEVELOP SRI LANKA'S PORT OF COLOMBO AS A HUB FOR ITS CONTAINER TRADE. ONLY THE INDIAN PORTS OF MADRAS AND HALDIA HAVE REASONABLY MODERN CONTAINER FACILITIES, ALTHOUGH BOMBAY IS SOON TO COME ON STREAM. IN SOUTH ASIA, TRADE IMBALANCES BETWEEN EUROPE AND THE FAR EAST HAVE ALSO MADE ONE-WAY SERVICES OUT OF EUROPE TO A LOCAL HUB

DURING THE RECENT GULF CRISIS, THE US-BASED SEA-LAND LINES (OPERATED JOINTLY WITH NEDLLOYD, P&O CONTAINERS, CTE) ESTABLISHED THE SPANISH PORT OF ALGECIRAS IN THE STRAIT OF GIBRALTAR AS ITS HUB CENTRE FOR ITS COMMERCIAL MEDITERRANEAN-BOUND TRADE AND ITS MILITARY GULF-BOUND TRADE VIA DEDICATED FEEDER VESSEL SERVICES. MAERSK QUICKLY FOLLOWED SUIT IN UTILIZING ALGECIRAS AS RELAY HUB. FOR WESTBOUND MEDITERRANEAN TRADE, THE EGYPTIAN PORTS OF DAMIETTA AND PORT SAID ARE COMPETING TO INCREASE THEIR MARKET SHARE.

JEDDAH AS THE MOST NATURAL CHOICE FOR RELAY HUB TO MIDDLE EAST AND EAST AFRICA DESTINATIONS DID NOT DEVELOP IN TIME DUE TO GOVERNMENT

RESTRICTIONS, PORTS AT THE UNITED ARAB EMIRATES, ESPECIALLY PORT RASHID AND LATELY FUJAIRAH, WERE ABLE TO PROMOTE THIS TRADE SINCE 1985. HOWEVER, MORE PORTS IN THE GULF OF ADEN ARE VEYING TO INCREASE THEIR SHARE, WITH THE PORT OF ADEN ITSELF BEING IN THE MOST ADVANTAGEOUS GEOGRAPHICAL POSITION UNDER REDEVELOPMENT AT PRESENT.

IN THE CARRIBEAN, THE PORT OF SAN JUAN/PUERTO RICO WAS PREFERRED DUE TO

SECURITY REASONS TO KINGSTON/JAMAICA TO FEED THE US GULF, THE CARIBBEAN AND CENTRAL AMERICA, AND IN 1990 RANKED 16TH IN THE WORLD CONTAINER TRAFFIC.

FURTHERMORE, RECENT PORT PRIVATISATION INITIATIVES, SUCH AS IN MALAYSIA AND THAILAND, POINT TOWARDS A GRADUAL RELAXATION OF GOVERNMENT POLICIES, WHICH IN THE PAST HAVE HAMPERED PORT DEVELOPMENT BY EXCESSIVE INTERVENTION.

2.4. POLITICAL INFLUENCES:

IN TERMS OF SHIPPING, 1990 WAS A VERY EVENTFUL YEAR: THE UNIFICATION OF NORTH AND SOUTH YEMEN, FORMING THE MOST POPULOUS STATE IN THE ARABIAN PENINSULA, IN MAY 1990 ALSO AIMED TO MAKE MORE OF THE NATURAL OPPORTUNITY AND STRATEGIC POSITION IN INTERNATIONAL TRADE AFFORDED BY ADEN PORT, THE ECONOMIC CAPITAL OF THE NEW STATE.

SHIPPING INTO THE ARABIAN GULF HAD NOT FULLY RESTORED ITS PRE-WAR IRAQ-IRAN LEVELS, WHEN IRAQ'S INVASION OF KUWAIT HAD THE WAR RISKS RATING COMMITTEE'S (WRRRC) PREMIUMS SKYROCKET AGAIN, THUS ALSO AFFECTING CONTAINER SHIPPING INTO THE ARABIAN GULF. THE PORT OF AQABA LOST MOST CONTAINER TRADE DUE TO JORDAN'S ROLE AS TRANSIT COUNTRY FOR CARGOES WITH DESTINATION IRAQ.

TABLE 2: WAR RISK PREMIUMS BY WRRRC ON MARINE CARGO (% OF VALUE)

DATE	JUBAIL	DAS ISL	DUBAI	JEDDAH	AQABA	PORT SAID
14/8/90	0.50	0.05	0.05	0.05	0.10	0.00
14/9/90	0.38	0.38	0.04	0.04	0.04	0.00
18/1/91	3.50	0.50	3.50	0.50	0.50	2.50
23/1/91	2.00	0.13	2.00	0.25	2.50	0.75
01/2/91	1.00	0.13	1.00	0.13	0.38	0.25
13/2/91	0.50	0.13	0.50	0.10	0.26	0.20

DURING THE SECOND HALF OF 1990, CHARTER RATES FOR RO-RO AND CONTAINER VESSELS SHARPLY INCREASED DUE TO THE HUGE DEMAND OF THE MILITARY FOR THE TRANSPORT OF ARMY SUPPLIES INTO THE MIDDLE EAST. THE NATIONAL DEFENSE RESERVE FLEET (NDRF) TO 40% COMPRISES RO-RO VESSELS, BUT ONLY 42 WERE PLACED IN SERVICE AT BEGINNING OF THE CRISIS, SO 18 RO-RO VESSELS WERE HIRED AT 30%-50% ABOVE CHARTER NORM. FOUR CONTAINER CARRIERS (FARRELL, SEA-LAND, LYKES LINES, APL) WERE NOMINATED TO CARRY MILITARY CARGO (>5,400 TEU PER WEEK).

OTHER SHIPPING COMMODITIES WERE AFFECTED DIFFERENTLY, FOR INSTANCE CRUDE OIL. DESPITE EMBARGO ON KUWAITI/IRAQI CRUDE OIL SINCE AUG. 1990, THE LARGE VOLUMES OF OIL AT SEA ENSURED A TIME LAG BEFORE REPLACEMENT SUPPLIES BEGAN TO REACH CONSUMERS.

THE OUTBREAK OF THE GULF WAR IN JANUARY 1991 THEN EFFECTED IN HUGE RISES OF VESSEL AND CARGO INSURANCE RATES ALSO IN THE RED SEA, AND PROMPTED SEVERAL SHIPPING LINES TO DIVERT THEIR VESSELS AROUND THE CAPE OF THE AFRICAN CONTINENT. KUWAIT'S PORT OF SHUWAIKH GOT SEVERELY, ITS PORT OF SHUAIBA SLIGHTLY, DAMAGED, AND MINE AND DEBRIS-CLEARING LASTED UNTIL AUGUST 1991. DUBAI'S PORT OF JEBEL ALI WAS FOR THE MEANTIME DECLARED THE DISTRIBUTION CENTRE FOR KUWAIT'S RECONSTRUCTION CARGO, UNTIL BOTH PORTS ARE FULLY OPERATIONAL DUE TO LASTING LACK OF EQUIPMENT AND DAMAGE TO STORAGE AREAS.

THE NEED TO REBUILD THE DEVASTATED KUWAITI ECONOMY ALSO ADDED URGENCY TO LONG CONSIDERED PLANS TO SET UP A FREE TRADE ZONE, WHICH COULD BE OPERATIONAL IN EARLY 1992, AND THUS EASING MANY OF THOSE CUSTOMS

REGULATIONS CONSIDERED TOO RESTRICTIVE BY LOCAL MERCHANTS.

SOME OF THE KUWAITI RECONSTRUCTION CARGO IS ALSO FINDING ITS WAY THROUGH SAUDI ARABIAN PORTS, MAINLY THE CONVENIENTLY LOCATED KAAP DAMMAM. HOWEVER, TO PAY FOR THE WAR BILL, DEMANDS FOR IMPORTS OF THE SAUDI GOVERNMENT WILL BE AFFECTED BY EXORBITANT DEFICITS BOTH IN THE COUNTRY'S BUDGET AND IN ITS TRADE BALANCE DURING 1991. THE HUGE GOVERNMENT PROJECTS HAVE BEEN SLOWED DOWN, AND RECONSTRUCTION NEEDS IN SAUDI ARABIA ITSELF ARE MINIMAL.

FINALLY, THE SECOND HALF OF 1991 SAW THE POLITICAL OPENING OF TWO COUNTRIES THAT COULD CHANGE THE EXISTING PATTERN OF THE EUROPE-FAR EAST CONTAINER TRADE:

WITH IRAQ LOSING THE FAVOUR OF THE WESTERN NATIONS, THE GOVERNMENT OF IRAN EASED ITS FUNDAMENTALISTIC RESTRICTIONS. SUBSEQUENTLY, SAUDI ARABIA RESTORED ITS TIES WITH IRAN DURING MID-1991. TEHRAN STARTED SPENDING ITS WINDFALL REVENUES, GENERATED FROM INCREASED CRUDE OIL PRICES, AND BOOSTING IMPORTS OF CAPITAL AND CONSUMER GOODS, THUS INCREASING SHIPPING TRADE INTO THE ARABIAN GULF.

THE BEGINNING OF A POSSIBLE RECONCILIATION IN SOUTH AFRICA PROMPTED MOST WESTERN COUNTRIES TO LIFT TRADE EMBARGOES TO ITS ECONOMY. AFTER THE NATIONAL SOUTH AFRICAN CARRIER 'SAFMARINE' ALREADY IN EARLY 1991 HAD PURCHASED 49% OF THE CMB TRANSPORT COMPANY, IT FORMED THE SOUTHERN AFRICAN CONTAINER SERVICE (SAECS), TOGETHER WITH EIGHT OTHER MEMBERS. INCREASED TRADE OF NORTH AMERICA, EUROPE, FAR EAST WITH THE STRONG ECONOMY OF SOUTH AFRICA WILL DIVERT SOME CONTAINER SHIPPING AROUND THE CAPE, PARTICULARLY WITH LOW OPERATING COSTS OF THE FIFTH GENERATION VESSELS AND WITH EVER INCREASING TOLL FEES FOR THE SUEZ CANAL PASSAGE.

2.5. FREIGHT RATE DEVELOPMENT:

MAJOR CONTAINER CONFERENCE RATES EUROPE-FAR EAST DECLINED SLOWLY FROM \$3,263/TEU IN MID-1988 OVER \$3,254/TEU IN MID-1989 TO \$3,239 IN MID-1990, BEFORE PLUNGING TO \$2,721/TEU IN MID-1991. THIS WAS IN CONTRAST TO ALL OTHER MAJOR ROUTES (NORTH ATLANTIC \$2,841/TEU TO \$3,422/TEU, TRANSPACIFIC \$1,157/TEU TO \$1,499/TEU). ONLY THE MINOR EUROPE-AUSTRALIA TRADE SUFFERED A SIMILAR RATE DECLINE FROM \$7,469/TEU IN MID-1990 TO \$6,655/TEU IN MID-1991, AFTER PREVIOUS INCREASE FROM \$6,942/TEU IN MID-1988.

TABLE 3: MAJOR CONFERENCE CONTAINER RATES (US \$ PER TEU)

ROUTE: MONTH/YEAR	6/88	6/89	6/90	6/91
EUROPE-FAR EAST	3,263	3,254	3,239	2,721
EUROPE-GULF	1,500	1,750	1,700	1,900
NORTH ATLANTIC	2,841	2,884	3,157	3,422
TRANS-PACIFIC	1,157	1,473	1,573	1,499
EUROPE-AUSTRALIA	6,942	7,055	7,469	6,655

THIS DEVELOPMENT WAS REFLECTED IN THE EUROPE-GULF (DUBAI) RATES, WHICH DURING END 1988 STOOD AT \$1,600/TEU AND \$2,700/FEU, WHILE IN END 1989 THEY HAD PLUNGED TO \$1,300/TEU (PLUS \$80 JEBEL ALI, \$160 DAMMAM) AND \$2,200/FEU (PLUS \$90 JEBEL ALI, \$240 DAMMAM), DUE TO TERMINATION OF A 12% WAR RISK SURCHARGE AND A 13% BUNKER ADJUSTMENT FACTOR. IN CONTRAST, ROAD HAULIERS CHARGED SR 2,450 PER TON ON A 21-TON CONTAINER TIR TRUCK FROM BRITAIN TO KUWAIT.

THESE DECLINING RATES ARE A RESULT OF OUT-CONFERENCE QUOTING FAR EAST TRADERS, WHICH REAP MARGINAL PROFITS PER CONTAINER UNDER HIGH THROUGHPUT PERFORMANCE TO GENERATE CASH AND MARKETS FOR THE EXPEN-

SIVE CONTRACTED FIFTH GENERATION CONTAINER VESSELS. IF THIS TREND CONTINUES INTO THE 1990S AS CAN BE EXPECTED, THE DIRECT GULF TRADE WILL HAVE TO DIVERT INTO FAR EAST TRADE AND FEEDER OFF GULF-BOUND BOXES IN HUB PORTS LIKE DJIBOUTI, ADEN OR COLOMBO.

OF THE TOTAL RECURRENT COSTS INVOLVED IN SEA TRANSPORT, TOTAL PORT CHARGES AT THE LOCATION OF DISPATCH AND DESTINATION CONSTITUTE ABOUT 20% OF TOTAL FREIGHT EXPENSES (SEE APPENDIX I). IN MID-1987 SAUDI TERMINAL HANDLING RATES FOR DISCHARGE/LOADING (TRANSHIPMENT) OF CONTAINER STOOD AT 70% (SEE APPENDIX II), EUROPEAN RATES AT 55% (50%), SOUTH EAST ASIAN AT 30% (30%), AND SOUTH ASIAN (COLOMBO) AT 65% (22%) OF JAPANESE AVERAGE RATES.

COSTS FOR A SIX-DAY TRIP INTO UPPER GULF ON WEEKLY EUROPE-FAR EAST VOYAGE FOR 1,800 TEU VESSEL AMOUNT TO AT LEAST \$150,000. IF THE VESSEL DISCHARGED 300 TEU, THE CALCULATED COST OF \$500/TEU STOOD AGAINST A \$250/TEU FOR A DEDICATED FEEDER AT LESS THAN \$75,000 VOYAGE COST. IF THE COMPANY SHARED SLOTS IN A LARGER FEEDER VESSEL WITH ANOTHER EN-ROUTE OR SHORT-SEA LINER, COSTS COULD BE DOWN TO \$100/TEU. COST SAVINGS BY USING UAE EAST COAST PORTS INSTEAD OF DUBAI AMOUNT TO ABOUT \$25,000 A VOYAGE PER MAIN-LINE VESSEL.

THE POSSIBILITY OF CUTTING ITS MAIN FLEET BY ONE SHIP DUE TO THE REDUCTION OF ROUND-TRIPS BY ONE WEEK OFFERS FURTHER SAVINGS.

DAMMAM VIA LAND TRANSIT FROM JEDDAH MIGHT BE CHEAPER FOR SMALLER CONSIGNMENTS THAN DAMMAM DIRECTLY BY SHIP, AND CERTAINLY FASTER. DURING THE GULF WAR, RIYADH AS FINAL DESTINATION OF NORTH EUROPE TRADE VIA JEDDAH WAS ONLY ABOUT 80% OF FREIGHT RATES VIA DAMMAM. VIA AQABA, TOTAL COSTS WOULD STILL BE ONLY 90% OF DAMMAM RATES.

NO REGULAR SAILINGS OF VESSELS ARE OFFERED BETWEEN SAUDI ARABIA AND ITS POTENTIAL MARKETS, WHILE TRAMP SHIPPING IS EXPENSIVE. SHIPPING GOODS FROM THE GULF TO THE RED SEA HAS BEEN COSTING AS MUCH AS SHIPPING THEM TO JAPAN. DUE TO RIGOROUS DOCUMENT INSPECTION IN AQABA AND JEDDAH DURING THE GULF WAR, MAJOR SHIPPING LINES DISCHARGED OR LOADED NO SMALL CONSIGNMENTS AT THESE RED SEA PORTS.

DURING THE GULF CRISIS, APL AND SEA-LAND (49%) EACH CARRIED ABOUT 40% OF MILITARY CARGO, WHILE THE REST WAS SHARED AMONG OTHER US-CARRIERS. RATES FOR NORTH AMERICA-GULF CONTAINER TRADE CLIMBED TO \$8,000/TEU OR \$5,000/FEU DURING EARLY 1991, WHEREAS THEY STOOD AT \$3,500/TEU BEFORE THE CRISIS.

THE FAR EAST AND OTHER LINES REINTRODUCED TEMPORARY ADDITIONAL RISK SURCHARGE (TARS) OF \$250/TEU AND \$500/FEU TO THE GULF IN END AUG. 1991. THE FAR-EAST FREIGHT CONFERENCES (FEFC) AND JOINT CONTAINER SERVICES IMPOSED A MIDDLE EAST EMERGENCY SURCHARGE (MEES) \$300/TEU AND \$600/FEU THROUGH THE SUEZ CANAL UNTIL FEB. 1991, \$200/TEU AND \$400/FEU UNTIL MARCH 1991. ACE GROUP ROUTED AROUND THE CAPE OF GOOD HOPE (14 DAYS LONGER, BUT STILL CHEAPER), IMPOSING A \$250/TEU DEVIATION SURCHARGE.

JCS IMPOSED MIDDLE EAST WAR RISK CHARGE \$400/TEU TO JEDDAH AND UAE PORTS (\$600 TO UPPER GULF) UNTIL MARCH 1991, \$200/TEU (\$300/TEU TO UPPER GULF) UNTIL MAY 1991. WAR RISK PREMIUMS FOR NORTHERN GULF DESTINATIONS PEAKED DURING JAN. /FEB. 1991 AT 5% ON HULL AND CARGO, AT 3% FOR SOUTHERN GULF PORTS, BETWEEN 0.125% AND 2% (RESULTING IN ADDITIONAL COSTS OF \$2 MILLION/VESSEL) TRANSITING THE SUEZ CANAL.

THE (NORTH) EUROPE-MIDDLE EAST RATE AGREEMENT (EMERA) SINCE APRIL 1991 COMPRISES JCS, CMA, CMB, MERZARIO, NCHP, NORASIA, SEA-LAND, DSR, MAERSK

AND SENATOR. EMERA INCREASED RATES BY \$200/TEU FROM 1ST JULY 1991. HOWEVER, EMERA HAS NO OTHER COMMON PRICING POLICY, SINCE IT CONSTITUTES NO FREIGHT CONFERENCE.

(AMERICA) WEST COAST-MIDDLE EAST RATE AGREEMENT (WCME), COMPRISING SEALAND, APL AND MAERSK, INCREASED CONTAINER RATES BY \$500/TEU AND \$400/FEU AS FROM 1ST JULY 1991.

FINALLY, THE FAR EAST-MIDDLE EAST CONFERENCES JCS, TRIO AND ACE-GROUP, PLUS INDIVIDUAL CONTAINER LINES SUCH AS CMA, NSCSA, SEALAND AND UNIGLORY, ANNOUNCED AN INCREASE OF CONTAINER FREIGHT RATES BY \$100/TEU AS FROM JANUARY 1992, TO RESTORE THE FREIGHT RATE LEVEL.

2.6. CONTAINER TRADE AND SHIPPING LINES:

WORLD-WIDE CONTAINER TRANSPORT SERVICES CAN BE CLASSIFIED INTO TWO LEVELS OF TRAFFIC GENERATION:

1. BESIDES THE MAJOR ROUTES EUROPE-US/CANADA, FAR EAST-SOUTH EAST ASIA, AND FAR EAST-US/CANADA, IT IS ROUND-THE-WORLD AND EUROPE-FAR EAST CONTAINER SERVICES THAT ARE IMPORTANT FOR THE MIDDLE EAST WITH WAYPORT CALLS IN THE RED SEA OR THE GULF OF OMAN.

ROUND-THE-WORLD SERVICES ARE PROVIDED BY THE TAIWANESE EVERGREEN LINE THROUGH 12 CONTAINERSHIPS EASTBOUND (TOTAL 31,820 TEU CAPACITY) AND 11 SHIPS WESTBOUND (37,710 TEU) ON A WEEKLY SCHEDULE, THE ACE GROUP (KAWASAKI KISEN K-LINE, NEPTUNE ORIENT LINES NOL, ORIENT OVERSEAS CONTAINER LINE OOCL), APL, THE GERMAN SENATOR LINE, AND, AS FROM JAN. 1992, BY THE BRITISH CONTSHIP AND FRENCH COMPAGNIE GENERALE MARITIME CGM WITH FIVE VESSELS EACH CALLING IN THE MIDDLE EAST AT COLOMBO AND ALEXANDRIA.

EUROPE-FAR EAST ROUTES ARE SERVED MAINLY BY CONFERENCES SUCH AS TRIO (NIPPON YUSEN KAISHA NYK, HAPAG-LLOYD, MITSUI OSK LINES MOL; BEN LINE CONTAINERS BLC AND P&O LEFT THE GROUP IN OCT. 1991) CALLING AT JEDDAH; BALT-ORIENT LINE, MERZARIO, AND YANG MING CALLING AT JEDDAH; ACE-GROUP (NEPTUNE ORIENT LINES NOL, OOCL, K-LINE); SCAN DUTCH (NEDLLOYD, CGM, SWEDISH TRANSOCEAN, WILHELMSSEN, MALAYSIAN INTERNATIONAL SHIPPING CORPORATION MISC) CALLING AT PORT SAID; EAST ASIATIC COMPANY EAC TOGETHER WITH BENLINE CALLING AT JEDDAH AS FROM JAN. 1992; AND TRICON (DSR, SENATOR, KOREA'S CHO YANG) CALLING AT KHOR KAKKAN, SINCE EACON (DEUTSCHE SEEREEDEREI ROSTOCK DSR, POLISH OCEAN LINES POL) DISSOLVED DURING END 1989.

INDIVIDUAL LINES COMPRISE CHINA OCEAN SHIPPING (COSCO) WITH 10 VESSELS OF 1,100 TEU CAPACITY EACH; P&O CONTAINERS' (9 VESSELS TOTALLING 27,900 TEU CAPACITY) JOINT SERVICES WITH MAERSK (8 VESSELS TOTALLING 26,400 TEU), WITH JEDDAH ALSO ON P&O'S REGULAR SCHEDULE; AND SOUTH KOREA'S HANJIN SHIPPING BETWEEN US WEST COAST-EUROPE-FAR EAST WITH 17 2,700 TEU VESSELS.

2. TERMINAL ROUTES SUCH AS EUROPE-SOUTH AMERICA, EUROPE-RED SEA, EUROPE-EAST AFRICA, EUROPE-GULF, EUROPE-INDIA, EUROPE-AUSTRALIA (ACTA, P&O, CGM, HAPAG, NEDLLOYD, LLOYD TRIESTINO LT); FAREAST-AUSTRALIA-SOUTH AMERICA, FAREAST-GULF, FAREAST-MEDITERRANEAN, ARE OFTEN PROVIDED BY NATIONAL CARRIERS.

FAR EAST-RED SEA-MEDITERRANEAN SERVICES INCLUDE MED CLUB (MO, NYK, LT, OMEX) CALLING AT PORT SAID AND ALEXANDRIA; SCAN DUTCH CALLING AT JEDDAH AND AQABA; AND THE AUSTRALIA MIDDLE EAST GULF CONFERENCE CALLING AT JEDDAH; THE NON-CONFERENCE LINES INCLUDE BEN OCEAN AND

EVERGREEN CALLING AT JEDDAH, AND EAGLE CONTAINER LINE, POL, ZIM ISRAEL NAVIGATION COMPANY, BALTIC SHIPPING COMPANY FROM AUSTRALIA.

EUROPE-MEDITERRANEAN-RED SEA SERVICES ARE PROVIDED BY IRAQI LINE, FINNCARRIERS, JADROPLOV, CAMEL, JORDAN NATIONAL SHIPPING LINES, MOCHA LINE, RED SEA EXPRESS (TRICOM), SEFRAMER, SUDAN SHIPPING

LINE, SUDCARGOS, TRANSUEZ AND YEMEN GULF LINE. ONWARD SHIPPING TO INDIA BY COBRA AND MEDIPAS (EUROASIA, LT). FALCON CONTAINER LINE (FCL), COMBINED BY JORDAN AND YEMEN, RUNS AN 18-DAY SCHEDULE TO AQABA, HODEIDAH, MOCHA AND ADEN.

EAST AFRICA IS SERVED FROM EUROPE BY CMB-GROUP COMPANY DEUTSCHE OST-AFRIKA LINIE (DOAL) CALLING AT DJIBOUTI, FROM SOUTH ASIA BY THE CEYLON SHIPPING CORPORATION (CSC) VIA KHOR FAKKAN, AND FROM THE MIDDLE EAST BY GLOBAL CONTAINER LINES AND BY P&O VIA DUBAI.

MAJOR OR POTENTIAL LAND CONNECTIONS SUPPLEMENT THE TRADING ROUTES. RAIL AND ROAD TRANSPORT COMPANIES ENABLE A ROUND-THE-WORLD SERVICE BY COMPANIES LIKE APL AND SEA-LAND BY LINKING THE US EAST AND WEST COASTS. SEA-LAND ALSO INTENDS TO UTILIZE THE TRANS-SIBIRIAN-RAIL-WAY (TSR) WITH UP TO 200 LOADS A WEEK BY 1992, WITH 20' AND 40' UNITS, IN EACH DIRECTION BETWEEN VLADIVOSTOK AND RIGA.

BUT ALREADY IN MID-1990, THE JAPANESE-SOVIET JOINT VENTURE EURASIA LAUNCHED AN IMPROVED SHUTTLE BLOCK TRAIN SERVICE WITH FOUR WEEKLY TRAINS OF AN AVERAGE 50 TEU CAPACITY. MAJOR POTENTIAL USERS OF THE 25-30 DAYS DURATION CONNECTION ON THE EUROPEAN SIDE IS GETO, A LOOSE ASSOCIATION OF FORWARDERS. CARGO FREIGHT RATES FOR THE TSR SERVICES ARE MUCH LOWER FOR FINAL DESTINATIONS IN INLAND EUROPE OR NON-DIRECT SCANDINAVIA THAN OF ALL-WATER EUROPE-FAREAST SERVICES.

MAJOR NORTH-SOUTH LAND CONNECTIONS FOR CONTAINER TRANSPORT EXIST IN THE US BETWEEN THE GREAT LAKES AND THE US GULF, AND IN EUROPE BETWEEN THE NORTH SEA/BALTIC COASTS AND THE MEDITERRANEAN.

CONTAINER SHIPPING INTO THE ARABIAN GULF CAN BE DISTINGUISHED INTO THREE CATEGORIES (SEE APPENDIX III):

1. LINE VESSELS ON EUROPE-FAR EAST ROUTES PREFER PORTS AT THE OMAN AND EASTERN EMIRATES COASTS AS RELAY HUBS. APL SAIL INTO FUJAIRAH EVERY 7 DAYS WITH 2,800 TEU, AND THE ASIAN EXPRESS LINES CONNECT TO FUJAIRAH EVERY 14 DAYS WITH 500 TEU CONTAINERSHIPS.

MERZARIO CONNECTS DUBAI ON ITS EUROPE-FAR EAST SCHEDULE ON A FORT-NIGHTLY BASIS, OTHER SHIPPING LINES FROM EUROPE INTO DUBAI ARE POL (EACON), SEA-LAND AND COMPAGNIE MARITIME D'AFFRETEMENT (CMA) ON A 10-DAY SCHEDULE. UK-BASED CONTSHIP CONTAINERLINES IN JOINT OPERATION WITH COMPAGNIE MARITIME BELGE (CMB) PROVIDE SIX VESSELS EACH OF AROUND 1,800 TEU CAPACITY EVERY EIGHT DAYS FROM NORTH EUROPE TO JEBEL ALI, KARACHI AND BOMBAY, AND THREE VESSELS FROM SOUTH EUROPE TOGETHER WITH BLACK SEA SHIPPING COMPANY.

MAJOR SHIPPING LINES FROM THE FAR EAST INTO UAE PORTS ARE SENATOR, UASC, P & O, K-LINE, BLASCO, MERCANO, BLUE STAR, OOCL, WILLINE AND NYK, USUALLY CALLING AT DUBAI OR FUJAIRAH.

PARTICULARLY THE BIG SHIPPING COMPANIES HAVE LONG ESTABLISHED DEDICATED FEEDER SERVICES INTO THE ARABIAN GULF. BY COORDINATING TIME AND TONNAGE INTERNALLY WITHIN THE COMPANY, WAITING TIME OF TRANSHIPPED CONTAINERS AT THE RELAY PORTS IS KEPT TO A MINIMUM.

THEIR SERVICES CONCENTRATE ON THEIR OWN LINES' TRAFFIC, BUT MAY SUPPLEMENT THIS WITH OTHER, NOT COMPETING, LINES' FEEDER BUSINESS.

UNTIL JULY 1991, **JOINT CONTAINER SERVICES** HAD A FEEDER CONNECTING ONLY QATAR FROM DUBAI (PEARL OF DUBAI ONCE MONTHLY). BUT AFTER MAERSK JOINED THE GROUP ANOTHER FEEDER WAS ADDED DISTRIBUTING CARGO TO ABU DHABI, BAHRAIN AND DAMMAM, AND THUS REPLACING THE PREVIOUS DIRECT CALLS AT ALL MAIN GULF PORTS.

SINCE THE END OF THE GULF WAR, **GRAY MACKENZIE** RUNS THE 100 TEU ZORBA EXPRESS ON A 5-DAY SCHEDULE BETWEEN DUBAI AND KUWAIT, AND **AZOV SHIPPING** INTRODUCED TWO DEDICATED WEEKLY SERVICES TO KUWAIT WITH 245-TEU SELF-SUSTAINED CONTAINER VESSELS.

SEA-LAND TOGETHER WITH NORASIA SERVED THE WHOLE ARABIAN GULF BY FEEDER FROM DUBAI (NORASIA ARABIA TWICE MONTHLY) UNTIL MID-1990. MEANWHILE, SEA-LAND CONTINUES ITS DAMMAM-EXPRESS SERVICE, AN OPERATION INITIALLY ESTABLISHED TO SERVE THE MILITARY DURING THE GULF WAR, BY OFFERING SAILINGS EVERY 10 DAYS FROM ALGECIRAS, IN SPAIN, TO JEDDAH, DUBAI AND DAMMAM.

BEFORE THE CRISIS, **AMERICAN PRESIDENT LINES** CONNECTED THE ARABIAN GULF TWICE MONTHLY FROM FUJAIRAH (EAGLE WORLD). IN MID-1991, APL RESUMED HANDLING TRAFFIC FOR KUWAIT ON ITS ASIA-MIDDLE EAST-NORTH AMERICA CONTAINER SERVICE. CARGO IS PRE-CLEARED THROUGH CUSTOMS AT JEBEL ALI AND THEN MOVED BY FEEDER VESSELS TO SHUAIBA.

CMA RESUMED ITS FEEDER SERVICES TO KUWAIT (VILLE D'OMAN THRICE MONTHLY BEFORE THE CRISIS) IN JUNE 1991, BY EXTENDING ITS MINA QABOOS-BASED OPERATION TO INCLUDE SHUAIBA BY TWO SELF-SUSTAINED 582-TEU VESSELS ON A 14 DAY BASIS.

2. FEEDER SERVICES IN THE NORTHERN GULF ARE OFTEN PERFORMED BY **NATIONAL SHIPPING LINES** (SUCH AS THE UNITED ARAB SHIPPING TO UMM QASR, OR THE NSCSA) AND MIGHT FALL UNDER GCC-AGREEMENT REGULATION. OMAN PLANS TO ESTABLISH ITS OWN OMAN NATIONAL SHIPPING LINE (ONSL) BY CHARTERING 9 VESSELS, OF WHICH 4 WILL BE CONTAINER SHIPS SIZED BETWEEN 1,500 TEU AND 2,000 TEU.

ADDITIONALLY, **SHORTSEA LINER OPERATORS** CATERING FOR THE GULF PORTS TRANSPORT CARGO BACK TO THE BIG RELAY HUBS AT THE GULF ENTRANCE AND THUS SERVE AS FEEDER VESSELS. THEY USUALLY CONCENTRATE ON SELF-GENERATED LINER BUSINESS, BUT OFTEN ACCEPT STRAIGHT FEEDER BUSINESS FOR OTHER LINES. THE DUBAI-BASED SHARAF SHIPPING AGENCY, FOR EXAMPLE, RUNS WEEKLY UAE-KUWAIT FEEDER OPERATIONS USING A MIX OF CONTAINER SHIPS AND OTHER CARGO VESSELS.

FINALLY, **COMMERCIAL COMMON CARRIERS** SERVE AS PURE FEEDER FOR OTHER LINES, AND THUS KEEP THEIR EQUIPMENT AND INVENTORY COSTS AT ZERO. FOR INSTANCE, NORMUDU LINE FEEDERS FROM JEBEL ALI AROUND THE GULF WITH THE 924-TEU WESTPHALIA, AND FROM FUJAIRAH TO THE RED SEA WITH THE 425-TEU MARJON. THE WEST ASIA KONTENA LINE (WAKL FEEDER) OF INDIA, WITH AN 840-TEU VESSEL ON 7-DAY INTERVALS SERVING THE GULF FROM FUJAIRAH FOR APL, IS ANOTHER PROMINENT EXAMPLE.

3. THE PRINCIPAL COMPANIES OFFERING MAIN LINER SERVICES INTO THE ARABIAN GULF BY CALLING AT SEVERAL GCC PORTS ARE:

FROM US EAST COAST: NSCSA (WITH 8 RO-RO/CONTAINER VESSELS BETWEEN 1,250 TEU AND 2,154 TEU CAPACITY, TOTALLING 15,000 TEU CAPACITY) SINCE 1981; AND LYKES LINES (TO DUBAI, DAMMAM, SHUAIBA).

FROM EUROPE THE UNITED ARAB SHIPPING COMPANY (UASC, OF WHICH THE KINGDOM IS A 19.5% SHAREHOLDER), KUWAIT; JOINT CONTAINER SERVICE; NSCSA (SINCE 1989); MERZARIO, ITALY (A PURE FORWARDING AGENT WITH DOOR-TO-DOOR SERVICE, SINCE IT SOLD ITS SHIPPING LINE TO CMB IN EARLY 1990); OT AFRICA LINE, NORTH EUROPE (OTAL, ON A 20-25 DAY SCHEDULE); MAERSK, COPENHAGEN; BARBER BLUE SEA, OSLO; BLACK SEA SHIPPING CO; SCAN CARRIERS, OSLO; NORASIA; POLISH OCEAN LINES (POL); CONTSHIP; P & O CONTAINERS; JUGOLINJA; BLUE STAR; AND UNI-GLORY, TAIWAN.

THE JOINT CONTAINER SERVICE AS THE MAJOR SHIPPING CONFERENCE FROM EUROPE PORTS CLAIMS TO HANDLE 50 PER CENT OF TOTAL TEU CONTAINERS SHIPPED INTO THE GULF. IT CONSISTS OF THE FIVE SHIPPING LINES UASC, CUNARD ELLERMAN, P&O CONTAINERS, NEDLLOYD AND HAPAG-LLOYD. WITH A TOTAL FIVE VESSELS OF 1,850-1,900 TEU CAPACITY (OF WHICH FOUR ARE FROM UASC) THEY CALL FROM EUROPE EVERY SEVEN DAYS WITH TWO SAILINGS, CONNECTING MINA QUABOOS, DUBAI, ABU DHABI, MINA SULMAN, AND DAMMAM, WITH B/L FOR KUWAIT VIA FEEDER FROM DUBAI. NAVALE & COMMERCIALE HAVRAISE PENINSULAIRE (NCHP) LEFT THE CONSORTIUM IN MARCH 1991 TO CHARTER SLOTS FROM CMA, AND CGM FROM CMB. FINALLY, IN JULY 1991, MAERSK JOINED THE JCS, SUPPLYING ONE OF THE NOW SIX 1,800 TEU VESSELS.

FROM FAR-EAST: UASC, NSCSA (SINCE 1985), OASIS CONSORTIUM (K-LINE, MOL, NYK, P&O), COSCO, MALDIVES SHIPPING, SHOWA LINE, WILINE, Y-S LINE, SHIPPING CORPORATION OF INDIA, AND THE PAKISTAN NATIONAL SHIPPING CORPORATION.

THE MOST IMPORTANT SHIPPING CONFERENCE FROM THE FAR EAST IS OASIS, COMPRISING THE SHIPPING LINES NYK, MO, K-LINE, NIPPON LINER (LEFT DURING THE CRISIS), AND P&O CONTAINERS. IT OPERATES FOUR 2000-TEU CELLULAR VESSELS INTO THE GULF WITH SERVICE INTERVALS OF 12 DAYS.

THE NUMBER OF CONTAINERS DESTINED FOR THE GULF FROM FAR-EAST PORTS FOR 1989 WERE ESTIMATED AT AROUND 122,000 TEU, THIS FIGURE INCREASED BY 50% TO AN ESTIMATED 180,000 TEU DURING 1990. COMPARED TO THE VAST EUROPE-FAR EAST CONTAINER TRADE, ONLY A FEW INTERNATIONAL LINER SHIPPING COMPANIES SUCH AS MAERSK, UNIGLORY AND YANG MING (TAIWAN) HAD JOINED THE NSCSA IN SERVING THE ARABIAN GULF PORTS AFTER THE IRAN-IRAQ CEASEFIRE. BEFORE THE SYSTEM OF DIRECT CALLS COULD BE WELL ESTABLISHED AGAIN, THE GULF CRISIS OF MID-1990 AGAIN DIVERTED DIRECT SHIPPING, THUS SUPPORTING THE GLOBAL TENDENCY OF FEEDERING FROM MAJOR RELAY HUBS.

3. REGIONAL CONTAINER TRADE:

3.1. COMMODITY TRADE WITH SAUDI PORTS:

TRADE DEVELOPMENT IS INFLUENCED IN ADDITION TO THE GROWTH OF THE WORLD ECONOMY MAINLY BY THE STRUCTURE OF IMPORTS AND EXPORTS, AND BY THE EXCHANGE RATES. DUE TO THE INTENSIFIED EXPLOITATION OF OWN OIL RESOURCES IN THE USA AND EUROPE SINCE 1981, THE ASIAN COUNTRIES BECAME THE MAIN CLIENTS. IMPORTS TEND TO BE DIRECTED ON THE SAME TRADE LINES IN ORDER TO KEEP A BALANCE OF TRADE BETWEEN THE KINGDOM AND ITS CLIENT COUNTRIES. HOWEVER, THE SLOWDOWN OF THE US CURRENCY MADE IMPORTS MORE EXPENSIVE, AND NECESSARILY SELECTIVE FROM THE WIDE RANGE OF COMPETING INDUSTRIALIZED COUNTRIES.

DISTRIBUTION OF TOTAL IMPORT/EXPORT VALUES OF SAUDI TRADE DURING 1990 (APPENDIX IV) WAS ASIA WITH 36.8%, EUROPE 27.7%, THE AMERICAS WITH 25.0%, GCC WITH 5.0%, NORTH AFRICA WITH 3.5%, SOUTH PACIFIC WITH 1.2%, AND EAST AFRICA WITH 0.8%.

MOST OF THE KINGDOM'S VOLUME SEA TRADE DURING 1990 WAS WITH THE USA (12.1% OF TOTAL) AND CANADA (8.2%), FOLLOWED BY SPAIN (5.7%), ITALY (5.4%), BELGIUM (5.1%), FRANCE (4.6%), GERMANY (4.6%), AND THE NETHERLANDS (4.0%). ALL THESE TRADING PARTNERS ARE LOCATED TO THE NORTH OF THE KINGDOM, REQUIRING SHIPS TO PASS THE SUEZ CANAL.

THESE FIGURES CONTRAST WITH CARGO VOLUMES PASSING THE SUEZ CANAL, WHICH ARE LED BY SAUDI ARABIA (15.2% OF TOTAL), ITALY (13.2%) AND INDIA (9.3%), FOLLOWED BY THE SOVIETS (6.9%), USA (6.9%), EGYPT (6.9%), NETHERLANDS (6.7%), AUSTRALIA (6.5%) AND CHINA (6.2%).

VOLUME SEA TRADE WITH COUNTRIES TO THE SOUTH OF THE RED SEA IS DONE IN RELEVANT PROPORTIONS ONLY WITH JAPAN (3.7%), AUSTRALIA (2.7%), CHINA (1.7%) AND INDIA (1.5%). SEA TRADE IN THE REGION IS MAINLY WITH THE UNITED ARAB EMIRATES (1.8% OF TOTAL), EGYPT (1.6%), SUDAN (1.0%), AND TURKEY (0.4%).

MORE SPECIFICALLY, INDIVIDUAL SAUDI PORTS TRADED WITH WORLD REGIONS DURING 1990 (BY % OF WEIGHT) AS FOLLOWS:

TABLE 4: SEAPA PORTS WORLD TRADE DURING THE YEAR 1990 (% OF TOTAL)

TO/FROM	JIP	KAAP	JUC	YAC	GP	KPJ	KPY
DOMESTIC	0.25	0.01	4.19	0.00	14.43	2.03	35.40
GCC	1.81	9.11	6.50	0.00	0.00	17.52	4.52
NORTH AFRICA	6.02	0.85	3.68	45.45	29.37	6.33	8.47
EUROPE	42.78	21.36	17.43	43.86	15.80	8.62	15.82
ASIA	21.15	35.65	24.52	0.00	49.69	54.35	17.12
BLACK AFRICA	2.44	2.60	0.00	0.00	0.00	0.08	1.58
NORTH AMERICA	21.26	22.89	34.83	10.65	5.14	3.75	14.26
SOUTH AMERICA	2.55	3.55	0.35	0.00	0.00	5.90	1.72
SOUTH PACIFIC	3.26	4.00	12.69	0.00	0.00	4.10	1.15

SOME SPECIFIC TRADE ORIENTATIONS COULD THUS BE DISTINGUISHED FOR THE SAUDI PORTS DURING THE YEAR 1990:

JEDDAH ISLAMIC PORT SERVES AS A WAY PORT FOR THE MAJOR SHIPPING LINES BETWEEN NORTH AMERICA (FOODSTUFFS), EUROPE (BUILDING MATERIALS, FOODSTUFFS) AND ASIA (CONSUMER GOODS) WITH CONCENTRATION ON EUROPEAN TRADE. DURING THE YEAR 1990, 23.2% OF ALL VESSELS CROSSING THE SUEZ CANAL CALLED AT JEDDAH ISLAMIC PORT. WHILE THE PROPORTION FOR DRY-BULK VESSELS WAS AS LOW AS 7.7% (INDICATING THE NATURE OF THIS TERMINAL TRADE), FOR GENERAL CARGO SHIPS AROUND 14.8% AND FOR OTHER VESSELS AT 22.9%, MORE THAN ONE-THIRD (37.6%) OF ALL CONTAINER SHIPS STEAMING THROUGH THE RED SEA CALLED AT JEDDAH ISLAMIC PORT.

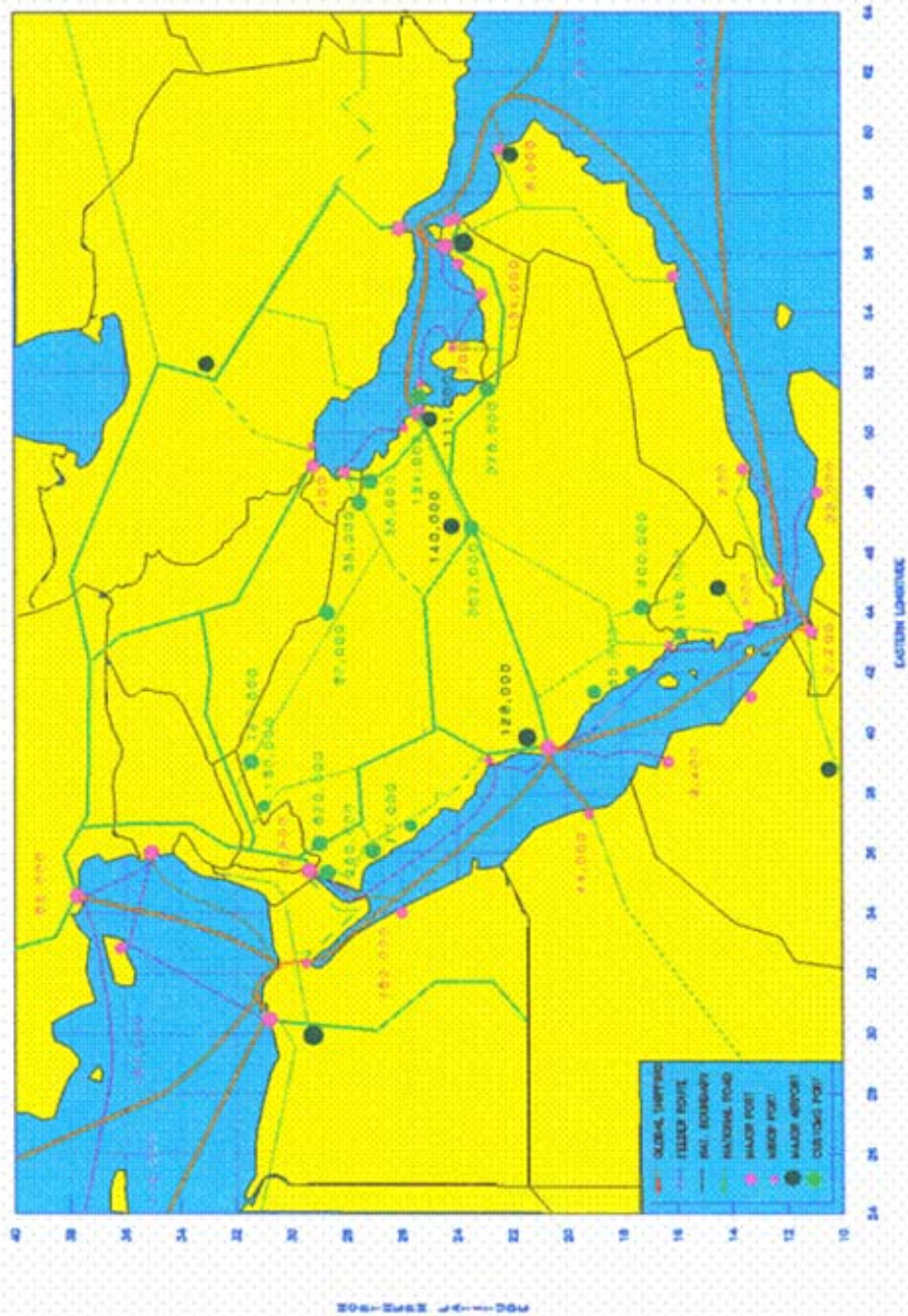
IN CONTRAST, **KAAP** DAMMAM'S TRADE IS ORIENTATED MORE TOWARDS THE ASIAN REGION (IMPORTS OF BUILDING MATERIALS FROM JAPAN, AND OF BARLEY AND RICE FROM INDIA) RATHER THAN NORTH AMERICA OR EUROPE.

JUBAIL COMMERCIAL PORT IMPORTED BARLEY FROM USA AND AUSTRALIA, AND IRON ORE FROM CANADA. YANBU COMMERCIAL PORT AND GIZAN PORT IMPORTED FERTILIZER FROM MOROCCO, GIZAN EXPORTED CLINKER TO YEMEN AND, SURPRISINGLY, ALSO TO THAILAND AND THE REPUBLIC OF CHINA.

KFIP YANBU SERVED MAINLY THE DOMESTIC MARKET WITH FUELS AND OTHER REFINED PRODUCTS. KFIP JUBAIL EXPORTED SPECIAL FUELS TO JAPAN, SINGAPORE, SOUTH KOREA AND INDIA, AND REFINED PRODUCTS TO BRAZIL. MORE OBVIOUSLY, IT ALSO PROVIDED THE BULK OF REGIONAL TRADING COMMODITIES WITH THE GCC COUNTRIES, WHILE JUBAIL COMMERCIAL PORT EXPORTED CLINKER AND KAAP DAMMAM PETROCHEMICALS, WHEAT AND MORE THAN 40,000 UNITS OF EMPTY CONTAINERS.

MIDDLE EAST SHIPPING AND LAND TRANSPORT

SAUDI ARABIAN REGIONAL IMPORTS DURING 1990 (IN METRIC TONS)



(DEGREES APPROXIMATELY)

CONSTANT DURING THE PERIOD 1988 TO 1990, WITH THE UAE AND INDIA IN THE LEAD (>600,000 TONS); FOLLOWED BY SUDAN, EGYPT, PAKISTAN, GREECE AND TURKEY (<200,000 TONS); BAHRAIN, YEMEN AND KUWAIT (<100,000 TONS); SOMALIA, ETHIOPIA, JORDAN, OMAN, DJIBOUTI AND SOUTH YEMEN (<50,000 TONS); AND ENDED WITH SYRIA, IRAN AND QATAR (<10,000 TONS).

3.2. REGIONAL PORT DEVELOPMENT:

TABLE 5: THROUGHPUT OF COMMERCIAL CONTAINERS (TEU, * ESTIMATES)

TO/FROM	1989	%	1990	%	1991	RANK
PORT SAID	39,299	39.4	54,783	-17.9	*45,000	11
AQABA	99,487	-39.7	*60,000	-70.0	*18,000	15
YANBU	5,784	25.9	7,319	-3.7	7,050	18
JEDDAH	548,698	0.2	549,934	24.6	685,385	1
PORT SUDAN	27,815	7.9	*30,000	-16.7	*25,000	14
ASSAB	6,868	97.4	13,559	-63.1	*5,000	20
DJIBOUTI	22,536	24.2	*28,000	25.0	*35,000	12
ADEN	6,685	-40.2	*4,000	25.0	*5,000	21
TOTAL RED SEA	750,099	-0.3	747,595	10.4	825,435	
MINA RAYSUT	391	27.9	*500	20.0	*600	22
MINA QABOOS	175,350	71.1	*300,000	10.0	*330,000	6
FUJAIRAH	270,661	53.1	414,353	11.0	460,000	3
KHOR FAKKAN	125,486	32.0	165,000	81.8	300,000	7
PORT KHALID	5,768	20.7	*7,000	-28.6	*5,000	19
PORT RASHID	644,230	-4.8	613,696	5.9	650,000	2
JEBEL ALI	183,165	65.4	302,659	15.6	350,000	4
BANDAR ABBAS	35,000	42.9	*50,000	50.0	*75,000	9
TOTAL OMAN GULF	1,439,559	28.8	1,853,108	17.1	2,170,600	
MINA ZAYED	45,788	1.5	46,535	-35.5	*30,000	13
DOHA/UMM SAID	25,761	-15.6	21,822	-31.2	*15,000	16
MINA SULMAN	76,094	18.4	*90,000	22.2	*110,000	8
DAMMAM	204,059	13.9	232,456	48.4	341,000	5
JUBAIL	6,716	-19.4	5,382	-100.0	0	23
SHUAIBA	105,065	-52.4	*60,000	-16.7	*50,000	10
SHUWAIKH	124,032	-43.5	*70,000	-85.7	*10,000	17
TOTAL INNER GULF	587,515	-10.4	526,195	5.7	556,000	
TOTAL	2,777,073	12.6	3,126,898	13.6	3,552,000	

ACCORDING TO ITS SHIPPING SERVICES, THE MIDDLE-EAST REGION CAN BE CLASSIFIED INTO THREE GEOGRAPHICAL RANGES:

THE RED SEA AND GULF OF ADEN REGION IS LINED BY A LIMITED NUMBER OF WAY PORTS ALONG THE NORTH AMERICA-EUROPE-EAST ASIA SHIPPING ROUTES. PORTS SITUATED DIRECTLY ALONG THIS ROUTE ARE PORT SUEZ, JEDDAH ISLAMIC PORT, AND THE PORT OF ADEN, TOGETHER WITH PORTS OF LESS IMPORTANCE SUCH AS YANBU, PORT SUDAN, ASSAB AND HODEIDAH. PORTS THAT REQUIRE SOME DEVIATION, AND CONSEQUENTLY INCURR TIME AND REVENUE LOSSES, ARE AQABA AND DJIBOUTI, WITH MASSAWA, GIZAN, BERBERA AND MUKALLA AS PORTS OF LESS IMPORTANCE.

THE ARABIAN SEA AND GULF OF OMAN REGION IS ALREADY LOCATED OUTSIDE THE DIRECT MAJOR SHIPPING ROUTE, AND DOES NOT POSSESS A POPULATION RICH GCC-HINTERLAND, BUT ITS PORTS OFFER A HUGE POTENTIAL AS RELAY HUBS FOR THE TRANSHIPMENT OF CONTAINER, UNITIZED AND BREAKBULK CARGO INTO THE ARABIAN GULF AND TO PORTS OF PAKISTAN AND THE INDIAN WESTCOAST. PRESENTLY MOST IMPORTANT ARE THE PORTS OF FUJAIRAH, KHOR FAKKAN AND MINA QABOOS, BUT THE OMANI PORT OF MINA RAYSUT (SALALAH) ALSO IS IN A GEOGRAPHICALLY ADVANTAGEOUS LOCATION.

THE ARABIAN GULF OFFERS THE HIGHEST DENSITY OF FULLY EQUIPPED PORTS, WITH THE EMIRATES' PORTS OF SHARJAH AND DUBAI IN GROWING COMPETITION WITH THE GULF OF OMAN PORTS FOR ATTRACTING CUSTOMERS, AND HENCE TRANSHIPMENT AND TRANSIT CARGO. THE COMMERCIAL PORTS OF THE INNER GULF, NAMELY ABU DHABI, DHOBA/UMM SAID, MINA SULMAN, DAMMAM, JUBAIL, SHUAIBA AND SHUWAIKH CONSTITUTE MAINLY TERMINAL DESTINATION POINTS, SIMILAR TO THE IRAQI PORT OF UMM QASR, AND THE IRANIAN PORTS OF KHOR RAMSHAHR (FORMERLY IRAN'S BIGGEST COMMERCIAL PORT) AT THE SHATT AL-ARAB, BANDAR KHOMEINI AND BANDAR ABBAS.

BEFORE OUTBREAK OF THE IRAQ WAR OVER KUWAIT, 17 BERTHS HAD BEEN MADE OPERATIONAL AT TWO OF THE MAIN PORTS, UMM QASR AND KHOR AL ZUBEIR, 25 KM SOUTH OF BASRA. ANCHORAGE AT THE LATTER, HOWEVER, WAS AVAILABLE ONLY TO A DEPTH OF 3 METRES. ONE SCHEME SAW AN EXTENSION OF A 200 METRES WIDE AND 12.5 METRES DEEP CANAL FROM UMM QASR AT THE KUWAITI BORDER. THE PORT OF BASRA, LOCATED ON THE SHATT AL-ARAB, REMAINS INACCESSIBLE TO SHIPPING.

MOST SIGNIFICANT WAS THE LOSS OF THE IRAQI TRANSHIPMENT TRAFFIC AND THE DIMINUTION OF MAINLINE CALLS AT THE HEAD OF THE GULF DUE TO THE IRAQ/IRAN WAR. EVEN GRAVER CONSEQUENCES AROUSE FROM THE SECOND GULF WAR: REPORTS FROM KUWAIT INDICATED THAT \$1 BILLION IS NEEDED TO REBUILD THE PORTS OF SHUAIBA AND SHUWAIKH. DAMAGE AT THE KUWAIT CITY PORT OF SHUWAIKH WAS PARTICULARLY EXTENSIVE. THE CONTAINER TERMINAL HAD BOTH ITS GANTRY CRANES TIPPED INTO THE WATER, ALONG WITH ONE GENERAL CARGO CRANE. ONLY 15 CONTAINERS WERE LEFT INTACT IN ITS CONTAINER YARD. AT SHUAIBA, ONLY ONE OF THE FOUR GANTRY CRANES HAD BEEN HIT BY SHRAPNEL. THE NEED TO REBUILD THE ECONOMY ALSO ADDS URGENCY TO LONG-CONSIDERED PLANS TO SET UP A FREE TRADE ZONE, WHICH COULD BE OPERATIONAL IN EARLY 1992.

WITH A WELL FUNCTIONING FEEDER SERVICE THERE IS A POSSIBILITY THAT KAAP DAMMAM COULD SERVE AS A TRANSHIPMENT HUB FOR THE NORTHERN GULF THEREBY COMPETING FOR A SHARE OF THE TRADE WITH THE KUWAITI, BAHRAIN AND QATAR PORTS, WHICH ARE PRESENTLY SERVED BY THESE LINE AND TRAMP SHIPS. FEEDER SERVICES INTO KUWAIT COULD BE PROVIDED FOR CONTAINER LANDINGS FROM JOINT CONTAINER SERVICES IN DAMMAM. SOME SHIPPING FIRMS SET UP ARRANGEMENTS TO TRANSIT GOODS BY ROAD FROM DAMMAM TO KUWAIT.

MINA SULMAN'S MAIN PROBLEM IS THE DREDGING LIMIT OF 9.7 METRES. DREDGING CANNOT GO DEEPER DUE TO THE DANGER OF DAMAGING FRESH WATER ACQUIFERS. IN EIGHT KM DISTANCE FROM MANAMA, BAHRAIN'S NEW SUPERPORT WILL HAVE TWO CONTAINER BERTHS AS FROM MID-1994. AFTER CONSTRUCTION OF A THIRD CONTAINER BERTH DURING THE FOLLOWING DECADE THE PORT IS PLANNED TO HANDLE 200,000 BOXES A YEAR FROM FOURTH GENERATION CONTAINER VESSELS. A LARGE INDUSTRIAL ESTATE BEING CONSTRUCTED NEXT TO THE PORT IS PLANNED TO BECOME A FREE TRADE ZONE COMPARABLE TO JEBEL ALI.

THE ABSENCE OF MODERN CONTAINER HANDLING GEAR AT QATAR'S TWO PORTS OF DOHA AND UMM SAID, AND THE LONG-STANDING PRACTICE OF QATAR CARGOES BEING TRANSITTED OVERLAND BY ROAD, HAS MEANT THAT NO SIGNIFICANT CONTAINER TRAFFIC HAD BEEN ATTRACTED TO THE PORTS.

AFTER A STEADY INCLINE IN CONTAINER TRANSHIPMENT FROM 700 TEU IN THE YEAR 1985 TO 13,677 TEU IN 1988, MINA ZAYED LOST TRANSHIPMENT CARGO (DOWN TO 10,800 TEU IN 1989) BOTH TO PORT RASHID AND JEBEL ALI, AND TO THE NORTHERN GULF, AS LINES RESUMED DIRECT SAILINGS AFTER CEASEFIRE IN MID-1988. ABU DHABI'S PORT OFFERS A YEAR'S FREE STORAGE FOR GOODS UNLOADED AT THE PORT AWAITING TRANSHIPMENT FOR KUWAIT SINCE END-1990. CONTAINER

TRAFFIC IN FEB. 1991 INCREASED BY 14% TO 3,082 BOXES, AS COMPARED TO FEB. 1990.

IRAN IS ALSO EXPECTED TO GENERATE SUBSTANTIAL BUSINESS WITH ITS WINDFALL OIL REVENUES AND ITS BOOSTED EXPORTS. BANDAR ABBAS IS DUBAI'S TOP RE-EXPORT DESTINATION, RECEIVING ABOUT 600,000 TONNES OUT OF PORT RASHID'S TOTAL 10 MILLION TONNES DURING THE YEAR 1990. THIS FIGURE REPRESENTS AN INCREASE OF 80% TO THE PREVIOUS YEAR. THE ISLAMIC REPUBLIC OF IRAN SHIPPING LINE (IRISL) SET UP A JOINT VENTURE WITH DUBAI, OASIS FREIGHT COMPANY OPERATING TWO CONTAINER-CAPABLE VESSELS TO PORT KHALID, WITH ONE CELLULAR CONTAINERSHIP PLANNED FOR END-1991. IRAN PLANS TO TURN THE ENTIRE QISHM ISLAND, LOCATED WITHIN THE STRAIT OF HORMUZ JUST OPPOSITE THE PORT, INTO THE LARGEST FREE ZONE IN THE REGION. IT IS PLANNED TO BE SERVED BY A PORT WITH A CAPACITY TO HANDLE 50 MILLION TONS OF CARGO A YEAR.

THE UAE WEST COAST PORTS OF PORT RASHID AND JEBEL ALI ARE THE ONLY PORTS LOCATED WITHIN THE ARABIAN GULF, WHICH ARE ATTRACTIVE FOR TRANSHIPMENT BY THIS TRADE BECAUSE OF LONG-ESTABLISHED BUSINESS CONNECTIONS (OFFICES ALREADY EXIST), FAST CUSTOMS CLEARANCE, LOW TARIFFS, AIR CARGO LINKS AND FREE TRADE ZONE IN CASE OF JEBEL ALI.

IN ORDER TO ATTRACT TRANSHIPMENT INTO JEBEL ALI (AN INCREASE BY 355% FROM 1988 TO 1989), US\$ 2.5 MRD. HAD TO BE INVESTED INTO THE PORT ALONE, NOT COUNTING THE FREE TRADE ZONE, FROM WHICH 325 COMPANIES OPERATED BY MID-1991. EVEN SO, IT TOOK MORE THAN FIVE YEARS AND THE CEASEFIRE IN THE NORTHERN GULF, UNTIL CONTAINER THROUGHPUT FINALLY INCREASED TO 302,659 TEU IN 1990.

THE CREATION OF THE DUBAI PORTS AUTHORITY (DPA), BY COMBINING THE ADMINISTRATION OF PORT RASHID AND JEBEL ALI, IN MID-1991 CREATED A 'SUPERPORT' WITH A CAPACITY IN ACCESS OF 100 DEEPSEA BERTHS (67 AT JEBEL ALI AND 36 AT PORT RASHID) INCLUDING 10 CONTAINER/RO-RO BERTHS EQUALLY SPLIT BETWEEN THE TWO FACILITIES.

THIS ORGANIZATIONAL MOVE CAN ALSO BE SEEN AS TIMELY RECOGNITION OF FUNDAMENTAL CHANGES IN THE STRUCTURE OF THE SHIPPING INDUSTRY AND THE CONSEQUENT PATTERN OF REGIONAL SHIPPING ROUTES. MAJOR CONTAINER LINES SUCH AS MAERSK AND SEALAND ARE ACTIVELY ENCOURAGING THE POOLING OF RESOURCES. SMALLER CONSIGNMENTS WILL BE CARRIED IN LARGER VESSELS, TO FEWER PORTS WITH REDUCED FREQUENCY. CARGO VOLUMES INTO THE GULF COULD DROP STEADILY DURING THE 1990S, AS MAIN LINES SAVE TIME AND MONEY BY STAYING OUT OF THE GULF COMPLETELY.

TOTAL IMPORTS TO THE GULF ARE IN DECLINE, TURNING THE AREA INTO A SECONDARY MARKET FOR CONTAINER LINES. CARRIERS ARE NOW ATTACHING GROWING IMPORTANCE TO THE INDIAN SUB-CONTINENT AND EAST AFRICA. A STOP-OVER AT FUJAIRAH OR KHOR FAKKAN IN SHARJAH, IN PREFERENCE TO OTHER UAE PORTS, CAN SAVE A COMPANY USING A MAIN-LINE VESSEL ABOUT \$25,000 A VOYAGE, EQUIVALENT TO ONE DAY'S SAILING TIME.

OPERATIONAL SINCE 1976, PORT KHALID WAS THE FIRST FULLY EQUIPPED CONTAINER TERMINAL IN THE MIDDLE EAST. TODAY, WITH ONLY MAERSK AND NORASIA FEEDER LINES PROVIDING REGULAR CONTAINER BUSINESS THROUGH THE PORT, EXCESS CAPACITY IN THE TERMINAL IS HUGE. SOME LCL FROM ACROSS THE GULF OF OMAN IS CONSOLIDATED AT SHARJAH, BUT THE TWO 35-TON GANTRIES AND TWO YARD CRANES ARE HARDLY IN USE.

KHOR FAKKAN OPERATED BY GULFTAINER, AND CONNECTED TO PORT KHALID BY SHARJAH PORT AUTHORITY'S TWIN PORT LANDBRIDGE THUS ENABLING TRANSHIPMENT UNDER BOND, ATTRACTED FIVE NEW LINES, AND THEN USED THESE

OVERLAND AND FEEDER CONNECTIONS FOR SUPPLYING TRADITIONAL MARKETS. ITS XCL AND WAKL FEEDER SERVICES ARE FIRMLY LINKED TO THE TRICON, APL, CMA, UASC AND BLASCO CONTAINER SERVICES.

THE PORT OF FUJAIRAH INCREASED CONTAINER THROUGHPUT BY 20% DURING THE FIRST HALF OF 1991, HANDLING 231,732 TEUS. BETWEEN THE YEARS OF 1985 AND 1989, FUJAIRAH EXPERIENCED THE HIGHEST GROWTH OF CONTAINER TRANSHIPMENT (UP TO 219,760 TEU IN THE YEAR 1989). INTERESTS IN FUJAIRAH'S SMALL FREE ZONE HAVE GROWN DURING 1990.

IN ORDER TO EXCLUDE DUBAI TRADERS AND TO SECURE FOREIGN EXCHANGE, IRAN ALSO PLANNED TO MAKE ITS PORT CHA BAHAR, LOCATED ABOUT 150 KM FROM PAKISTAN, A FREE PORT. DURING 1989 PORT INSTALLATIONS WERE MODERNIZED AND INLAND TRANSPORT CONNECTIONS WERE IMPROVED.

AN INCREASE OF CONTAINER THROUGHPUT IN MINA QABOOS BY MORE THAN 18 PER CENT WAS MAINLY DUE TO TRANSHIPMENT, THE PORT BEING ONE OF THE CLOSEST TO THE MAIN EAST/WEST TRADE LANES. ALTHOUGH BY MID-1991 ONLY ONE INTERNATIONAL SHIPPING COMPANY, FRANCE'S CMA, USED MINA QABOOS AS TRANSHIPMENT BASE, THE PORT PLANS TO CONVERT TWO BERTHS TO CONTAINER BERTHS, AND TO BUILD AN ADDITIONAL THREE BERTHS AND NEW STORAGE AREA. TOGETHER WITH DREDGING THE PORT ENTRANCE AND BASIN TO 13 METRES DEPTH, AND THE PURCHASE OF TEN GANTRY CRANES AND OTHER CONTAINER HANDLING EQUIPMENT, THIS DEVELOPMENT WILL PLACE MINA QABOOS IN THE POSITION TO SERVE AS A MAJOR CENTRE FOR CONTAINER TRANSHIPMENT TO GULF DESTINATIONS.

DURING THE 1950S, ONLY LIVERPOOL, LONDON AND NEW YORK HANDLED MORE SHIPS THAN THE PORT OF ADEN AT THE MOUTH OF THE RED SEA. BUT THE CLOSURE OF THE SUEZ CANAL IN 1967 DEALT ADEN A DEALY BLOW, AND WHEN THE CANAL REOPENED IN 1974, SHIPS HAD INCREASED THEIR RANGE AND NO LONGER DEPENDED ON REFUELLING OINTS LIKE ADEN. WHEN NORTH AND SOUTH YEMEN UNITED IN MID-1990, A PROJECT, FINANCED BY SAUDI ARABIA AND ABU DHABI, WAS ALREADY UNDER WAY TO BUILD NEW BERTHS. THIS BUILDING PROGRAMME IS VIRTUALLY COMPLETE. WITH THE CREATION OF THE ADEN FREE ZONE IN MID-1991, AND THE LASTING INSTABILITY IN ETHIOPIA, SOMALIA AND NOW DJIBOUTI, ADEN, AS NEW ECONOMIC CAPITAL BOOSTED BY INCREASING REVENUES FROM OIL DISCOVERIES, COULD REGAIN MUCH OF THE SHIPPING BUSINESS IT HELD 25 YEARS AGO.

HODEIDAH, WHICH COMPLETED ITS NEW CONTAINER TERMINAL DURING 1989, WILL PROBABLY BE REDUCED IN ITS FUNCTION TO PROVIDE THE INTERIM SEA LINK FOR THE POLITICAL CAPITAL SANA'A ALONG A SHORT AND WELL-CONSTRUCTED HIGHWAY.

THE SIX-LINE EUROPE-EAST AFRICA BEACON CONSORTIUM USES THE PORT OF DJIBOUTI FOR TRANSHIPMENT VIA AN 84 TEU FEEDER VESSEL TO PORTS IN THE SURROUNDING AREA, E.G. ADEN, ASSAB, MUKALLA, MASSAWA, BERBERA AND HODEIDAH. DURING 1989, THIS LINE ACCOUNTED FOR 38% OF THE PORT'S TOTAL CONTAINER THROUGHPUT, ALSO EXTENSIVELY USING THE DJIBOUTI'S FREE PORT FACILITIES. MANY CARGOES ARE ALSO DESTINED FOR THE ETHIOPIAN CAPITAL OF ADDIS ABABA VIA A DIRECT 789KM RAIL LINK.

ASSAB NEITHER GENERATES THE CARGO TO ATTRACT, NOR HAS FACILITIES TO HANDLE, CALLS FROM LARGER CONTAINER VESSELS. THE PORT IS SERVED, IN CONTAINER TERMS, IN THE MAIN VIA FEEDERING OVER DJIBOUTI.

A FIRST SOLELY RED SEA CONTAINER FEEDER SERVICE OFFERING TRANSHIPMENT OUT OF JEDDAH STARTED END-1989 IN THE SHAPE OF PETRA NAVIGATION INTERNATIONAL, CALLING PORT SUEZ, AQABA AND PORT SUDAN, AND HODEIDAH ON

INDUCEMENT, EVERY 12 DAYS WITH A 205 TEU VESSEL. KTS, A JOINT VENTURE BETWEEN KANOO AND NEDLLOYD, OPERATES FACILITIES IN JEDDAH, DAMMAM AND RIYADH, PROVIDING CONTAINER STORAGE, CLEANING, COLLECTION, REPAIR, TRACKING, LEASING AND ONWARD TRANSPORT. KTS, WITH CUSTOMERS LIKE SEALAND, UASC AND APL, PLANS A NEW EXTENDED TERMINAL AS PART OF THE PORT COMPLEX, BUT NOT OF THE BONDED AREA.

BEFORE THE GULF CRISIS, MANY OF THE OCEAN CARRIERS SERVING AQABA OFFERED THROUGH BILLS OF LADING TO THE PRINCIPAL CITIES IN IRAQ. THE STATE-OWNED IRAQ LAND TRANSPORT CO., AND CUSTOMS CLEARANCE AT AQABA FREE TRADE ZONE OPERATE TRUCKING BETWEEN AQABA AND IRAQ, AND ON-TRUCKING TO BAGHDAD COULD BE EFFECTED WITHIN FOUR DAYS. SINCE AUGUST 1990, CONTAINER OPERATIONS HAVE COME TO A VIRTUAL STILLSTAND. AQABA'S ROLE AS A TRANSHIPMENT PORT FOR IRAQ HAD GIVEN RISE TO RELUCTANCE TO SHIP INTO THE PORT, AS VESSELS WERE BEING STOPPED AND SEARCHED, A DIFFICULT AND TIME CONSUMING INSPECTION EVEN WITH CORRECT DOCUMENTATION.

3.3. ROAD AND AIR TRANSPORT:

NON-BULK CARGO IMPORTS THROUGH SAUDI COMMERCIAL PORTS STEADILY DECREASED BY 70% FROM ITS CULMINATION HIGH LEVEL OF 37.5 MILLION TONNES DURING THE YEAR 1983 DOWN TO 11.25 MILLION TONNES DURING 1990 (SEE APPENDIX V). HOWEVER, WHILE THIS WAS IN LINE WITH THE OVERALL IMPORT DECLINE BY 67%, IMPORTS BY LAND DECREASED BY ONLY 35.3% OF QUANTITY, AND AIRBORNE WEIGHT IMPORTS BY ONLY 44.1%.

APART FROM THIS GENERAL DECREASE, THE WEIGHT PROPORTION OF SEABORNE IN OVERALL IMPORTS INTO THE KINGDOM DECLINED BY 7.1% FROM 90.7% DURING 1983 TO 83.6% DURING 1990. AT THE SAME TIME, THE PROPORTION OF LAND IMPORTS PRACTICALLY DOUBLED FROM 6.7% TO 13.2%. CONSEQUENTLY, THE KINGDOM'S PORTS LOST IMPORTANCE AS TRADE INLETS MAINLY TO THE ROAD NETWORK.

WITH THE ONGOING DEVELOPMENT OF THE KINGDOM'S ROAD NETWORK, THE IMPORT TRADE OF RELATIVELY LOW-VALUE TRANSPORT-COST SENSITIVE CARGOES WAS TRANSFERRED FROM SEA VESSELS TO ROAD CARRIERS. THIS THOUGHT IS SUPPORTED WHEN REGARDING VALUES OF COMMODITIES IMPORTED BY LAND, WHICH DECREASED BY 23.3% FROM 3.0 TO 2.3 SR/KG, WHILE THE VALUE OF IMPORTED SEABORNE COMMODITIES ALMOST DOUBLED FROM 2.8 TO 5.5 SR/KG (OVERALL VALUES 3.3 TO 6.7 SR/KG).

MAJOR LAND CUSTOMS PORTS INTO THE KINGDOM ARE QARIAT FOR IMPORT CARGOES FROM JORDAN, EGYPT, SYRIA AND TURKEY; SALWA FOR CARGOES FROM QATAR AND THE EMIRATES; KING FAHD CAUSEWAY FROM BAHRAIN; AND KHAFJI FOR IMPORTS FROM KUWAIT AND IRAQ. MINOR LAND CUSTOMS PORTS ARE HADITHAH AND HALAT AMAR FROM JORDAN; MAYDI, ZAHKAN AND TAWAL FROM YEMEN; SHAGAYAH FROM KUWAIT; AND JUDAIDAT AR FROM IRAQ.

AN ESTIMATED 50,000 TEUS PER ANNUM MOVE FROM DAMMAM TO RIYADH DRY-PORT, ALL IMPORTS, ABOUT 60% BY RAIL, AND MAINLY CONSUMER GOODS. APPENDIX VI STATING VALUES OF IMPORTS BY MAJOR CUSTOMS PORT INDICATES THAT IMPORTS THROUGH QARIAT MORE THAN DOUBLED BETWEEN 1986 AND 1990. SINCE VALUE BY COMMODITY KEPT QUITE CONSTANT AROUND 2.5 SR/KG SINCE 1986, THIS INCREASE TRANSLATES INTO AN IMPORT OF 1.2 MILLION TONNES DURING 1990. IMPORTS THROUGH SALWA INCREASED BY ONE-THIRD DURING THAT PERIOD, MEANING A QUANTITY OF ABOUT 0.4 MILLION TONNES DURING 1990. IN CONTRAST, IMPORTS THROUGH KHAFJI DECREASED CONSTANTLY TO 0.1 MILLION TONNES DURING 1990, ALMOST HALF THEIR LEVEL OF 1986. ADDITIONALLY, HIGHER FIGURES FOR 1989 INDICATE THAT SOME IMPORTS THROUGH KUWAIT AND JORDAN DURING THE

SECOND HALF OF 1990 SINCE START OF THE GULF CRISIS WERE SUBSTITUTED BY SEABORNE IMPORTS.

SAUDI FOREIGN TRADE STATISTICS DO NOT DISTINGUISH IMPORT VALUES THROUGH MINOR CUSTOMS PORTS. HOWEVER, IT CAN BE ASSUMED THAT IMPORTS FROM JORDAN, BAHRAIN AND YEMEN CONSTITUTE THE MAJOR PROPORTION, SINCE NEITHER THE MINOR SEAPORTS (ESTIMATED AT 0.1 MILLION TONNES) NOR THE MINOR LAND CUSTOMS PORTS FROM KUWAIT OR IRAQ HANDLED MUCH IMPORTS. SOLID FEEDSTOCKS, MAINLY IRON ORE, ARE TRANSPORTED FROM BAHRAIN BY SEA TO KFIP JUBAIL, ALL OTHER IMPORTS ARE ROUTED VIA THE CAUSEWAY, ACCOUNTING FOR 20% OF IMPORT VALUES OR 0.14 MILLION TONNES. THE REMAINING IMPORTS CAN BE ESTIMATED TO COME BY TWO-THIRDS FROM JORDAN (0.6 MILLION TONNES) AND ONE THIRD FROM YEMEN (0.3 MILLION TONNES).

REPORTS FROM ROAD HAULAGE FIRMS AND CUSTOMS BROKERS ALREADY DURING 1986 INDICATED THAT, OF AN AVERAGE 5 TRUCKS PER DAY FROM QATAR AND 20 TRUCKS FROM THE EMIRATES, MORE THAN 20% CONTAINED CARGO WHICH HAD BEEN RE-EXPORTED FROM QATAR AND THE EMIRATES INTO THE KINGDOM. WITH A 30 TONNES MAXIMUM LOAD PER TRUCK THIS WAS CALCULATED AT 55,000 TONNES DURING 1986. THE SAUDI CHAMBER OF COMMERCE THEN STATED THAT A GROWING NUMBER OF SMALL AND MEDIUM CONSIGNEES REROUTED THEIR SAUDI-CONSIGNEED CARGO VIA NON-SAUDI PORTS, WHILE MAJOR CONSIGNEES TEND TO HAVE THEIR SAUDI-BOUND CARGO CONSIGNEED TO OTHER GULF PORTS, WHERE THEY USUALLY HAVE OFFICES.

THE CARGO IS THEN TRUCKED INTO THE KINGDOM AS PART OF THE INTER-GULF TRAFFIC. DURING 1990, ONLY 140,000 TONNES WERE IMPORTED BY SEA INTO THE KINGDOM FROM THE EMIRATES, QATAR AND OMAN, AS AGAINST 375,000 TONNES IMPORTED BY LAND (APPENDIX VII). THE ENTIRE IMPORT FROM QATAR AND ALMOST ALL FROM OMAN COME BY TRUCK, ONLY ONE-THIRD OF UAE-ORIGINATED IMPORTS ARRIVED BY SEA. THE VAST MAJORITY OF THE DECLARED 185,000 TONNES OF RE-EXPORTED IMPORTS WERE TRANSIT CARGOES FROM THE EMIRATES, BEING INDUSTRIAL AND AGRICULTURAL PRODUCTS, OF WHICH ABOUT TWO-THIRDS WERE TRANSPORTED BY TRUCK THROUGH SALWA. AGAIN THE VAST MAJORITY OF THESE TRANSIT GOODS COME FROM INDIA AND THE FAR EAST, SINCE CARGO FROM EUROPE IS BEING SHIPPED VIA JEDDAH.

HOWEVER, IT IS PROBABLE THAT SOME OF THE SAUDI-BOUND CARGO ENTERING THE OTHER GULF STATES, IS FIRST STORED, REPACKED, RELABELLED OR PARTLY USED BY BRANCHES OF SAUDI AND OTHER GULF-STATE COMPANIES, BEFORE IT IS EVENTUALLY TRUCKED INTO THE KINGDOM AS NATIONAL GOODS. AN ESTIMATED 20% OF CONTAINERS DISCHARGED AT PORT RASHID ARE DESTINED FOR DIRECT OR RE-EXPORTED ONWARD ROAD TRANSIT TO SURROUNDING DESTINATIONS (CALCULATED SR 3,500 PER TEU DUBAI-DAMMAM).

IN CONTRAST, THE LEVEL OF RE-EXPORTED CARGOES FROM SAUDI THROUGH SALWA CUSTOMS PORT, ALMOST ENTIRELY INDUSTRIAL PRODUCTS WITH A TOTAL 50,000 TONNES DURING 1990 (APPENDIX VIII). ARE ALMOST NEGLIGIBLE AS THEY CONSTITUTE JUST ONE-FOURTH OF FOREIGN GOODS IMPORTS.

SEA/ROAD SERVICES FROM EUROPE TO IRAQ ALSO CEASED AFTER OUTBREAK OF THE GULF CRISIS. MOST OF THESE WERE ROUTED OVER THE TURKISH PORT OF MERSIN, WHICH THEN REFUSED ANY CONTAINERS CONSIGNEED FOR IRAQ, WHILE THE REMAINING TRADE THROUGH AQABA WAS CONTROLLED.

IN LATE 1988 QATAR INTRODUCED LEGISLATION RESTRICTING VEHICLE SIZES AND WEIGHT TO A MAXIMUM 45 TONNES. THIS EFFECTIVELY ENDED THE PRACTICE OF MOVING FOUR TEUS AT A TIME USING ROAD TRAINS, AND RESULTED IN A DRAMATICAL IMPROVEMENT OF THE SEAPORTS' COMPETITIVE POSITION. AS A RESULT, ABOUT 65-70% OF QATAR'S IMPORTED GOODS CAME THROUGH DOHA PORT

DURING 1989, AS COMPARED TO 25% PREVIOUSLY.

FUJAIRAH IS LINKED TO DUBAI, SHARJAH AND ABU DHABI BY A MULTI-LANE HIGHWAY. THIS HAS ENHANCED ITS ROLE AS A TRANSHIPMENT PORT, ALTHOUGH APL FEEDS THE ARABIAN GULF BY SEA. SIMILARLY PORT KHALID IS CONNECTED TO KHOR FAKKAN VIA THE 'MINIBRIDGE', A TARMAC HIGHWAY.

PARTICULARLY HIGH-VALUE CARGOES WERE REROUTED FROM SEA VESSELS AND ROAD CARRIERS ONTO AIRPLANES, WHERE THE SHARE OF AIRBORNE IMPORTS INCREASED FROM 1.9% TO 3.2%, WHEREAS THE VALUE PROPORTION OF IMPORTS ALMOST DOUBLED FROM 15.5% TO 27.5%, AND AIRBORNE COMMODITY VALUES CONSEQUENTLY MORE THAN DOUBLED FROM 27.6 TO 58.3 SR/KG.

THE INTERNATIONAL AIRPORTS OF THE KINGDOM HANDLED AN ESTIMATED 430,000 TONNES OF IMPORTS DURING 1990, WITH RIYADH ACCOUNTING FOR 165,000 TONNES, JEDDAH 145,000 TONNES AND DAHRAN 120,000 TONNES.

DURING THE FIRST HALF OF 1990, SAUDIA TRANSPORTED 20,900 TONNES OF GOODS AND EQUIPMENT FROM EUROPE, 23,500 TONNES FROM ASIA, 17,900 TONNES FROM AFRICA AND 9,500 TONNES FROM AMERICA AND MIDDLE-EAST. DOMESTICALLY, IT CARRIED 27,900 TONNES, OF WHICH 17,200 TONNES WERE CARRIED ON ITS MAJOR INTERNAL ROUTE JEDDAH-RIYADH-DHAHRAN.

TOTAL THROUGHPUT AT DUBAI INTERNATIONAL AIRPORT WAS 144,282 TONNES DURING 1990 (1989 130,000 TONNES), WHICH HAD BEEN AT A LEVEL OF AROUND 15,000 TONNES PER MONTH UNTIL AUGUST 1990, BUT FELL TO 2,000 TONNES DURING THE CRISIS AND ENSUEING WAR. BY MAY 1991, HOWEVER, THE LEVEL WAS BACK TO 11,323 TONNES. NEW AIR CARGO COMPLEX WITH ANNUAL THROUGHPUT CAPACITY OF 250,000 TONNES. DUBAI CLAIMS 7% OF INTERNATIONAL WORLD AIR CARGO.

SEA/AIR INTERMODAL TRAFFIC ACCOUNTED FOR SOME 20,000 TONNES OF THE 1990 TOTAL. FOR INSTANCE, SUPPORTED BY SIX CONTAINER FREIGHT STATIONS TO HANDLE LCL CONTAINERS PORT RASHID'S TOTAL SEA/AIR TRAFFIC IS COORDINATED WITH DUBAI INTERNATIONAL AIRPORT, AND HANDLED A TOTAL 14,602 TONNES DURING 1990 (1989 17,423 TONNES), DOWN TO 4,168 TONNES IN THE FIRST HALF OF 1991, BUT ALMOST UP TO THE 1990 LEVEL DURING AUGUST 1991. THE DIFFERENCE OF 5,500 TONNES SEA/AIR CARGO HANDLED BY DUBAI AIRPORT DURING 1990 CAME FROM FUJAIRAH PORT.

DURING 1990, FUJAIRAH PORT ALSO STARTED WINNING MORE SEA/AIR BUSINESS; ALREADY BY 1991 IT BECAME THE LEADER IN SEA/AIR CARGO SETTING A REGIONAL RECORD BY HANDLING 2,200 TONNES DURING MAY 1991. TRUCKING FROM FUJAIRAH TO THE DUBAI CARGO VILLAGE TAKES ONLY FOUR HOURS AS AGAINST AN AVERAGE OF TWELVE HOURS FROM FUJAIRAH TO THE DUBAI PORTS.

SHARJAH INTERNATIONAL AIRPORT IS MANAGED WITH SUPPORT OF FRANKFURT AIRPORT AUTHORITY, USED MAINLY BY DEDICATED FREIGHTER AIRCRAFT OF CHARTER AIRLINES, AND SPECIALIZES ITS IMPORTS IN LIVESTOCK TRANSPORT AND REFRIGERATED FOODSTUFF, WHILE SEA/AIR CARGO IS THE MAJORITY OF ITS EXPORT BUSINESS. THE AIRPORT INCREASED ITS SEA/AIR TRAFFIC TO 12,940 TONNES DURING 1989, FROM JUST OVER 3,000 TONNES IN 1985. A SLIGHT DECREASE TO 11,290 TONNES DURING 1990 WAS DUE MAINLY TO THE GULF CRISIS WITH LOSSES OF ALMOST 30% DURING THE SECOND HALF OF THE YEAR. THE TREND FOR 1991 IS UPWARDS SHOWING A 10% RISE OVER 1990 FIGURES. A MAJOR PART OF THE RE-EXPORT TRADE IS FOR IRAN AND YEMEN, WHILE MOST IMPORTANT SOURCES OF IMPORTS ARE BOMBAY AND TEHRAN.

SEA/AIR CARGO DEVELOPMENT CAPITALIZES ON THE JUST-IN-TIME CONCEPT IN GENERAL DUE TO ACCURATE FORWARD PLANNING OF DELIVERY DATES, AND ON TIME SAVINGS COMPARED TO THE WOUND AND HIGHLY RATED MIDDLE EAST TO

EUROPE SHIPPING LINES AND BROKEN ONWARD LAND CARRIAGE IN PARTICULAR. IN CONTRAST, THE ASIA-MIDDLE EAST LEG OFFERS SHORT LAND CARRIAGE DISTANCES, STRAIGHT SHIPPING ROUTES AND LOW FREIGHT RATES BY SHIPPING LINES QUOTING ON PERFORMANCE.

THE MAIN MARKET IS BETWEEN THE FAR EAST/INDIAN SUBCONTINENT AND EUROPE, AND INVOLVES ELECTRONIC GOODS AND TEXTILES. THE UAE AIRPORTS ARE LOCATED HALFWAY BETWEEN THE PRODUCING MARKETS OF JAPAN, SOUTH EAST ASIA, INDIA AND PAKISTAN, AND THE CONSUMING NATIONS OF EUROPE AND THE AMERICAS. SHIPPERS CAN ROUTE THE TRAFFIC VIA THE GULF, NORTH AMERICA OR, INCREASINGLY, THE SOVIET UNION. THIS MEANS GULF CENTRES SUCH AS DUBAI, FUJAIRAH AND SHARJAH MUST COMPETE NOT ONLY WITH EACH OTHER AS SEA/AIR TRANSHIPMENT HUBS, BUT ALSO WITH OVERSEAS HUBS LIKE SEATTLE, VANCOUVER, HONGKONG, SINGAPORE AND, MORE RECENTLY, VLADIVOSTOK.

3.4. TRANSHIPMENT IN THE ARABIAN GULF AND GULF OF OMAN:

CONTAINER TRAFFIC HANDLED IN THE RED SEA AND ARABIAN GULF AREAS IS ESSENTIALLY ONE-WAY TRAFFIC FOR CARGO: LOADED BOXES IN AND EMPTIES OUT. AT A BASIC LEVEL, THEREFORE, THE SUM OF ALL LOADED BOXES INTO THE AREA SHOULD BE EQUAL TO THE TOTAL OF EMPTIES OUT. HOWEVER, THIS IS NOT THE CASE BECAUSE OF TRANSHIPMENT.

THE SEA-FEEDER OPERATION DISTORTS PORT TRAFFIC STATISTICS, AS LOADED BOXES APPEAR AS EXPORT TRAFFIC (TO OTHER MID-EAST PORTS) AND EMPTIES AS IMPORTS. MOREOVER, SOME PORTS COUNT TRANSHIPMENT CONTAINERS ONCE ONLY IN THEIR PORT STATISTICS (I.E. ONE HANDLING), OTHERS TWICE (IN AND OUT).

TABLE 6: TRANSHIPMENT IN ARABIAN GULF/OMAN GULF (TEU, * ESTIMATES)

TO/FROM	1989	% CHANGE	1990	% CHANGE	1991	RANK
MINA QABOOS	84,400	66.6	140,599	13.9	*160,000	5
FUJAIRAH	208,000	34.6	*280,000	14.3	*320,000	1
KHOR FAKKAN	100,000	33.6	133,600	72.2	*230,000	4
PORT RASHID	232,200	-4.9	220,896	31.3	*290,000	2
JEBEL ALI	85,380	76.1	150,371	59.4	*240,000	3
MINA ZAYED	10,800	1.9	*11,000	-36.4	*7,000	6
MINA SULMAN	1,520	-33.4	*1,000	50.0	*2,000	7
SHUAIBA	2,000	-50.0	*1,000	-100.0	0	8

FEEDERING THE INNER GULF PORTS VIA RELAY HUBS LOCATED IN, OR CLOSE TO, THE GULF OF OMAN STARTED OFF DURING THE IRAN-IRAQ WAR DURING THE EARLY 1980S. HOWEVER, THIS TREND WAS ENFORCED BY THE GULF CRISIS, WHEN EVEN TRANSHIPMENT THROUGH PORT RASHID WAS AFFECTED BY THE CONSEQUENT HIGH WAR RISK INSURANCES RATED IN THE GULF.

THE MAIN GULF FEEDER PORTS (PORT RASHID, FUJAIRAH, KHOR FAKKAN AND, SINCE 1989, MINA QABOOS) TRANSHIP TO OTHER GULF PORTS, INCLUDING IRAN/IRAQ AND ALSO TO INDIAN OCEAN AREAS. FOR SOME LINES, GULF PORT TRANSHIPMENT IS THEIR SOLE METHOD OF HANDLING INDIAN OCEAN TRAFFIC, AND THIS TREND HAS BECOME MORE PRONOUNCED. SOME LINES, FOR EXAMPLE APL USING FUJAIRAH SINCE MID-1984, ALSO PREFER TO CALL AT ONE PORT ONLY IN THE GULF, AND MOVE THE BOXES ON TO FINAL DESTINATION BY SEA FEEDER, OR OVERLAND BY TRUCK.

OUT OF 1.16 MILLION TONS OF GENERAL CARGO TRANSHIPPED VIA PORT RASHID, THE INDIAN MARKET ACCOUNTED FOR 0.17 MILLION TONNES, PAKISTAN FOR ANOTHER 0.08 MILLION TONNES, KUWAIT, QATAR AND SAUDI ARABIA FIGURED SOMEWHERE IN BETWEEN.

BELOW TABLE OF DIRECTION OF CONTAINERS TRANSHIPPED THROUGH PORT RASHID

IS REPRESENTATIVE FOR THE EMIRATES' PORTS. ON BALANCE, A MAJOR PORTION OF THE TRANSHIPMENTS FROM THE FAR EAST ARE DESTINED FOR THE GULF, INCREASINGLY EUROPE AND NORTH AFRICA IS SERVED BY TRANSHIPMENT THROUGH DUBAI OF THE AMERICA-FAR EAST TRADE. OUTSIDE THE ARABIAN GULF, FUJAIRAH'S MOST IMPORTANT FEEDER DESTINATION IS KARACHI, A BUSINESS THAT IS STRONG IN BOTH DIRECTIONS.

CONTAINER TRADE DURING THE YEAR 1990

ARABIAN GULF SHIPPING ROUTES AND TRANSPORT CONNECTIONS

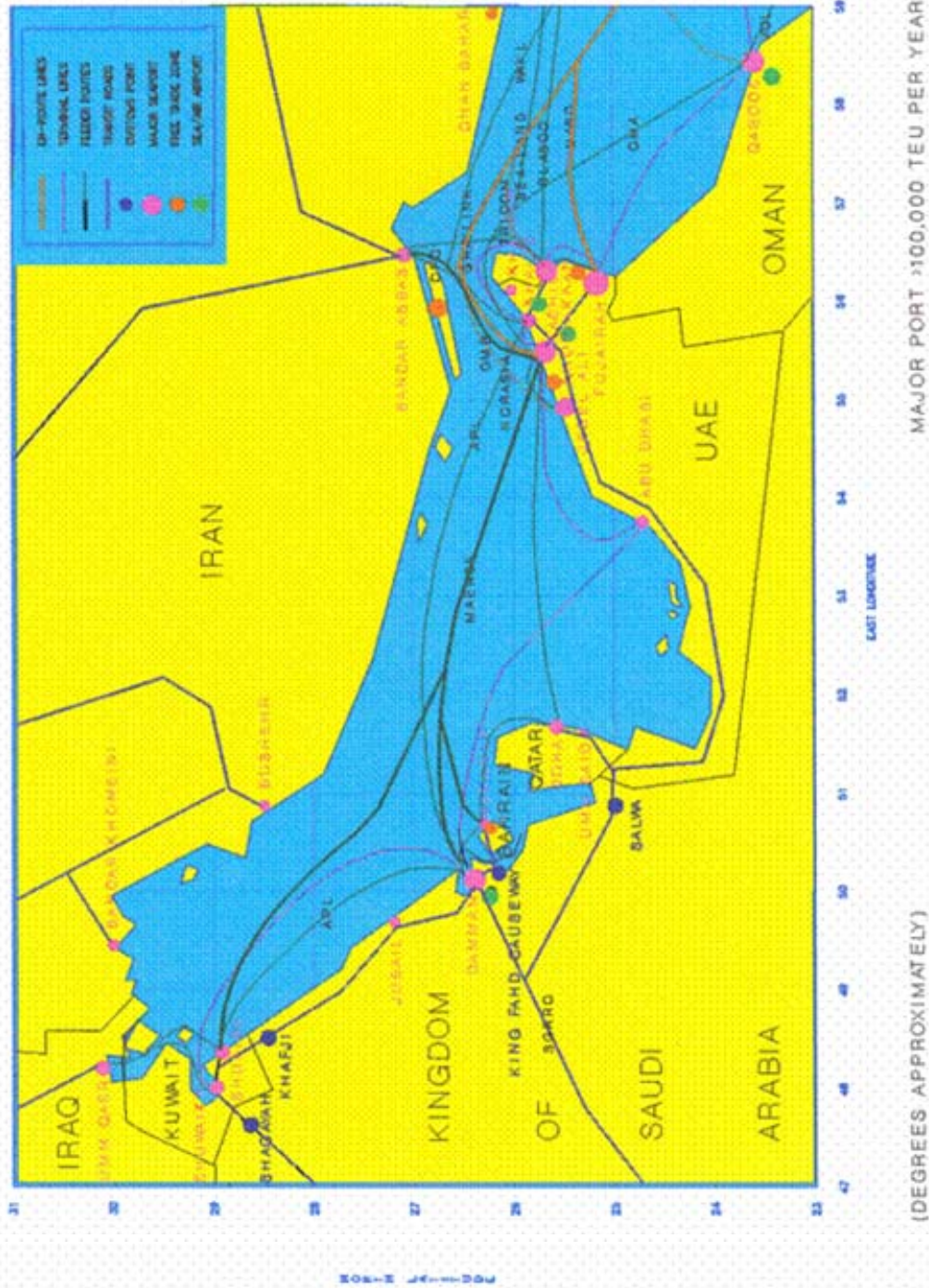


TABLE 7: TRANSHIPMENT THROUGH PORT RASHID (1990, IN % OF TEUS)

TO/FROM	INCOMING	OUTGOING	BALANCE
GCC	25.0	29.3	-4.3
NORTH AFRICA	1.9	3.1	-1.3
EUROPE	18.2	21.3	-3.1
ASIA	41.8	37.0	4.8
EAST AFRICA	1.9	1.5	0.4
NORTH AMERICA	10.5	7.2	3.3
SOUTH AMERICA	0.1	0.2	-0.1
SOUTH PACIFIC	0.6	0.3	0.3

THE RED SEA AREA CONSTITUTES A MARKET FOR CONTAINERIZED TRADE OF ALMOST ONLY ONE-THIRD THE SIZE OF THE ARABIAN GULF. THE MOST SIGNIFICANT FEATURE OF APPENDIX IX IS THAT AVERAGE LOAD FACTORS DURING THE YEARS LEADING TO 1990 DECREASED STEADILY FOR ALL TRADES, THUS DEPRESSING FREIGHT RATES AND PROVIDING AMBLE CAPACITIES FOR ADDITIONAL CARGOES AS GENERATED BY TRANSHIPMENT OF CONTAINERS.

THE LOAD FACTORS ON THE EUROPE AND FAR EAST TRADES INDICATE A LARGE LOSS IN CAPACITY DURING 1988, WHICH HAD BEEN BROUGHT INTO BALANCE DURING 1989 AND 1990. THE NORTH AMERICAN LOAD FACTOR FELL THROUGHOUT THE PERIOD, REFLECTING THE INCREASED VESSEL SIZES BEING INTRODUCED BY APL AND HOEGH.

OVERALL LOAD FACTORS TO THE GULF SEEM TO BE FALLING BELOW THE ONES TO THE RED SEA, INDICATING THE ONE-WAY TRADE INTO THE GULF.

3.5. CONTAINER TRANSHIPMENT IN THE RED SEA:

THE RED SEA IS NOT A FEEDER MARKET, AND IN GENERAL ITS TRADE CAN BE REGARDED AS FULL IN/EMPTY OUT.

TABLE 8: TRANSHIPMENT IN THE RED SEA, 1989-1991 (TEU, * ESTIMATES) TO/FROM

TO/FROM	1989	% CHANGE	1990	% CHANGE	1991	RANK
PORT SAID	1,557	929.5	16,061	24.9	*20,000	2
AQABA	23,500	-57.4	*10,000	-90.0	*1,000	4
JEDDAH	9,320	224.6	30,250	-28.3	21,700	1
DJIBOUTI	2,025	393.8	*10,000	50.0	*15,000	3

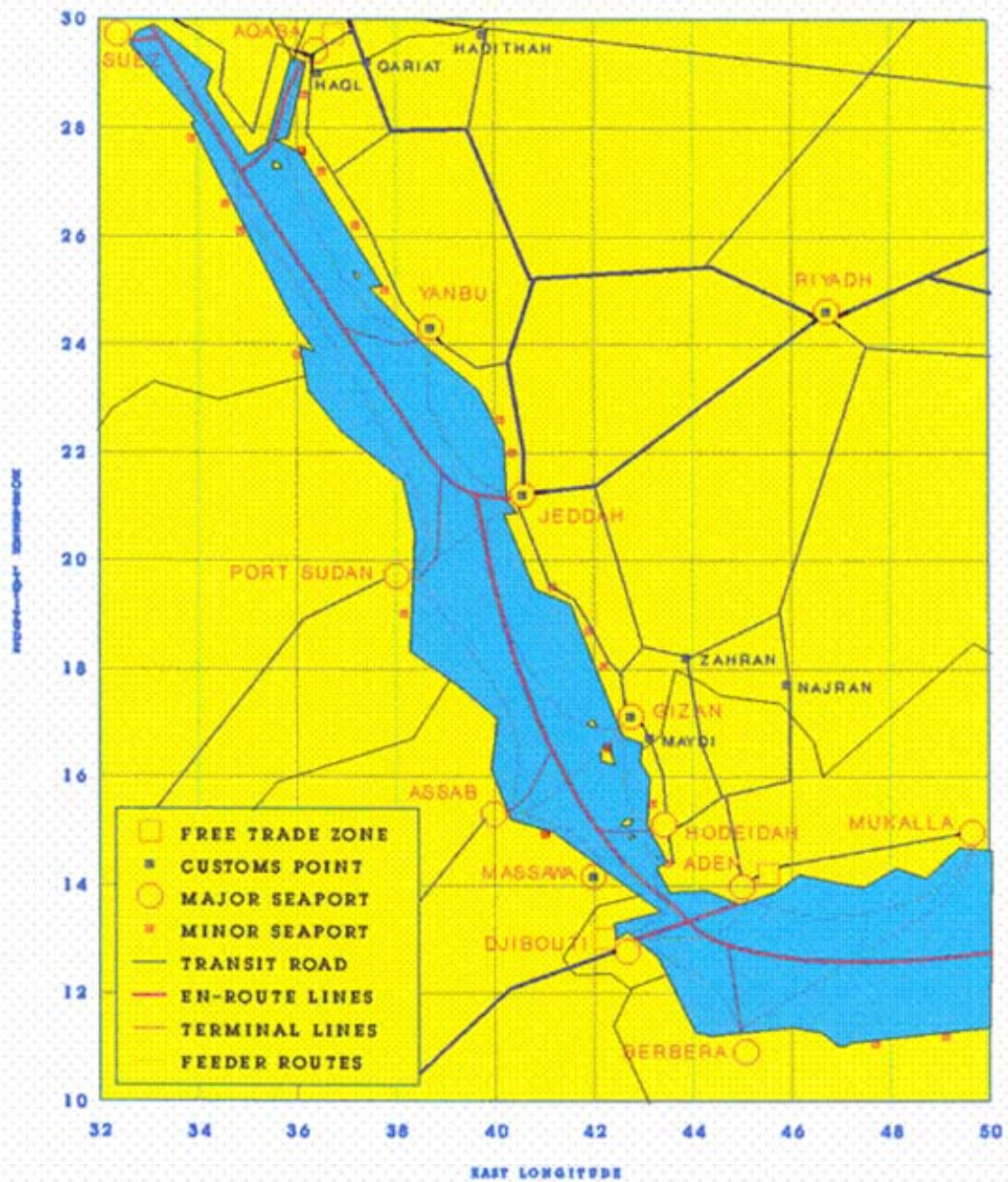
THE RED SEA AREA CONSTITUTES A MARKET FOR CONTAINERIZED TRADE OF ONLY ONE-THIRD THE SIZE OF THE ARABIAN GULF. POOR PURCHASING POWER IN ALL COUNTRIES OUTSIDE SAUDI ARABIA, AND CIVIL WARS ON THE AFRICAN SIDE OF THE RED SEA, ALLOW FOR ONLY ONE IMPORTANT CONTAINER PORT TO SERVE THE AREA.

THE MOST SIGNIFICANT FEATURE OF APPENDIX X IS THAT, WITH EXCEPTION OF THE NORTH AMERICA TRADE, THE AVERAGE LOAD FACTOR DURING THE YEARS LEADING TO 1990 DECREASED STEADILY, THUS DEPRESSING FREIGHT RATES AND PROVIDING AMBLE CAPACITIES FOR ADDITIONAL CARGOES AS GENERATED BY TRANSHIPMENT OF CONTAINER.

THE NORTH EUROPEAN LOAD FACTORS HAVE ASSUMED A BALANCED POSITION, WHILE THE AUSTRALASIAN FIGURES REMAIN LOW. THE REASON FOR THIS IS BECAUSE THE RED SEA (BASICALLY JEDDAH) IS SERVED MAINLY AS A WAY-PORT THUS OFFERING CAPACITY AFTER DISCHARGE FOR LOADING EMPTIES TO THE FAR EAST. IN ADDITION, THERE CONTINUE TO BE CONVENTIONAL SERVICES FROM EUROPE TO EAST AND SOUTH AFRICA AND TO THE INDIAN SUBCONTINENT, WHICH CALL IRREGULARLY AT RED SEA PORTS, DISCHARGING A FEW CONTAINERS EN ROUTE AND THEREBY INCREASING CAPACITY ON OFFER.

CAPACITIES WILL INCREASE EVEN FURTHER WITH FIFTH GENERATION CELLULAR CONTAINER VESSELS COMING ONTO THE MARKET AS FROM 1992, WHICH DUE TO HIGH CAPITAL INVESTMENTS BUT LOW CURRENT COSTS WILL HAVE TO MAXIMIZE OPERATION IN ORDER TO GENERATE PROFITS. NUMBER OF PORT CALLS WILL BE MINIMIZED TO ONE WAYPORT ONLY, FROM WHERE SMALLER CONTAINER VESSELS WILL BE OPERATED AS DEDICATED FEEDERS.

CONTAINER TRADE DURING THE YEAR 1990 RED SEA SHIPPING AND LAND TRANSPORT



(DEGREES APPROXIMATELY)

MAJOR SEAPORT >10,000 TEU PER YEAR

WHILE JEDDAH ISLAMIC PORT IS IN THE OPTIMUM LOCATION TO SERVE THE WHOLE RED SEA AS FEEDER STATION, THE OTHER THREE MAIN PORTS ARE VEYING TO IMPROVE THEIR ROLE AS RELAY HUBS BY ATTRACTING CONTAINER AND OTHER UNITIZED CARGO TRANSHIPMENT WITH LOW HANDLING RATES, BETTER SERVICES AND LESS RED TAPE. THE PORT OF DJIBOUTI IS BEING PROMOTED BY THE FRENCH BUSINESS AND WILL CERTAINLY INCREASE ITS TRANSHIPMENT PERFORMANCE. HOWEVER, IN THE LONG TERM FUTURE, ADEN MIGHT RESUME ITS FORMER ROLE OF ROUTE PORT BY OFFERING FREE TRADE ZONE AND FEEDERING SERVICES, SINCE ITS OPTIMUM GEOGRAPHICAL LOCATION AT THE CROSSROADS OF THE CONTINENTS AND THEIR WATERWAYS ALLOWS FOR BALANCED AND FAST TRADE CONNECTIONS WITH THE EAST AFRICAN, RED SEA AND INDIAN MARKETS.

3.6. REGIONAL LEGISLATION:

THE SAUDI GOVERNMENT DOES NOT GIVE INDUSTRIAL BUSINESSMEN ANY SPECIAL SUBSIDIES OR OTHER INCENTIVES TO EXPORT, AS DOES THE TURKISH GOVERNMENT, FOR EXAMPLE. THERE IS NO EXPORT-CREDIT GUARANTEE FUND WITHIN THE KINGDOM, HOWEVER, SAUDI EXPORTERS CAN OBTAIN VARIOUS TYPES OF EXPORT INSURANCE FROM THE ISLAMIC DEVELOPMENT BANK, WHICH FINANCES ISLAMIC TRADE, AND FROM THE INTER ARAB INVESTMENT GUARANTEE CORP, WHICH INSURES COMMERCIAL AND NON-COMMERCIAL RISKS. THE ARAB MONETARY FUND IS EXPECTED TO LAUNCH A SIMILAR PROGRAM SOON. HOWEVER, NONE OF THESE INSTITUTIONS IS REGARDED AS A SUBSTITUTE FOR A NATIONAL SYSTEM OF EXPORT INSURANCE.

THE SAUDI GOVERNMENT DOES GIVE, HOWEVER, SUBSIDIES TO AGRICULTURAL FARMERS. IN CASE OF WHEAT EXPORTS, THESE AMOUNTED TO US\$ 1,000 PER TONNE BEFORE 1988, AND US\$ 530 AFTERWARDS (AT A WORLD PRICE OF US\$ 130). AFTER VARIOUS DEDUCTIONS, SUCH AS ZAKAT ETC., THIS LEFT THE FARMER WITH SR 1,650 PER TONNE. TO THIS AMOUNT CASH SUBSIDIES ON MACHINERY AND STOCK BETWEEN 45% AND 33% HAVE TO BE ADDED.

GOVERNMENT SUBSIDIES ON IMPORTED BARLEY RAN AS HIGH AS SR 300 PER TONNE UNTIL 1987, SUCH A HIGH LEVEL THAT DURING 1987 THE KINGDOM BECAME THE WORLD'S BIGGEST IMPORTER OF BARLEY. IT NEEDED PERHAPS 3 MILLION TONNES, BUT ITS IMPORTS IN THE MID-1980S RAN TO DOUBLE OR TREBLE THIS LEVEL. IMPORTERS SOMETIMES FOUND THAT THE SUBSIDY WAS BIGGER THAN THE AMOUNT THEY HAD PAID FOR THE GRAIN. THEY DEVELOPED A THRIVING TRADE IN RE-EXPORTS TO IRAQ AND OTHER NEIGHBORING COUNTRIES.

SINCE EARLY 1989 THE IMPORT SUBSIDY HAS BEEN ABOLISHED, AFTER BEING CUT TO SR 100 A TONNE IN MID-1987, AND THE GSFMO TOOK THE IMPORT BUSINESS OUT OF THE HANDS OF THE PRIVATE SECTOR. HOWEVER, THE GUARANTEED PRICE FOR LOCAL BARLEY IN 1990 WAS ONLY SR 1,000 A TONNE, DOMESTIC PRODUCTION THUS AMOUNTED TO JUST 10% OF DEMAND.

THE GCC HAS MADE SOME PROGRESS IN CREATING A COMMON MARKET SINCE THE ORGANIZATION WAS ESTABLISHED IN 1981 (SEE APPENDIX XI). IN THE GCC-MARKETS, SAUDI EXPORTERS DO NOT NEED TO SELL THROUGH LOCAL AGENTS, AND THEIR PRODUCTS ENTER TARIFF-FREE. GOODS FROM MEMBER COUNTRIES ARE TRADED TAX-FREE, THIS EXEMPTION FROM TARIFFS APPLIES TO PRODUCTS THAT COME FROM FACTORIES AT LEAST 51%-OWNED BY GCC NATIONALS, AND THAT INCORPORATE A LOCAL CONTENT OR VALUE-ADDED OF AT LEAST 40% OF THE EXPORT PRICE. GCC MEMBER STANDARDS ARE GRADUALLY HARMONIZED, AND GCC GOVERNMENTS START COOPERATIVE PURCHASING. COOPERATION AMONG THE MEMBER COUNTRIES IS FACILITATED BY FREE MOVEMENT OF SERVICES AND INDIGENOUS WORKERS. THE BASIC GOALS OF COORDINATION AND INTEGRATION, ESPECIALLY THE UNIFICATION OF ECONOMIC, FINANCIAL AND MONETARY POLICIES AS WELL AS THE COMMERCIAL AND INDUSTRIAL REGULATIONS WERE PURSUED BY

EFFORTS FOR THE UNIFICATION OF TARIFF SCHEDULES SINCE 1983, WITHOUT A COMMON EXTERNAL TARIFF, HOWEVER.

PROTECTIVE TARIFFS OF AROUND 20%, WHERE THERE IS SUBSTANTIAL LOCAL PRODUCTION OF GOODS FILLING AT LEAST HALF OF LOCAL DEMAND, CAN ALSO BE APPLIED AGAINST GCC MEMBER GOODS AND EXIST IN ALL GCC STATES EXCEPT THE EMIRATES. OMANI INDUSTRIES THAT CAN FULFILL 70% OF LOCAL DEMAND EVEN GET TARIFF PROTECTION OF UP TO 30%. ONLY BAHRAIN PUTS A 5% DUTY ON FOODSTUFFS, WHILE MOST OTHER ITEMS ATTRACT A 4% DUTY FROM GCC COUNTRIES WITH THE EXCEPTION OF SAUDI ARABIA, WHERE THEY ARE AS HIGH AS 12%, AND THE EMIRATES AS LOW AS 2%. LUXURY ITEMS ARE TAXED 40% AND HIGHER IN KUWAIT AND BAHRAIN.

IN SAUDI ARABIA, THIS TARIFF POLICY IS SUPPORTED BY ADMINISTERED PRICES OF IMPORTED GOODS, REGULATIONS ON NATIONAL SUBCONTRACTING, AND TAX EXEMPTIONS FOR JOINT VENTURES AND PRESCRIPTIONS ON NATIONAL PROCUREMENTS BY CONTRACTORS. IN CONTRAST, SAUDI ARABIA MAINTAINS NO RESTRICTIONS ON THE EXCHANGE RATE SYSTEM, AND DOES ALSO NOT IMPOSE TRADE RESTRICTIONS ON IMPORTS FOR BALANCE OF PAYMENTS REASON.

IT USES ITS HIGH QUALITY STANDARDS, HOWEVER, TO EXCLUDE IMPORT BUSINESS IF THIS HURTS THE LOCAL PRODUCERS. A DISPUTE BETWEEN SAUDI ARABIA AND AUSTRALIA OVER INFECTED SHEEP IN EARLY 1990 LED TO THE SAUDI AUTHORITIES BANNING THE IMPORTATION OF LIVE SHEEP FROM AUSTRALIA ALTOGETHER. USUALLY SHIPS GET DELAYED IN PORTS WHILE VETERINARIANS DO THEIR TESTS, SOME BY UP TO TWO DAYS. KUWAITI TRADERS SAY THAT THE SAUDI AUTHORITIES OBSTRUCT THEIR EXPORTS WITH **NON-TARIFF BARRIERS**, NOTABLY RED TAPE. THEY SUBJECT GOODS TO LONG DELAYS AT THE BORDER, AND THEY EMPLOY THE NEW SAUDI STANDARDS REGULATIONS AGAINST THEM. BORDER DELAYS WERE AVERAGING 3 DAYS DURING 1987, SOMETIMES THEY WERE AS LONG AS ONE WEEK.

IN APRIL 1988, SEAPA PROHIBITED ENTRY INTO ITS PORTS BY VESSELS THAT HAD DISCHARGED ANY CARGO BOUND FOR SAUDI IMPORTERS IN NON-SAUDI PORTS FOR ONWARD TRANSPORT INTO THE KINGDOM. THE CIRCULAR DID NOT DECIDE, HOWEVER, A METHOD BY WHICH IT COULD BE PUT IN EFFECT AND EXECUTED. THAT THIS MEASURE WAS INTENDED TO STOP ONWARD **TRANSIT BY LAND** INTO THE KINGDOM, WAS CLARIFIED BY A SECOND CIRCULAR STATING THAT THE PREVIOUS CIRCULAR WAS NOT TO PROHIBIT TRANSHIPMENT OPERATIONS. SHORTLY LATER, THE CUSTOMS AND PORTS DEPARTMENT IN BAHRAIN CONFIRMED THAT NO RECIPROCAL ACTION WOULD BE TAKEN TO THE BENEFIT OF SAUDI EXPORTS ACROSS KING FAHD CAUSEWAY.

TIGHT SECURITY RESTRICTS THE ENTRY OF BUSINESSMEN AND TRUCK DRIVERS INTO OMAN AND INHIBITS EVEN CONVENTIONAL IMPORT TRADE; IT HAS BEEN AN IMPORTANT FACTOR IN ENCOURAGING OMAN'S MERCHANTS TO DO MUCH OF THEIR **IMPORT BUSINESS THROUGH DUBAI**. IN THE LONG RUN, THE FREE MOVEMENT OF TRAFFIC BETWEEN THE GCC STATES WILL ELIMINATE THE BORDER PROBLEM, IN WHICH CASE SHIPMENT VIA THE EMIRATES WILL BE EVEN MORE ATTRACTIVE.

DISPUTES NORMALLY CONCERN DEFINITIONS OF LOCAL CONTENT. THE EXCLUSION OF PRODUCTS SOURCED FROM THE **JEBEL ALI FREE ZONE** FROM TAX-FREE STATUS IN SOME STATES IS EXPLAINED BY THE FREE ZONE BEING, BY DEFINITION, OUTSIDE THE NORMAL FINANCIAL JURISDICTION OF A GCC COUNTRY. PRODUCTS THAT MOVE FROM THE JEBEL ALI FREE ZONE INTO DUBAI MUST BE CLASSED AS IMPORTS AND ATTRACT NORMAL TARIFFS. ON THIS PRINCIPAL SAUDI ENTREPRENEURS IN PARTICULAR SEE THE FREE ZONE'S PRODUCTS AS BEING IMPORTED FROM OUTSIDE A GCC-MEMBER STATE.

DURING RECENT YEARS, THE SAUDI GOVERNMENT NEGOCIATED A SERIES OF **BILATERAL DEALS** FOR MUTUAL TARIFF EXEMPTIONS ON MANY CATEGORIES OF

PRODUCTS WITH SIX ARAB COUNTRIES - JORDAN, SYRIA, IRAQ, TUNISIA, MOROCCO AND LEBANON. IN PRACTICE, THE MOST USEFUL OF THESE AGREEMENTS HAS BEEN THAT WITH JORDAN. THE OTHER COUNTRIES ARE SHORT OF FOREIGN EXCHANGE, TOO DISTANT FROM THE KINGDOM, OR CONVULSED BY CIVIL WAR. THE SAUDI GOVERNMENT IS FURTHER NEGOCIATING FREE-TRADE TREATIES WITH EGYPT, WHICH IS THE COUNTRY THAT INTERESTS EXPORTERS MOST, AND WITH YEMEN. MOST EXPORTS ORIGINATE FROM ABOUT TWENTY FACTORIES OWNED BY AN EVEN SMALLER NUMBER OF TRADING FAMILIES.

THERE ARE ALSO **MULTILATERAL NEGOTIATIONS** UNDER WAY WITHIN THE FRAMEWORK OF THE ARAB LEAGUE. TRADE IN AGRICULTURAL PRODUCTS AND MINERALS BETWEEN MEMBERS WAS FREED SOME YEARS AGO, THE PRESENT NEGOTIATIONS ARE CONCERNED WITH MANUFACTURED GOODS.

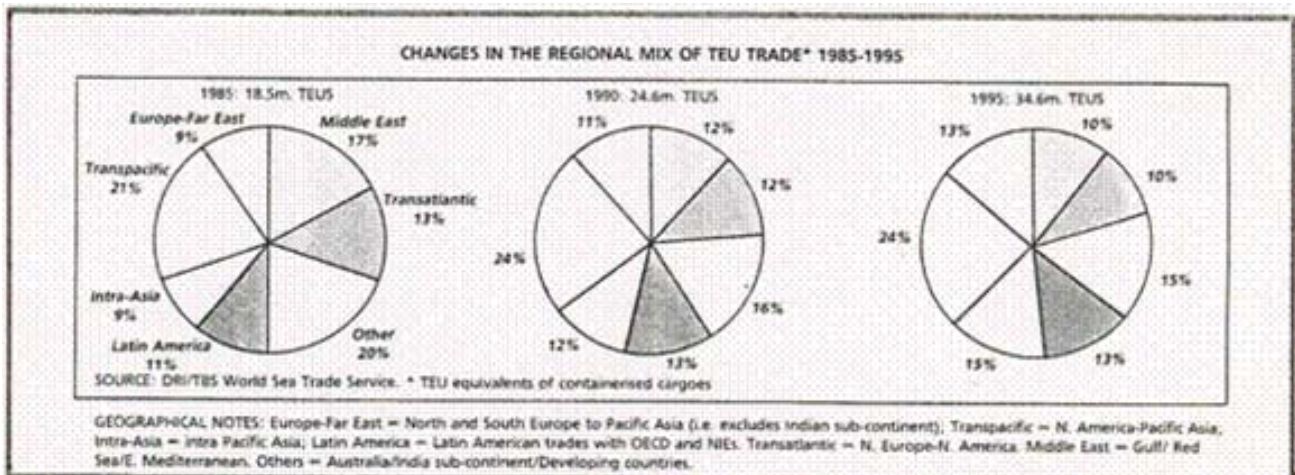
4. OUTLOOK UNTIL THE YEAR 2000:

4.1. GLOBAL DEVELOPMENT OF CONTAINER TRADE:

AROUND 38% OF CONTAINER VESSEL CAPACITY CONTRACTED IN MID-1989 WAS FOR SHIPS LOADING 3,000 TEU OR MORE, MANY OF WHICH WILL NOT BE DELIVERED UNTIL THE MID-1990S. AS THE 1980S WAS THE DECADE WHEN THE 4,000 TEU BARRIER WAS BROKEN, OWNERS WILL GO FOR VESSELS OF 5,000 TEU AND OVER IN THE 1990S. AS MAJOR OPERATORS TAKE DELIVERY OF LARGE, NEW TONNAGE, THE TRICKLE-DOWN EFFECT OF OLDER FIRST GENERATION SHIPS BEING RE-DEPLOYED IN FEEDER TRADES WILL CONTINUE. 1,000 TEU CAPACITY IS ALREADY BECOMING THE NORM FOR SUCH FEEDERS.

THE WORLDWIDE TOTAL OF CONTAINER MOVEMENTS OVER HARBOUR FACILITIES BETWEEN 1987 AND 1988 GREW BY 10.6% TO 73 MILLION TEU. UNDER AN ESTIMATE OF CONTINUOUS GROWTH, THEY REACHED 80 MILLION TEU IN 1989 AND 89 MILLION TEU IN 1990.

IT IS, HOWEVER, UNLIKELY THAT DURING THE 1990S THE RAPID GROWTH IN CONTAINERIZABLE TRADE WILL CONTINUE AT THE SAME ANNUAL RATE. ON THE EUROPE-FAR EAST TRADE A FORECAST 7.7% FOR THE PERIOD 1989-94 CONTRASTS WITH AN ANNUAL 9.0% DURING 1984-89. SLOWER GROWTH OVER THE NEXT FEW YEARS COULD EXACERBATE THE OVERTONNAGING THAT ALREADY EXISTS IN SOME SECTORS, ESPECIALLY ON THE EUROPE-FAR EAST ROUTE, WHERE THE MAJOR CONFERENCE CONSORTIA AND OPERATORS HAVE EITHER UPGRADED THEIR FLEETS RECENTLY, OR ARE PLANNING TO DO SO OVER THE NEXT FEW YEARS. THE LARGEST CARRIERS HAVE ALREADY MOOTED TO CAP CAPACITY BY 10% ON THE EUROPE-FAR EAST TRADE MARKET.



WORLD SEA TRADE SERVICE (WSTS) IN NOV. 1991 PREDICTED A FURTHER

CONSOLIDATION OF ASIA'S MARKET SHARE UNTIL 1995, WITH THE EUROPE-FAR EAST TRADE GROWING BY 9.7% ANNUALLY, THUS INCREASING ITS WORLD MARKET SHARE FROM 11% TO 13% (SEE ABOVE GRAPHIC). IN CONTRAST, WHILE SOME RECOVERY IN MIDDLE EAST ACTIVITY IS ANTICIPATED BY 1995, THIS WILL NOT BE SUFFICIENTLY ROBUST TO REVERSE THE DECLINE IN MARKET SHARE, WHICH IT PREDICTED TO DROP TO FROM 12% TO 10%.

SINCE GLOBAL SHIPBUILDING CAPACITY EXCEEDS TRUE DEMAND BY ABOUT 40%, THUS ENTICING MANY CARRIERS TO INVEST IN ADDITIONAL TONNAGE,

SHIPOWNERS ARE OFTEN WILLING TO CARRY CARGO THAT COVERS NO MORE THAN THE VARIABLE COSTS. AS A CONSEQUENCE, SHIPPERS IN GROWING NUMBERS DICTATE THE PACKAGING, ROUTING AND TRANSPORT ARRANGEMENTS. INCREASINGLY, A PRINCIPAL **CRITERION FOR SHIPPERS** AND THEIR CONTRACTED CARRIERS IS THE SHIP TURNAROUND TIME, GIVEN THE HIGH DAILY COST OF THESE SHIPS, INSTEAD OF THE PORT CHARGES.

PUBLIC EXPENDITURES HAVE ENCOURAGED LARGE PROJECTS TO GO AHEAD UNDER A DIFFERENT SORT OF ECONOMIC AND COMMERCIAL SCRUTINY, THAN WOULD APPLY TO PRIVATE SECTOR PROJECTS OF THE SAME MAGNITUDE. FOR MANY CARGOES A **GROWING CHOICE OF PORTS** IS NOW POSSIBLE, AND THE PROXIMITY OF MANY PORTS MAKES THEM DIRECT COMPETITORS ALONG THE VARIOUS TRADE ROUTES.

THE IMMEDIATE PROSPECTS FOR INDIVIDUAL PORTS WILL THEREFORE BE CLOSELY LINKED TO THE FORTUNES OF THEIR **MAJOR CUSTOMERS**, AND THERE IS A REAL PROSPECT THAT SOME PORTS WILL BECOME FINANCIAL DRAINS RATHER THAN ECONOMIC GENERATORS.

THE MOST IMPORTANT DEVELOPMENT WILL BE THE **ESTABLISHMENT OF RELAY HUBS** BY THE MAJOR SHIPPING LINES ALONG THE MAIN EAST-WEST CONTAINER TRADE ROUTE WITH FEEDING SERVICES TO THE NEIGHBORING PORTS.

4.2. DEVELOPMENT POTENTIAL OF SAUDI PORTS:

JEDDAH ISLAMIC PORT COULD HANDLE **CONTAINERS FOR TRANSHIPMENT** INTO THE ARABIAN GULF AND TO THE WESTERN PART OF THE INDIAN SUBCONTINENT IN COMPETITION TO THE EMIRATES' PORTS, MINA QABOOS AND, IN THE FUTURE, THE PORT OF ADEN; IN THE RED SEA AND TO THE AFRICAN EAST COAST IN COMPETITION WITH DJIBOUTI AND THE PORT OF ADEN.

JEDDAH PORT'S CONTAINER TERMINAL HAS A CALCULATED **CAPACITY** OF 1.2 MILLION TEU PER YEAR, WITH LESS THAN 550,000 TEU HANDLED DURING THE YEAR 1990, IT UTILIZED LESS THAN 50% ITS OF CAPACITY. MORE THAN ONE-THIRD OF ALL CONTAINER VESSELS PLYING THE RED SEA CALL AT JEDDAH ISLAMIC PORT, OFFERING AMBLE TRANSPORT OPPORTUNITY FOR CONTAINER TRANSHIPMENT THROUGH JEDDAH.

THE GULF VIA **LAND TRANSIT** FROM JEDDAH MIGHT BE CHEAPER FOR SMALLER CONSIGNMENTS THAN DIRECTLY BY SHIP, AND CERTAINLY FASTER. DURING THE GULF WAR, RIYADH AS FINAL DESTINATION OF NORTH EUROPE TRADE VIA JEDDAH WAS ONLY ABOUT 80% OF FREIGHT RATES VIA E.G. DAMMAM. THE DISTANCE FROM JEDDAH TO KUWAIT, FOR INSTANCE, IS 1,400 KM BY ROADS AS COMPARED TO 4,950 KM BY SEA. SIMILARLY, THE DISTANCE FROM JEDDAH TO BAHRAIN IS 1,500 KM BY ROAD, BUT 4,600 KM BY SEA, TO QATAR 1,500 KM BY ROAD AS AGAINST 4,450 KM BY SEA, AND EVEN ABU DHABI IS 1,900 KM FROM JEDDAH BY ROAD, AS AGAINST 4,200 KM BY SEA.

CONTAINER TRAFFIC IN KAAP DAMMAM ALREADY BENEFITS FROM DEMAND IN KUWAIT, WITH ITS 1991 THROUGHPUT 40% ABOVE THE ONE DURING 1990. EASING OF LEGAL AND CUSTOMS RESTRICTIONS, AND INTRODUCTION OF

REGULAR **LAND TRANSIT SERVICES** INTO KUWAIT, 450 KM TO THE NORTH, AND LATER ALSO INTO THE IRAQ AND IRAN, WOULD ENHANCE DAMMAM'S ADVANTAGEOUS LOCATION IN THE UPPER GULF IN TERMS OF LAND TRANSPORT CONNECTIONS, AND REGAIN SOME OF THE CONTAINER BUSINESS LOST TO EMIRATES PORTS DURING THE 1980S.

BOTH SEA-LAND AND SEA-AIR TRANSIT REQUIRES EASING OF THE PRESENT **CUSTOMS REGULATIONS** AND A BETTER ORGANIZATION FOR FASTER SERVICES. KUWAITI AUTHORITIES ALREADY IMPROVED THE INFLOW OF GOODS BY LIFTING CUSTOMS DUTIES FOR THE REMAINDER OF 1991. CUSTOMS OFFICIALS ARE STUDYING THE POSSIBILITY OF EASING CUSTOMS REGULATIONS CONSIDERED TOO RESTRICTIVE BY LOCAL MERCHANTS ON A PERMANENT BASIS.

WITH INAUGURATION OF KING FAHD INTERNATIONAL AIRPORT DURING **1993**, THE PRESENT DAHRAN AIRPORT COULD TAKE OVER THE ROLE OF A **SEA/AIR AIRPORT**, THUS ENABLING EVEN BETTER COST SAVINGS TO CONSIGNEES DUE TO ITS CLOSER POSITION TO EUROPE.

AS MORE AND MORE **GENERAL AND BULK CARGOES** ARE TRANSPORTED IN CONTAINERS, CONTAINER THROUGHPUT IN THE INDUSTRIAL PORT OF YANBU WILL CERTAINLY INCREASE. ESTABLISHMENT OF A FREE TRADE ZONE IN THE AREA BETWEEN YANBU COMMERCIAL PORT AND THE MADINAT WILL CERTAINLY ALSO BENEFIT CONTAINERIZATION IN ADJACENT KFIP YANBU.

SIMILARLY, ESTABLISHMENT OF **RE-EXPORT FACILITIES** LEASED FROM SEAPA TO INDUSTRIAL AREAS, EITHER WITHIN JEDDAH ISLAMIC PORT AS BONDED WAREHOUSES, OR ON FREE ZONES IN AREAS 1,2 OR 3, COULD STIMULATE CONTAINER TRADE THROUGH THE PORT. WAREHOUSING OPERATED AS SEA/AIR TERMINALS WITHIN THE PORT PERIMETER COULD IN THE LONG FUTURE BE LEASED TO FREIGHT FORWARDERS FOR GROUPAGE AND CONSOLIDATION.

REPRESENTATIVES OF **INDUSTRIAL ENTERPRISES** SUCH AS HADEED, THE SAUDI IRON AND STEEL COMPANY, SABIC, AND THE SAUDI-KUWAITI CEMENT MANUFACTURE COMPANY ARE INTERESTED IN ADDITIONAL, OR SPECIALIZED, SERVICES TO BE RENDERED BY JUBAIL COMMERCIAL PORT. SOME OF THE GENERATED EXPORTS WOULD LEAVE THE COUNTRY IN CONTAINERIZED FORM.

THE **STUFFING OF EMPTY CONTAINERS** WITH INDUSTRIAL EXPORT CARGO AT REASONABLE TARIFFS WILL BE POSSIBLE IN THE OUTER AREAS OF JUBAIL COMMERCIAL PORT.

COMPLETION OF THE **RAIL NETWORK** BY LINKING JUBAIL INDUSTRIAL AREA WITH THE DAMMAM RAILHEAD, AS PLANNED IN THE 5TH NDP (P. 352), WILL HAVE BOTH SPILL-OVER EFFECTS FROM INDUSTRIAL DEVELOPMENT AT KFIP JUBAIL AND DIRECT BENEFITS FOR INCREASED DEMAND AT THE PRESENT HINTERLAND OF JUBAIL. PROJECTED EXTENSION OF THE DIRT ROADS BETWEEN JUBAIL AND BURAIDAH WILL CREATE A VAST HINTERLAND FOR JUBAIL.

SINCE THERE IS HARDLY A POTENTIAL FOR COASTAL SHIPPING TRADE, THE KINGDOM'S SMALLER COMMERCIAL PORTS ONLY HAVE GROWTH OPPORTUNITIES, WHERE THERE IS A **LARGE AND POPULATED HINTERLAND** IN SOME DISTANCE TO THE LARGER COMMERCIAL PORTS. IN THE FAR FUTURE, THIS MIGHT HOLD TRUE FOR THE RED SEA PORTS OF GIZAN AND DHUBA, BOTH OF WHICH ARE SITUATED CLOSE TO LARGER CITIES CONNECTED BY TARRERED HIGHWAYS.

5. RECOMMENDATIONS:

1. TO EXPAND THE PRESENT CONTAINER TERMINAL IN JEDDAH ISLAMIC PORT AND TO INVESTIGATE THE POTENTIAL FOR A SECOND LEASE CONTRACT IN ORDER TO PERMIT FREE COMPETITION BETWEEN PORT CONTRACTORS UNDER GROWING THROUGHPUT.
2. TO EASE LEGAL AND CUSTOMS RESTRICTIONS IN THE SEAPA PORTS IN ORDER TO FACILITATE REGULAR SEA-LAND TRANSIT SERVICES INTO KUWAIT, AND LATER ALSO INTO THE IRAQ AND IRAN.
3. TO TENDER A CONTRACT FOR A PRIVATE LEASE OF A MULTI-PURPOSE TERMINAL IN KAAP DAMMAM OR JUBAIL COMMERCIAL PORT AS COMPETITOR TO THE PRESENT CONTAINER TERMINAL IN KAAP DAMMAM.
4. TO DISCUSS POTENTIAL OF SEA/AIR TRANSPORT AT THE OLD JEDDAH AIRPORT AND AT DAHRAN AIRPORT WITH THE MINISTRY OF DEFENSE AND AVIATION.
5. TO ORGANIZE CUSTOMS REGULATIONS AND SERVICES FOR SEA-AIR TRANSIT THROUGH DAHRAN AIRPORT AS SEA/AIR AIRPORT AFTER THE INAUGURATION OF KING FAHD INTERNATIONAL AIRPORT DURING 1993.
6. TO FACILITATE PRESENTLY CONSIDERED ESTABLISHMENT OF A FREE TRADE ZONE IN THE AREA BETWEEN YANBU COMMERCIAL PORT AND THE YANBU ROYAL COMMISSION.
7. TO INVESTIGATE LEASING OF AREAS 1, 2 OR 3 OF JEDDAH ISLAMIC PORT AS FREE ZONES FOR RE-EXPORT FACILITIES TO INDUSTRIAL COMPANIES.
8. TO EARMARK BONDED WAREHOUSES WITHIN THE PORT PERIMETERS OF JEDDAH ISLAMIC PORT AND KAAP DAMMAM TO BE LEASED TO FREIGHT FORWARDERS FOR GROUPAGE AND CONSOLIDATION AND OPERATED AS SEA/AIR TERMINALS.
9. TO SURVEY THE POTENTIAL MARKET AROUND JUBAIL COMMERCIAL PORT IN ORDER TO RENDER ADDITIONAL SPECIALIZED CONTAINER SERVICES TO INDUSTRIAL ENTERPRISES.
10. TO PERMIT STUFFING OF EMPTY CONTAINERS WITH INDUSTRIAL EXPORT CARGO AT REASONABLE TARIFFS IN THE OUTER AREA OF JUBAIL COMMERCIAL PORT.
11. TO INSTRUCT THE VARIOUS SEAPA PORTS TO DRAW UP A MASTER PLAN IN ORDER TO DETERMINE THEIR FUTURE PORT OPERATIONS UNDER CHANGING DEMAND FROM CUSTOMERS